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DE ASIGURARE A
CALITĂȚII ÎN
ÎNVĂȚĂMÂNTUL SUPERIOR

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FOREWORD

The ISQM 2011 aims to provide opportunities for exchange of information, good practice and ideas in international university cooperation as a key condition for quality assurance in higher education. It will provide an opportunity for academics, students, educational and quality improvement administrators and researchers to promote discussions and share knowledge, experience and expertise on the developments and best practices in Higher Education Quality Assurance.

This conference will also analyze the challenges and issues pertaining to new developments, innovation, and technology based education. Policies, governance, management in education and transnational education will also be discussed.

Invited and selected papers are written by experts and practitioners from academic sector in order to find new solution and good practices for higher education. The subject of papers of Proceedings covers topics and streams in order to familiarize themselves with the trends and to work towards a common attitude with respect to quality assurance in higher education. The topics of conference are: "The impact of international cooperation in Quality Assurance of Higher Education", "International evaluation in Higher Education Institutions", "New environments and challenges in Higher Education", "Good Practices in Quality Management, new policies and practices in Higher Education", "Student contributions to Quality Assurance in Higher Education Evaluation, Accreditation and recognition of study programmes and Learning outcomes".

We consider that this conference will address a range of critically important themes relating to quality assurance in Higher Education.

This volume contains 51 selected papers of the 3rd International Conference - Institutional Strategic Quality Management in Higher Education. The International Scientific Committee reviewed all submitted papers and selected the best papers.

We thank all the contributors to the success of this conference.

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MANAGING QUALITY IN A BUSINESS SCHOOL: FROM MISSION STATEMENT TO ASSESSMENT OF LEARNING

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Abstract

The objective of this paper is to document and share The Institute for Business Administration in Bucharest (IBAB) Executive MBA program's experience implementing an Assessment of Learning (AOL) and Continuous Improvement Program (CIP) in accordance with the standards of the Association to Advance Collegiate Schools of Business (AACSB) International. The case study describes: 1) how assessment differs from traditional student grading; 2) IBAB's motivation for implementation; 3) the implementation processes; 4) the steps taken to ensure alignment between AACSB standards and IBAB's mission, the curricula design, the assessment process; and 5) the continuous improvement actions subsequent to the learning measurements.

Key words: managerial education, assessment of learning, program-learning goals, curriculum continuous improvement, closing the loop.

1. Introduction

The public concern about the quality of graduates of universities, including those of business programs, has led the main stakeholders to call into question the institutional effectiveness of the educational processes. The question that emerges with even more urgency is how do we know what and if the students are learning? Monitoring the faculty qualifications, the structure of curriculum or the deployment of resources proved not to be enough. There is an evident demand for "hard evidence" demonstrating that graduating students possess the skills, attitudes, and knowledge schools promise. . While there are many definitions of assessment of learning in the literature, we base our approach on Tom Angelo's work (1999), which considers assessment

as a ***continuous, systematic process the goal of which is to improve the quality of student learning.***

The Romanian-American Postgraduate School of Business Foundation (ASEBUSS) founded IBAB in 1993. Accredited by The Romanian Agency for Quality Assurance in Higher Education, IBAB became a legally autonomous higher education entity on June 30, 2009. In addition, IBAB established a partnership in 2002 with Kennesaw State University (KSU) – Coles College of Business in Atlanta, Georgia, USA, for the delivery of a joint international program (Alsup, Duhaneanu, 2008).

AOL and CIP are about student learning, currently a topic of interest to the many higher education constituency groups. Their interest is calling into question organizational and program effectiveness. Few case studies are available describing the processes and experiences of a private graduate education institution offering only an Executive MBA like IBAB (Clark, 2004). This case study provides a different perspective on AOL and CIP as part of the accreditation process, the culture of quality in educational entities, and continuous improvement efforts.

2. The conceptual base for the approach

Outcome based measures of learning are particularly important for business schools because they can provide external constituents (current and potential executive students, trustees, public officials, accreditors, and business entities) the evidence that the organization is achieving its education mission (Dumitrescu, Duhaneanu, 2010).

Traditional measures of learning focus on a professor's teaching performance while AOL's focus is on student outcomes and whether or not the student is learning what is being taught in the program. AOL effectively changes the focus from the individual course to the entire curriculum (Martell, 2008). When schools measure learning they can evaluate how well their students achieve the program's learning goals and then use the results to initiate improvements and changes in the curriculum, in the teaching processes, and finally to better align all other educational activities with the mission of the school. Furthermore, individual faculty members, can use outcomes measurement to help them in their own continuous improvement efforts (DeMoranville, 2010).

No longer are grades and student evaluations regarded as the only adequate indicators of the quality of teaching and learning for an entire graduate business program. The public dissatisfaction with the quality of the graduates of higher education comes from the lack of skills and knowledge of the students who received good grades (Martell 2008). Table 1 shows how three students can receive the same grade while demonstrating their mastery of three identified learning goals. Aggregating the measured results at the program level leads to a conclusion that is very different from the conclusion reached when viewing individual skills mastery data.

Table 1: Grading versus assessment

Activities asked in the mid-term exam-learning outcomes	Learning goal	Student 1	Student 2	Student3
Ratios calculation 30 points	Computation Skills*	23 points	30 points	30 points
Ratios interpretation 40 points	Critical thinking Skills**	30 points	40 points	20 points
Use of ratios in decision 30 points	Business decision making*	27 points	10 points	30 points

Total grade	80	80	80
*(0-10) below expectation [10-25) meet expectation [25-30]-exceed expectations	** (0-15) below expectation [15-35) meet expectation [35-40] exceed expectations		

Clearly, there is a difference between assessing student work for a course and assessing student work for a program. *For class or course*, each individual student is assessed based on criteria and standards established by the professor (which may or may not be explicit and can be different from one professor to another even for the same course). The professor does the evaluation and the student gets the results. All the student's learning is considered in the measurement. *For program assessment*, faculty members collectively establish explicit criterion for use in the evaluation process. Furthermore, the evaluation process is done by the professors or by some other designated person with results going to program faculty and managers. Sampling is used at the program level assessment.

Two basic approaches can be used in measuring learning in assessment: **direct assessment and indirect assessment** (Martell, 2005). In the *indirect approach*, evidence about how students feel about their learning and the learning environment is acquired from students, alumni and employers using surveys, questionnaires, interviews, and focus groups. In the *direct approach*, assessment is based on the demonstration of student knowledge or skills. Existing assignments such as oral presentations, exams, projects, portfolios can provide the basis for data collection. There is a preference for the direct approach in outcomes assessment.

In the case of program AOL measurement is directed toward program learning goals. These learning goals should reflect the educational expectations for each degree program, the major competences the program intends to instill in its students based on their total curriculum experience.

Because the learning goals are broad, they are not sufficiently specific and observable for measurement. In this respect, learning objectives, which are established for each goal, are used for measurement. If the goals express *what the school wants its students to be*, the objectives describe *what the school wants its students to do*.

The outcomes assessment process should include the following steps:

1. Identification of program's learning goals and objectives;
2. Alignment of curricula with the learning goals;
3. Identification of instruments and measures to assess learning;
4. Collection, analysis and dissemination of assessment results;
5. Using assessment information for change and continuous improvement, including closing the assessment process loop.

3. The basic methodology of AOL

In line with AACSB requirements, learning expectations are aligned with the school's mission and cultural circumstances with the school then specifying learning goals for key management-specific knowledge and skills in each master's level general management program. Figure 1 depicts the relationship between the various steps and sequence involved.

IBAB started the implementation process of AOL and CIP in 2006. The process initially started with the development of an AACSB accreditation plan. Presenting and sharing IBAB's Executive MBA program's experience in implementing AOL and CIP follows the 5 steps of the *outcomes assessment process*

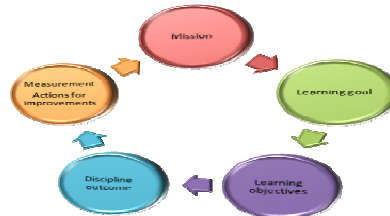


Figure 1: The logic of AOL articulation at program level

Assessment data was collected for three years on five of seven program-learning goals. To illustrate the process, the data from one learning goal (Communication) is presented. On average, data was collected from 67 students. The results were analyzed and reported so faculty members and program administrators could make decisions regarding continuous improvement. Furthermore, this approach is in line with the best practices recommended by AACSB regarding the assessment of learning for business schools.

4. Results obtained

Step 1. The identification of the program learning goals and objectives started from the mission of the school and from the corresponding competencies IBAB expected students to achieve at graduation. IBAB's 2007 mission statement specifies:

*"We create a class **of competitive leaders** able to do business with peers from all over the world, who are equipped with the mindset, skills and understanding required in an increasingly **dynamic global business environment**.*

*Committed to continuous improvement, The Institute for Business Administration fosters a learning experience that connects theory with practice, **promotes critical thinking, ethical decision making, and action orientation**. Participants **learn to manage across cultural, linguistic, technological and geographical boundaries** by working within national and **international teams** of executives to comply with a variety of assignments and projects..."*

IBAB's EMBA program started the assessment process in 2008 with seven learning goals consistent with the Mission, and 21 learning objectives. Tables 2a and 2b illustrate the learning goals and learning objectives. Developing goals and objectives was a team effort, with feedback coming from the business community, advisory board members, alumni, students, and American partners.

Lessons learned: a) Knowledge and skills must be adapted to the type of program. For the MBA or EMBA programs it is important to build learning beyond general skills (communication abilities, ethical reasoning, analytic skills, multicultural understanding, and reflective thinking) and to emphasize practical applications, change management, application of knowledge in new and unfamiliar contexts, leadership, and decision making with incomplete information. b) Normally 4 to 10 learning goals should be specified for each degree program. Avoid the trap of trying to justify the effectiveness of the program by using too many learning goals. Obviously, more goals make measurement more difficult.

Step 2. Alignment of curricula with the learning goals is realized by mapping the courses in the program to the program's learning objectives Table 3 provides an example for one of the Communication Learning Objectives.

Table 2a: Articulation: Mission-Learning Goals

General management competencies aligned to mission	Learning Goals (LG)
<p>“...working within national and international teams of executives...”</p> <p>IBAB promotes “a learning experience that connects theory with practice, promotes critical thinking, ethical decision making, ...”</p> <p>“.. Participants learn to manage across cultural, linguistic, technological and geographical boundaries ..”</p> <p>“.. equipped with the mindset, skills and understanding required in an increasingly dynamic global business environment. “</p> <p>“We create a class of competitive leaders ..”</p> <p>IBAB “fosters a learning experience that connects theory with practice”</p> <p>“Participants learn to ...to comply with a variety of assignments and projects...”</p>	<p>LG 1: Collaboration Executive MBA Students will collaborate to accomplish individual, team, and organizational objectives.</p> <p>LG 2: Ethical decision making Executive MBA Students will be able to question, formulate, and defend decisions using an ethics framework.</p> <p>LG 3: Communication Executive MBA Students will be able to communicate to establish a shared understanding in order to achieve personal and organizational effectiveness.</p> <p>LG 4: Global environment Executive MBA Students will evaluate global environment, identify major shifts and adapt accordingly.</p> <p>LG 5: Leadership Executive MBA Students will evaluate and use appropriate leadership behavior to enhance personal and organizational effectiveness.</p> <p>LG 6: Business acumen Executive MBA Students will coordinate disparate resources to foster an organization's mission by synthesizing data and applying the tenets of relevant disciplines.</p> <p>LG 7: Strategic agility Executive MBA Students will evaluate and use appropriate strategic models to enhance personal and organizational effectiveness.</p>

Table 2b: Articulation: Learning Goals-Learning Objectives - Examples

Learning Goals (LG)	Learning Objectives (LO)
<p>LG 1: Collaboration Executive MBA Students will collaborate to accomplish individual, team, and organizational objectives.</p> <p>LG 3: Communication Executive MBA Students will be able to communicate to establish a shared understanding in order to achieve personal and organizational effectiveness.</p>	<p>LO 1.1: Function effectively in a collaborative environment in organizations.</p> <p>LO 1.2: Evaluate the appropriate use of collaboration.</p> <p>LO 1.3: Applying the appropriate collaborative techniques within various organizational environments.</p> <p>LO 3.1: Select and use appropriate interpersonal communication skills and channels.</p> <p>LO 3.2: Select and use appropriate organizational communication skills and channels.</p> <p>LO 3.3: Create effective interpersonal relationships through organizing and influencing people to achieve desired individual and organizational outcome.</p>

The EMBA faculty starting from the courses taught, identified the outcomes of each course that could contribute to the building of the knowledge, skills, and attitudes relating to each learning objective. In order to allow the measurability of the learning objective, the discipline outcomes must be written in such a way to be easily identified or observed as a product, a behavior, or a result assessable as presented in the Table 3.

Lessons learned: a) Not all courses having outcomes related to a learning objective should be reflected in the mapping process. List only those courses making a significant contribution to the build-up of knowledge, skills, or attitude and are reflected in a “product” easy to be assessed should be considered in the mapping. b) When writing the outcomes, the use of the correct verbs will help the process of assessment and the identification of the assessable products adapted to the corresponding level of learning. For MBA or EMBA programs, the verbs for the

outcomes must reflect the expectation regarding the type and level of difficulty of educational process as such: create, design, critique, perform, forecast, anticipate, collaborate, decide, value, weigh, rate (versus identify, calculate, present, write, compute, explain, demonstrate -at undergraduate level).

Table 3: Alignment with Curricula: Example of Mapping the Courses to Learning Objectives

Learning Objective	Mapping of Courses to Learning Objectives
3.1. Select and use appropriate interpersonal communication skills and channels (knowledge, skills)	<p>Economy of Competition – Executive MBA Students <i>make team presentations</i> about the way in which they will change their way of thinking and acting after acquiring the Micro-economics knowledge.</p> <p>Macroeconomics – Executive MBA Students (as a team) <i>analyze and present critically</i> the recent macroeconomic developments.</p> <p>Marketing Management – The Executive MBA Students communicate interpersonally in the offline and online environments to design and support effective marketing strategies according to the market and organizational information provided by each case study and group task.</p> <p>Organizational Behavior – Executive MBA Students (in a team) <i>critique and present</i> the charismatic leadership skills displayed by a video's characters and identify learning opportunities</p> <p>Statistical Analysis for Managers – Executive MBA Students <i>effectively communicate</i> with other professionals in decision making process.</p> <p>Entrepreneurship – Executive MBA Students complete, in study groups executive summaries of business plans and they submit them to another group of students that simulate the investors. The goal is <i>to convince</i> the investors to finance their business.</p> <p>International Project – Executive MBA Students (as a team) complete a team operating agreement with delineated roles to establish operative roles for the international and virtual teams.</p>

Step 3. Identification of instruments and measures to assess learning. For LG 3 *Communication* three instruments were used: 1) *Dissertation Assessment Matrix and Rubric* (verbal communication), 2) *Dissertation Written Communication Matrix and Rubric* (written communication), and 3) *Joint Program Peer Assessment Matrix* used at the end of the residency week at KSU, which is filled in electronically by each Romanian and American international team member to assess the individual performance of the other members of his/her joint team with respect to several quality criteria.

Lessons learned: a) When the target is not met one should start by analyzing if the selected instrument really measures what is intended to measure. b) An instrument can be used for assessing multiple learning objectives. c) The instruments must be selected to measure the fundamental characteristics of the skill (e.g. for Communication to be assessed separately verbal communication and written communication).

Step 4. Collection, analysis, and dissemination of assessment information. This step will be illustrated by the LG 3 – **Communication**, LO 3.1: *Select and use appropriate interpersonal communication skills and channels*.

In line with AACSB's recommendation, measurements should be done preferably at the end of the program, by the vehicle assessing the competencies in a cumulative and trans-disciplinary context and if possible by the evaluation of multiple peers or relevant assessors.

To cope with those requirements, for measuring **LG Communication**, the points of measurement have been selected at Dissertation exam and the end of International Joint Project. we started the assessment of this learning objective in 2007/2008, when we noticed that the measurements must address separately the verbal communication and separately the written communication.

Table 4: Measurements of LG 3 Communication – LO 3.1: *Select and use appropriate interpersonal communication skills and channels.*

Vehicle with Rubrics / Measurements	Data Collected / Analysis	
Dissertation Assessment Matrix and Rubric (P) / 5 performance criteria (P1, P2, P3, P4, P5) on a 5-point scale (Verbal communication) The performance criteria: P1- the quality of the presentation's organization; P2- the quality of the presentation content P3- the quality of slides/ visuals aids; P4- the quality of the presentation's conclusions and recommendations; P5- the presentation's quality of the delivery	July&Sept. 2009 Data collected: Assessments made by the faculty part of Dissertation commission based on performance criteria, and a scale of rubrics for all 70 students in program : Threshold: Meet&Exceed expectations if 80% of students scored >3.5 Results: P1: 99% yes P2: 96% yes P3: 99% yes P4: 97% yes P5: 93% yes	July& Sept 2010 Data collected: Assessments made by the faculty part of Dissertation based on performance criteria, and a scale of rubrics for all 62 students in program : Threshold: Meet/Exceed expectations if 80% of students scored >4 Results: P1: 91% yes P2: 82% yes P3: 86% yes P4: 75% not met P5: 78% not met Average percentage = 81%
Written communication Assessment Matrix and Rubric (W) / 5 performance criteria (W1, W2, W3, W4, W5) on a 3-point scale (Written communication) The performance criteria: W1- The quality of Dissertation's opening statement W2- The quality of the Dissertation's organization W3- The quality of spelling and word choice W4- The quality of grammar W5- The quality of sentence's structure	July &Sept. 2009 Data collected: Assessments made by the faculty scientific advisor- based on performance criteria, and a scale of rubrics based on a random sample of 30%, or 21 students Threshold: Meets/Exceeds expectations if average score > 1.7 Results: W1: 2.52 yes W2: 2.67 yes W3: 2.48 yes W4: 2.57 yes W5: 2.67 yes	July &Sept 2010 Data collected: Assessments made by the faculty scientific advisor- based on performance criteria, and a scale of rubrics based on a random sample of 35%, or 22 students Threshold: Meets/Exceeds expectations if average score> 1.7 Results: W1: 2.45 yes W2: 2.35 yes W3: 2.45 yes W4: 2.30 yes W5: 2.35 yes
Joint Program Peer Assessment Matrix (Q)/ 2 performance criteria (: Q8, Q10) on a 5-point scale (Verbal communication) The performance criteria: Q8-ability to communicate in a multicultural team Q10- ability to give professional feedback	May 2009 Data collected: Assessments made by the peer students- based on performance criteria, and a scale of rubrics based on a random sample of 6 out of 16 international teams, or 27 Romanian students. Threshold: Meet/Exceed expectations if 80% of sample scored > 3.5 Results: Q8: 81% yes Q10: 85% yes	May 2010 Data collected: Assessments made by the peer students- based on performance criteria, and a scale of rubrics based on a random sample of 6 out of 16 international teams, or 26 Romanian students Threshold: Meet/Exceed expectations if 80% of sample scored > 3.5 Results: Q8: 81% yes Q10: 81% yes

The results obtained in assessment of learning for verbal communication learning objective. In 2008/2009 the first measurements were done and given the results it was decided to raise the score for meet/exceed expectations from 3.5 to 4 points on a scale from 1 to 5 for all five performance criteria from in Dissertation Assessment Matrix as **threshold** for next academic year .

In 2009/2010 the assessments for 62 students that presented the Dissertation were collected from the nine professors in the Dissertation Commission and data aggregated. *Rule of judgment* applied for the assessment in both years was: if at least 80% of students meet or exceed expectations for a specific performance criterion, we consider that criterion met. In 2010 from the five criteria, three were met and two were not met. Starting with 2009, a new instrument was in place for measuring the learning objective 3.1 verbal communication: Joint Program Peer Assessment Matrix, applied in 2009/2010 as well. *Data collection*: for this vehicle was randomly sampled 6 out of 16 international teams that accounted for 26 Romanian students or 42%. The *rule of judgment applied* was that if at least 80% of students in the sample meet or exceed expectations for a specific performance criterion, we considered that criterion met. In both years, the criteria were met using that vehicle.

The results obtained in assessment of learning for the learning objective written communication. In 2009/2010, the sample for written communication has been enlarged to 35% as decided in 2009. The data were collected on a random sample of 35% out of all the 62 Dissertations or 22 projects submitted and presented in 2010. The *rule of judgment*: If the average score for a criterion exceeds 1.7, on a scale from 1 to 3, that criterion was met. Conclusion: as presented in the Table 4 in both years the criteria were met.

Step 5. Using assessment information for continuous improvement and closing the loop.

For verbal communication some measures have been identified such as: the Dissertation procedures to be better aligned with the assessment instrument in order to focus the presentation on the core results and analysis of the paper; all the faculty giving scientific mentorship for Dissertation and International project must allocate more time to individual and team presentations with feedback on the quality of delivering within a strict time limit. The Senate of IBAB decided for Dissertation Assessment to raise the minimum score from 3.5 to 4 in 2010 for the students meeting and exceeding the expectations. The faculty mentoring the Joint Program teams encouraged more the use of multiple communication channels and in an appropriate way such as SharePoint, and other instruments (Skype, e-mail, video conferences) as appropriate. For written communication in 2010 we enlarged the sample size of papers assessed from 30% to 35%.

Lessons learned: a) Identify the measurement points in the exam or activities at the end of the program putting in light the accumulation of knowledge, skills and attitudes; if the target is not met the measurement should check the measurement point to see the misalignments or cascade down at course level. b) The more people that are doing the assessment, the more reliable are the results (a larger commission of professors assessing during the exam, the peer evaluation of the teammates).

5. Conclusions

This case study provides insight into the establishment of AOL and CIP programs for business education institutions considering the design and implementation of such programs in order to improve or demonstrate student learning. For the learning goal Communication we presented the results obtained in the measurements at the level of each methodological step as well as the actions initiated for closing the loop and the subsequent lessons learned to be shared as challengers.

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QUALITY ASSURANCE OF ENGINEERING EDUCATION VIA PROGRAMME ACCREDITATION: THE EUR-ACE APPROACH

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Abstract

Quality Assurance and accreditation of higher education have become widespread practices throughout the world, and contribute significantly to its improvement. However, in “accrediting” higher education several approaches, that may involve the very definition and significance of the word, are possible. This lecture will discuss “programme” and “institutional” accreditation in the context of “Meta- and “Sectoral” Qualification Frameworks, with particular reference to engineering education, and maintain that the two are not in contrast, but on the contrary can usefully complement each other. In particular, “programme accreditation” is essential for all “professional” disciplines that - like engineering - involve public safety and in several countries require a “licence” to practice. A brief review of the latest developments and open questions of the EUR-ACE accreditation system of engineering programmes at the Bachelor and Master levels, run by ENAEE, concludes the lecture.

Key words: Engineering education, accreditation, quality assurance, EUR-ACE.

Introduction

One of the main and most positive achievements of the “Bologna process” has been the development of specific Quality Assurance (QA)¹ procedures for Higher Education (HE) and their rapid and widespread diffusion. The “Standards and Guidelines for Quality Assurance in the European Higher Education Area”, briefly known as “ESG”, [1] were officially endorsed by the HE Ministers meeting in Bergen in 2005 and have completely replaced the ISO Standards in the QA of HE programmes (although these are still occasionally used in the evaluation of HE managerial structures). The implementation of QA practices throughout the EHEA² has been

¹ The acronyms used in the text (QA, HE, etc.) are defined the first time they appear.

² “European Higher Education Area”, comprising all EU countries plus 20 more (in total 47).

strongly encouraged, and in almost every country a QA Agency has by now been established; the “European Register of Quality Assurance Agencies” [2] has also been created.

All these activities have also lead to reconsider the role and practice of “accreditation”.

1. Accreditation: background and definitions

Nowadays, “accreditation” is a much used word that however has several similar but not identical meanings, and therefore needs to be appropriately defined.

Most of the QA Agencies operating in Europe (including the 24 listed in the EQAR) are “general Agencies”, i.e. deal with all disciplines (and some even with all levels of education, from primary to tertiary). In these cases, “accreditation” is either practically coincident with QA of the course provider Institution (“institutional accreditation”) or is an “official” or “para-official” certification authorizing the Institution to deliver courses and award degrees: indeed in many countries the word “accreditation” (or a similar-sounding one) has a “legal” value and is reserved to the use of governmental (or para-governmental) authorities. In either cases, this type of “accreditation” concerns much more the quality of the teaching/learning process, including the adequacy of staff and available facilities, than the “content” of the educational programmes.

On the other hand, “programme accreditation” (under different names) is a rather old practice in European HE, at least in engineering: as a matter of fact, the UK engineering Institutions started their activity, that included promotion of learning and evaluation of professional qualifications (a sort of “accreditation”), in the 1800s.

On the other hand, the word “*accreditation*” has been accepted in the European usage (especially in EU circles) only in the late 1990s, when it came from the USA where the “Accreditation Board for Engineering and Technology” (ABET) had been established in 1932 as “Engineers’ Council for Professional Development” (ECPD). However, in France, the CTI (“Commission des Titres d’Ingénieur”) was established by law already in 1934, with among its main missions to award the “habilitation” (indeed, the “accreditation”) to engineering programmes and HE Institutions.

At this point, let me recall the definition given in the EUR-ACE Framework Standards [3][4]: *“Accreditation of an engineering educational programme is the primary result of a process used to ensure the suitability of that programme as the entry route to the engineering profession.”* In this definition, written for engineering but extendable to other professions by replacing the word “engineering”, “*accreditation*” is strictly related to a field-specific QA approach, in which the aims and contents of the educational programmes are specified, and combines assurance of “academic quality” with professional relevance. Therefore, it can neither be simply qualified as “academic accreditation” nor, on the other hand, as “professional accreditation”, because “academic education” may be not sufficient to be “licensed” for a profession (e.g., in several countries to be qualified as “engineer” a graduate of an accredited programme must fulfil further, more or less formalized “professional training” requirements, fixed by professional, not academic, organizations). In order to avoid confusions, “accreditation”, defined in this way, can be referred to as “pre-professional accreditation”.

2. “Meta-” and “sectoral” Qualification Frameworks.

The ESG refer to the “Qualification Framework for the European Higher Education Area” [5] developed within the Bologna Process: this, and the parallel “European Qualifications

Framework for Lifelong Learning” [6] identify levels of qualifications, employing general Learning Outcomes (LO) descriptors without specifying nor referring or quoting specific subject areas: they can be defined “Qualifications Meta-Frameworks”.

Although the ESG and in general QA practices have done and are doing a great deal to improve the European HE systems (and the same is true on the global scale) the risk is unavoidable that using only Meta-Frameworks may lead to paying more attention to the “educational process” than to the “content” and “job relevance” of the education. That’s why “field-specific” approaches to QA, based on Learning Outcomes (LO) defined for more or less broad subject areas, are becoming recognized as relevant and essential, as confirmed by two documents pertaining to the Leuven Conference of HE Ministers (2009), namely:

- i) In the “Background Paper” [7], we can read: “...the relationship between qualifications frameworks and quality assurance is crucial. Work needs to be continued over the next few years, at national and institutional as well as at European and regional level, to improve the links and interaction between the work done on qualifications frameworks and on quality assurance, involving a broad range of relevant stakeholders... While learning outcomes have been generically defined for the degree structure [through] the ‘Dublin descriptors’, the key point is to further develop descriptors for subject specific knowledge, skills and competences. Since the start of the Bologna Process, higher education institutions and their academics have taken up the challenge to develop international descriptors and reference points for a growing number of subject areas. Initiatives in this direction ... are welcomed and need further encouragement; ... [it is true that] the establishment of too detailed subject specific descriptors could hinder the development of interdisciplinarity... however, shared subject descriptors are only to be seen as indicative for a kind of core curriculum, leaving still plenty of freedom for programme diversity. Common reference points could also be developed for an entire sector, which might lead to the definition of sectoral descriptors and the establishment of sectoral qualifications frameworks”.
- ii) Also the final Communiqué [8] promotes field-specific definitions of Learning Outcomes: “We reassert the importance of the teaching mission of higher education institutions and the necessity for ongoing curricular reform geared toward the development of learning outcomes... Academics, in close cooperation with student and employer representatives, will continue to develop learning outcomes and international reference points for a growing number of subject areas...”.

In this context, several European organizations are developing competence profiles at disciplinary level and sets of Learning Outcomes defined for more or less broad subject areas (engineering, chemistry, informatics, geology,...), that have a number of characteristics and objectives in common: they intend to

- be widely applicable and inclusive, enabling eligibility of a wide range of possible approaches to higher education;
- handle the diversity of content of degree programmes;
- be relevant for academic study programmes leading to a First- (Bachelor) and/or to a Second-Cycle (Master) Degree;
- define appropriate qualifications as entry routes to the relevant profession;
- facilitate also accreditation of trans-national joint- and double-degree programmes.

Examples of “Sectoral Frameworks” in different fields can be considered the “EUR-ACE

Framework Standards for Accreditation of Engineering Programmes” [3][4], that will be dealt with in detail in Section 4 below; the “EQUIS Standards and Criteria” for business, economics and management Schools, elaborated by the European Foundation for Management Development EFMD [9]; the “Eurobachelor Framework 2007” [10] and “Euromaster Framework 2006” [11], at the basis of the award of “Chemistry Quality Eurolabels” by the European Chemistry Thematic Network Association ECTNA.

3. “Institutional” vs. “programme” Accreditation.

Meta and Sectoral Qualification Frameworks imply, respectively, “field-specific” and “general” QA approaches, that in turn lead naturally to “institutional” and “programme” accreditation. Institutional and programme accreditation share most of their “technical” instruments and procedures: self evaluation reports, peer reviews, benchmarks vs. reference points, etc.: the choice should never be “either - or”, but how best to combine the two approaches in order to optimize the results while limiting the burden placed on the HE Institutions and their members.

A fair comparison of the two approaches is contained in Fig.1, reproducing a slide presented by the ENQA Vice-President Helka Kekäläinen at the Final Conference of the EUR-ACE SPREAD project (Brussels, 25/10/2010). I share most of the considerations contained in this slide, except that programme approaches imply “extra bureaucracy”: indeed, the “licensing” procedures for professional practice do require anyway a sort of “professional accreditation” (that can be called differently) and the trick is to avoid duplications.

Also Prof. Howard Davies, speaking as representative of the “European University Association” (EUA) at the same Conference, recognized that in QA procedures there is “*no discontinuity between institutional and programmes levels, where both are consistent with ESG*”, and programme approaches are “*particularly relevant for disciplines relevant to public health and safety*”.


 EUROPEAN ASSOCIATION FOR QUALITY ASSURANCE IN HIGHER EDUCATION	
Institutional vs. Programme oriented approaches to QA*	
Institutional Approach	Programme Approach
<ul style="list-style-type: none"> assesses the internal monitoring and quality assurance arrangements Content of programmes are not thoroughly examined allows for more flexibility in terms of structure, content and implementation of study programmes emphasises the autonomy and the primary responsibility of the institutions for their quality 	<ul style="list-style-type: none"> transversal comparison between subjects possible better information about programmes offered, recognition of joint degrees more resources needed (time and money), extra bureaucracy limited effect in improving the institution's management of teaching and learning quality
<small>*ENQA workshop report <i>Programme-oriented and institutional-oriented approaches to quality assurance: new developments and mixed approaches</i></small>	

Figure 1. Institutional vs. Programme Accreditation

Summing up, I would say that “Institutional accreditation” is essential to guarantee the “quality” of the educational process, since only well-structured HE Institutions can provide reliable education; while “programme accreditation” is essential to assure “relevance for the job” besides “academic quality” of educational programmes.

Both approaches being relevant, it is however clear that field-specific QA approaches accentuate the need for aligning the goals of educational programmes with the expectations of the stakeholders, and underline that Higher Education institutions, while in principle autonomous, are nevertheless accountable to their constituents, which includes an obligation to demonstrate the “relevance” of their output. Thus, field-specific QA systems give credibility and concreteness to the whole “Bologna”/EHEA system.

For the EU countries, this link to the relevant social and economical issue of employability is further stressed and strengthened by the “Directive for Recognition of Professional Qualifications” [12].

4. The EUR-ACE exercise

4.1 The EUR-ACE system at present

EUR-ACE is a decentralized Europe-based accreditation system of educational programmes as entry route to the engineering profession (“pre-professional accreditation”): a common quality label (EUR-ACE® label) is awarded to programmes that satisfy a common basic set of standards (“EUR-ACE Framework Standards for the Accreditation of Engineering Programmes” [3][4]) and are accredited by an Agency fulfilling appropriate Quality Assurance prescriptions, in particular the already quoted “European Standards and Guidelines for Quality Assurance in Higher Education” (ESG)[1]. ENAEE, the European Network for Accreditation of Engineering Education authorizes qualified Agencies to award the EUR-ACE label.

The whole EUR-ACE system obviously follows the “programme approach” to QA: in fact, the ENAEE “General Policy” [13] clearly states:

“ENAEE strongly supports a field-specific approach and programme accreditation, considering it essential to fulfil the need of aligning the goals of educational programmes with the expectations of the relevant stakeholders and ensuring their relevance for the labour market.

Programme accreditation does not exclude institutional accreditation: on the contrary, it may become easier if an overall system of QA authorizes only quality HE Institutions to deliver academic degrees.”

The EUR-ACE Framework Standards, that identify 21 programme outcomes for First Cycle degrees and 23 for Second Cycle degrees³, provide a common reference framework serving as the basis for the award of the common European EUR-ACE quality label, and do not intend to substitute for national standards. Consequently, the EUR-ACE accreditation system is essentially a bottom-up system aiming at a “European Recognition of National Accreditations”: national (or possibly regional) agencies accredit the educational programmes, and ENAEE authorizes (“meta-accredits”) them to add the EUR-ACE label to their accreditation, after checking that their procedures and requirements satisfy the EUR-ACE Framework Standards (hence the ESG). Thus, the authority for accrediting remains with national bodies but by

³ The EUR-ACE Standards use the term “programme outcomes” instead of “learning outcomes”.

agreeing a pan-European meta-framework there is the opportunity to build up cross-border recognition.

In accord with the EUR-ACE Framework Standards and the European Qualification Frameworks, the EUR-ACE label distinguishes between First-Cycle (FC) and Second-Cycle (SC) degrees (sometimes referred to as “Bachelor” and “Master” degrees in engineering) the SC label is awarded also to degrees obtained via “Integrated Programmes” (i.e. “long-cycle” programmes leading directly to a Second-Cycle degree). Consequently, the authorization (“meta-accreditation”) specifies if the Agency is authorized to deliver FC and/or SC labels.

Each EUR-ACE label is awarded to a specific programme by means of a certificate signed by the ENAEE President and by an official of the Accrediting Agency. The graduates of an EUR-ACE-accredited programme can define themselves as either “EUR-ACE® Bachelor” or “EUR-ACE® Master”, respectively if they have obtained a First-Cycle or Second-Cycle degree.

EUR-ACE is currently implemented by seven Agencies based in seven countries throughout the European Higher Education Area, namely:

- CTI (Commission des Titres d'Ingénieur), France;
- ASIIN (Accreditation Agency for Study Programs in Engineering, Informatics, Natural Sciences and Mathematics), Germany;
- Engineers Ireland;
- Ordem dos Engenheiros, Portugal.
- RAEE (Russian Association for Engineering Education);
- Engineering Council, United Kingdom.

Implementation of EUR-ACE started in 2007: approximately 750 EUR-ACE labels have so far been awarded, some even outside the home countries of the seven Agencies.

EUR-ACE has been quoted by the European Commission as an example of good practice in a 2009 Report [14] and in a publication issued in the occasion of the “Bologna Anniversary Conference” [15].

Note that, at least for the time being, the EUR-ACE labels are limited to First-Cycle and Second-Cycle engineering degrees, but ENAEE is monitoring the possibility and opportunity of accrediting other engineering programmes, including Third-Cycle (Doctoral) and Continuing Education programmes.

4.2 The EUR-ACE system: current developments

The EC-supported EUR-ACE SPREAD project (November 2008/October 2010) has been aimed at expanding the EUR-ACE system into other EU countries. By the end of the project, ENAEE had received applications to be authorized to award the EUR-ACE label from six more accreditation Agencies, namely:

- NVAO (Accreditation Organisation of Netherlands and Flanders)
- ARACIS, QA Agency, Romania
- SKVC, QA Agency, Lithuania
- OAQ, QA Agency, Switzerland
- KAUT, Accreditation Committee for Technical HE Institutions, Poland

These application are now undergoing the process of evaluation by ENAEE, that involves consideration of submitted documentation and site visits: it is hoped that within a few months all these Agencies will be able to join the EUR-ACE system.

Moreover,

- An Italian engineering accreditation Agency, named “Agenzia EUR-ACE” has been founded in December 2010, and will start soon the process to be authorized by ENAEE;
- CTI has signed an agreement with AEQES (the evaluation agency for the HEIs of the French Community of Belgium) that will allow CTI to accredit and award EUR-ACE labels to French-language Belgian HEIs (as already done for programmes of the bi-lingual Belgian Military Academy, Brussels);
- Kazakhstan, the latest (47th) EHEA country, participates in the EUR-ACE system through RAEE, but is also trying to create a national Engineering Accreditation Agency (and the same holds for other Central Asia countries).

EUR-ACE is arising great interest in other countries too (e.g. Austria, Spain, Finland, Denmark, Hungary...): thus, the perspectives to make it a truly pan-European system look good.

4.3 An open question: accreditation at “branch” level?

In Section 2 above, two levels of Qualification Frameworks have been identified: “Meta-Frameworks” and “Sectoral Frameworks”. As already stated, the EUR-ACE Framework Standards can be assimilated to a “Sectoral Framework”: they are valid for all “branches” of engineering and for all educational “profiles” (either more theoretically or more vocationally oriented).

However, many Sectoral Frameworks may be further subdivided in sub-sectors characterized by specific descriptors, including, if applicable, the identification of professional activities for which the candidates are to be prepared. Engineering is a good example of a sector whose domain descriptors can be differentiated according to the different specialties or “branches” (e.g. civil engineering, chemical engineering, etc.), including possibly main or core curricula contents and methods, giving substance to the higher level descriptors.

Significant work is taking place at branch level in European engineering education, through the activity of “Education Working Parties” of the relevant scientific-technical Associations, or through the initiative of HE Institutions. Generally, these initiatives include the ‘translation’ of sectoral descriptors into specific branch-level descriptors, the identification of core contents and the identification of scope, depth and breadth of the programmes, a major issue in the engineering area when comparing programmes. Five initiatives can be quoted as typical examples:

- 1) The EUCEET - European Civil Engineering Education and Training Association [16], a comparatively new Association stemmed out of three Thematic Networks (EUCEET I, II and III), directly related to the TUNING project and developed with the support of the European Council of Civil Engineers, which identified both generic and specific competences for civil engineering programmes.
- 2) The Working Party on Education of the European Federation of Chemical Engineering, that elaborated the “Recommendations for Chemical Engineering Education in a Bologna Two Cycle Degree System” [17]. The proposed core curricula cover about two thirds of the total

credits, leaving space for significant modifications and innovations.

- 3) CHEMPASS, an European project involving 13 HEIs, which aimed at promoting mobility and attractiveness of European Chemical Engineering Higher Education through a thorough analysis of contents and methods, and through the development of tools for competence evaluation [18].
- 4) The “Recommendation for the development of consecutive Bachelor’s and Master’s courses”, proposed by the Associations of German Engineers (Verein Deutscher Ingenieure, VDI) and the Society for Chemical and Process Engineering (GVC) both for ‘more applications oriented’ and for ‘more research oriented’ profiles [19]. The VDI-GVC recommendation defines: (i) professional profiles and aims for the courses, adopting the EUR-ACE Framework Standards; (ii) qualifications for admissions; (iii) structure of the degree course, including core curricula; (iv) fields of studies; and (v) industrial placements. This proposal is a major recognition of the relevance of the EUR-ACE outcomes and respective descriptors and represents a remarkable example on changes that promote recognition of qualifications.
- 5) The very ambitious global AHELO (“Assessment of Higher Education Learning Outcomes”) project of the OECD [20], that produced in 2009 its first result, i.e. a “Framework of Expected/Desired Learning Outcomes” for First Cycle programmes in the branches of electrical, mechanical and civil engineering [21][22] and at present (2011) is working on a “Feasibility Study” for assessing the actually achieved graduate competencies in civil engineering (and, in parallel, in economics).

“TechnoTN”, the “Archipelago of Thematic Networks in the fields of Sciences and Technology”, is another example of positive collaborations and exchanges of experience within and between subject- and branch-specific networks and associations [23], that has so far organized five two-day “Fora”. Subject-specific approaches in QA of HE have also been the theme of a 2009 Conference, organized by ASIIN with the collaboration of a number of networks [24]. INQAAHE⁴ is currently promoting and organizing a series of meetings of European disciplinary networks and of professional and specialized accreditors.

Although the relevance of branch qualifications is beyond doubt, at least in engineering, a question is now open: noting that in some countries engineering programmes are accredited with reference to the branch and in others without (e.g. respectively in the UK and in France), should/could branch requirements be recognized at European trans-national level by a EUR-ACE-like system? or should they be left at the national level?

5. Some Concluding Remarks

The “Bologna Process” aims at creating in Europe “a system of easily readable and comparable degrees” in order to facilitate mobility of students and graduates and to promote attractive conditions for third countries to cooperate with European Universities. One of the great assets of Europe is the diversity of its cultures: the “Bologna Process” does not pursue the “uniformity” of the diverse educational systems that derive from such European cultural diversity and can only be slowly harmonized by a gradual spontaneous convergence, and not by “top-down” means.

Mutual trust is key for achieving the essential goals of the Bologna Process. To create such trust it is necessary to build transparent and readable academic curricula and professional

⁴ International Network of Quality Assurance Agencies in Higher Education

qualifications. This can be facilitated by transparent Qualifications Frameworks (QF) and Quality Assurance procedures (QA), recognised and accepted by all partners and stakeholders. While “general” QA procedures are essential to guarantee the quality of HE Institutions, only “subject-specific” QF and QA approaches can give concrete application and put on solid and practical grounds the “Bologna” objectives.

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UNIVERSITY CIVIC ENGAGEMENT ROLE: NEW ENVIRONMENTS AND CHALLENGES IN THE ROMANIAN HIGHER EDUCATION SYSTEM. THEORETICAL CONSIDERATIONS

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Abstract

This paper is intended to be a critical analysis of the involvement of Romanian higher education institutions in improving the level of civic engagement within the communities they serve. The article addresses some theoretical considerations, introduced and developed regarding the civic involvement of universities in developing the communities they assist. The analysis is carried out through the principles of responsibility, responsiveness and accountability. The end of the article includes some recommendations for new methodology addressing evaluation and quality assurance from an institutional level viewpoint, as well as from the perspective of study programmes.

Key words: civic-reflexive university, civic engagement, university civic responsive role, accountability.

1. The Civic Engagement of the Universities in Community Development

The specific cultural and historical role of higher education and implicitly, of universities, varies widely depending on place and time. Following the historical evolution one can see that, through different times and situations, universities played a specific role in regional development, even in national and state development. In this respect, nation-states' universities have contributed to the creation, intellectual unification and strengthening of the nation they belonged to, thus having a significant impact in creating *civitas* (Bîrzea 2005). The role universities play in the development of *civitas* and of communities is somewhat obvious, but considering their constant functional and structural changing nature it is necessary for them to diversify, at various points in time, the educational services they provide, both for better responding to community needs and for increasing civic participation within those communities. We will focus on this particular new role and use the phrases „civic engagement (of universities)” or, simply, “civic engagement”. We argue that it is necessary to develop the particular behaviour of „civic engagement of universities” and we will present an overview of Romanian universities focusing on this issue.

According to Lăzăr Vlăsceanu (2010, p. 165), from the multitude of university types three distinct categories can be distinguished:

- established universities;

- market-oriented universities;
- reflexive universities.

The first category encompasses Humboldtian universities. The second category includes a multitude of institutional formats through which educational services are offered and usually sold, thus including within university activities a financial dimension of profit-seeking. The third category includes a new type of university, situated between the other two typologies: reflexive universities. These have a basis in the academic fundamental standards, typical for established universities, but also pick up some practices from market-oriented universities. Through their own specific path they get closer to the needs and aspirations of communities. Thus, reflexive universities „symbolize the risks and uncertainties which the university as knowledge and learning organization is confronting today” (Vlăsceanu 2010, p. 165). As far as civic engagement is concerned, compared to the other two categories, the reflexive university „is called to, and often succeeds in building individual citizenship and social civism, and offers ground for the development and guiding of social construction” (Vlăsceanu 2010, p. 175). In this way, reflexive universities manage to think in a coordinated manner with the communities they serve, which leads to a correlation between demand (expectations and needs of the community) and supply (availability and capacities developed by the universities). Through this correlation, reflexive universities manage to be actively involved in civic activities:

- They turn away from exclusive centring on the teaching staff (representing solely the teaching portfolio, otherwise very important) and add a centring on collective and civic identities specific to academic communities but, more than anything, a centring on external communities for whom they provide various educational and professional competences programmes, correlated to their demands (Macfarlane 2007). It is necessary, therefore, to complete the specific instruments for evaluating and validating competencies developed outside higher education institutions;
- They diversify and personalize educational programmes, so that universities hold portfolios accessible to different categories of potential beneficiaries. The relevance of the offered programmes comes from combining a fit for purpose structural and functional behaviour with a greater closeness to communities (McIlrath and Mac Labhrainn, 2007);
- They step outside the academic structures and space and adopt a behaviour typically associated with foundations and volunteer organizations. By institutional restructuring they manage to get closer to a wider audience and facilitate citizens' access to services of popularization of knowledge (Macfarlane 2007). This involvement provides added value to the role and functions the universities take on, providing educationalization of communities and the development of social services through specialized cognitive and professional guidance and orientation (Smeyers and Depaepe, 2008).

Thus we could state that through civic engagement and the adaptation of their programmes through personalization and diversification, universities can be thought of as being civic-reflexive.

Their civic-reflexive character is evident through the following:

- they are connected to what is happening in their communities;

- they offer quick answers to communities' questions and focus on foresight;
- they contribute to raising the degree of responsibility of public authorities;
- they support entrepreneurship activities.

Based on academic freedom and institutional autonomy, reflexive universities take on roles equally important to those of public authorities, civil society and market organizations. By focusing the maximization of competences reflexive universities facilitate the formation of different networks. Unlike established or market-oriented universities, the civic-reflexive ones have a high degree of responsibility both towards direct and indirect beneficiaries and most importantly towards the communities they serve (Arthur and Bohlin 2005). Civic-reflexive universities are *a priori* more prone to international and transnational cooperation for educational programmes, projects and civic activities.

2. Three Principles of Analysis

At the present time, the European Higher Education Area encompasses a few platforms and networks specialized in such educational and civic activities (Benson, Harkavy, and Puckett 2007). For example, a decade ago, the Council of Europe developed an approach embraced by European Universities conceptualizing them as „republics” - similar to democratic states (Weber and Bergan 2005). This metaphor illustrated how universities defined their own set of values, beliefs and practices but also were turned towards the social dimension and provided innovative education.

The civic reflexive character of universities can be approached:

- by the type of educational and research services they provide;
- by the way beneficiaries are involved;
- by geographical representation, etc.

We will analyze the civic-reflexive character of universities through three principles:

- Responsibility;
- Responsiveness;
- Accountability.

Responsibility

The principle of responsibility focuses on how the university relates to direct and indirect beneficiaries through offering high quality educational and research services, in relation to the harmonious and sustainable development of communities (McIlrath and Mac Labhrainn, 2007). By correlating their services to communities needs implicitly the level of civic engagement of citizens and public or private organizations rises (Arthur and Bohlin 2005). However, the understanding of this principle as absolute would limit universities to their institutionalized borders (Weber and Bergan 2005); in that way, universities would develop their services focusing inward on the university themselves, not necessarily on communities. This explains occasional frustrations towards the low civic engagement of universities.

Responsiveness

The responsiveness principle provides depth to the relation between community and university. The responsiveness principle includes responsibility but focuses on the development of universities in close relations to the level of community development (local communities, professional or cultural communities). The university thus takes on direct involvement and development of communities. Responsiveness describes a behaviour of being inside the community and thinking in tune with it, and at the same time taking on a role of guidance through technical and social innovation. The responsiveness principle calls for creative responses for the community development need, design of alternative solutions and foresight. This is done through specific educational programmes - short-term courses, informative campaigns, training sessions, TV and Radio broadcasts, simulations and other instructive exercises for the wider public. Moreover, the principle of responsiveness refers to the fact that universities have to provide programmes, as well as research and innovation services, highly applicable to the socio-economic development of the communities. Thus, by research and innovation, universities can offer new entrepreneurial premises, and they may lead to strengthening citizens' ability to cope with major problems specific to such communities (e.g., combating drought, pollution mitigation, energy supply, etc.).

Accountability

The accountability principle focuses on reporting to the direct „client” and obliges the university to offer educational services within specific parameters agreed upon by the „client” (Weber and Bergan 2005). For statist systems this principle addresses the conforming of educational offers with the needs explicitly stated by state institutions, and the universities act as providers of public goods. Accountability also addresses the relation with corporations and the educational services provided to them. Civic engagement here is understood in terms of transmitting education to clients, but does not include the impact assessment of such activities on communities. Accountability is vital because it conditions universities to adopt a transparent and responsible behaviour, one that could prove contagious to other organizations and institutions.

*

Taking into account the previously mentioned principles, one has to note that ensuring quality in higher education needs to encompass an analysis of the relevance of provided services. Quality assurance systems need to be adjusted to new institutional and functional contexts and include civic engagement and community relations in their analysis grid. Thus, for civic-reflexive universities quality assurance does not focus only on verifying, control and guidance, but also on evaluating the responsiveness towards the community.

3. Romanian Present Situation

In the last two decades, higher education institutions in Romania have mainly focused on extending the range of activities. This entailed:

- offering new study programmes - particularly programmes solicited by potential beneficiaries (expansion) – this is the case of programmes which have been abolished or limited to a maximum during the years 1950 - 1989 (e.g., sociology, political sciences, international relations, public administration, etc.);
- enrolling a growing number of students (massification);
- a multiplication of higher education institutions - state institutions and private ones.

It is important to notice that through these processes of expansion, multiplication and massification, higher education institutions have turned from „ivory towers” to institutions accessible to the wider public. Therefore, it is expected for them to become spaces for educating citizens for an active and responsible citizenship. However, universities have focused primarily on the strict offer of educational services, without including a transversal dimension of civic engagement for students. Even more, Romanian universities have established their missions in correlation with their expansion and massification aspirations. Their officially assumed mission was limited to offering academic and research support for beneficiaries acquiring professional competences strictly limited to each domain. Very few times universities in Romania, public or private, have explicitly assumed missions that included the development of civic activities or community development projects.

During the last decade the responsibility principle was understood in relation to the internal institutional context - teaching and administrative staff, students and sometimes potential employers. External responsibility remained underdeveloped. Private universities have adopted an opportunistic and at the same time conservative approach, focusing on providing professional competences and generally lacked involvement with communities. Similar approaches were embraced by state universities, which show that the responsibility principle was secondary as far as university missions were concerned.

Until now, Romanian universities have not engaged with the responsiveness principle. Even the new legislation does not refer to it. The responsiveness principle is mostly related to big corporate national or international actors. Normally, universities would have to stimulate the generalization of responsiveness practices, through specific activities and examples. However, because of how their function was understood and the way the teaching and managerial staff is structured and formed, universities have been preoccupied rather with researching the model of corporate responsiveness and including it into their curriculum. Romanian universities have thus not developed their own vision, structures or programmes, and avoided competing with the corporate environment and promoting a pro-active civic culture of their own within their communities.

Focusing on conforming to the legal and quality assurance normative framework during the last decade, the Romanian universities fostered responsibility towards state authorities and students, but not to their communities. Hence, we can argue that Romanian higher education institutions, public or private, have developed a behaviour of limited public responsibility, within the borders of the present legal system. This leads to multiple disfunctionalities in the understanding of the role of higher education institutions in a knowledge-based society. The new National Education Law (NEL) does not go far in clarifying this. For example in accordance to the new NEL, art. 3 let. F, public responsibility principle means that „educations institutions are publicly responsible for their performance”. Their performance is evaluated taking into account their assumed mission and activities mentioned in their strategic and operational plans, which so far have included only teaching, research and internal development aspects.

This limited public responsibility approach favours the continuation of the current situation, one where relations between universities and communities are very poor. Such logic is reminiscent of the socialist era: organizational forms remain the same (excepting the emergence of private universities) and, functionality-wise, universities have developed a sort of an aversion to ideological mass education specific to the socialist era, which led to a limiting to offering educational services and at most, developing services for popularizing knowledge. Thus, Romanian universities have not succeeded in developing as fully opened and reflexive

organization, but limited themselves to developing as academic knowledge production, transition and reproduction institutions through training/education and cognitive/technological transfers. Fearing being labelled as „communists“, universities did not explicitly fulfil their role as civic-reflexive actors.

Getting back to the National Education Law (NEL), we need to mention that it does not explicitly state the obligation of higher education institutions to develop civic activities for increasing citizen involvement and it does not set any stimulants for active participation in community development. Although NEL is innovative in many respects and it somewhat conditions universities to adopt a more reflexive approach, according to art. 117 their mission concerning producing and transferring knowledge for society remains limited to two essential aspects: a) initial and continuous training for labour market insertion and correlation with the socioeconomic environment and b) scientific research.

Therefore, according to the new law, higher education institutions lack and are not stimulated to develop missions focusing on improving citizens' civic participation. There is a risk of limiting future strategies strictly to one of the three categories instituted by law: teaching centred universities; teaching and scientific research universities or teaching and artistic/creative universities; advanced research and teaching universities.

However there is one novelty in relation to university civic engagement, brought on by the *Methodology for University Classification and Ranking of the Study Programmes*. The Methodology entails measurement indicators of developing citizens' civic attitudes and developing communities. For example criterion 3 „University relations to external environment“ and indicator R 3.2 „Civic activities“ oblige universities to report the number of civic activities organized by members of the staff (teaching, administrative or temporary research staff) within the last five calendar years. The activities are separated into different categories: conferences, legally constituted manifestations, volunteering in NGO's and community development activities.

This first exercise of classification of universities and ranking of study programmes revealed that Romanian universities lacked systems of primary data gathering and lacked data for Indicator 3, which showed that few universities considered such a dimension for their activity planning, data gathering or budgeting. The Methodology is novel in the Romanian legal, normative and methodological landscape in its inclusion of a civic engagement dimension that counts for further inclusion in one of the three categories established. The resulting stratification is expected to condition some Romanian universities to reposition themselves and adapt their mission as to include more active civic engagement and community development activities. Furthermore, after this particular exercise we will be able to see a re-defining of University governance and internal structure so that civic engagement would become just as important as knowledge production and innovation, leading to a greater engagement with a new institutional civic-reflexive culture.

Considering the previously mentioned aspects we can state that within the Romanian quality assurance in higher education approach, the responsiveness of universities to their communities through civic activities was almost entirely absent.

Nevertheless, it needs to be mentioned that some higher education institutions and particularly some study programmes were stimulated to approach civic engagement through different stimulants developed by civil society and the private sector. For example in recent years, associations and foundations develop recognition and prize-awarding activities for universities or teaching staff, including civic engagement in their evaluation. We expect that such activities

develop further and even for some autonomous agencies in higher education to develop their own similar approaches.

In conclusion, for the past two decades, the civic-reflexive character of Romanian universities was rather an isolated occurrence. Recently it has been conditioned by the new normative and methodological framework for higher education stratification and regulation. A positive aspect is that for some higher education institutions this type of civic activities has become long-standing practices. Even if, even for them, the institutional mission is not explicit regarding this aspect, they have developed civic activities and, to a considerable degree, their teaching and research process are correlated with the promotion of principles specific to civic engagement¹.

4. Conclusions

The main conclusion of this article is that, for the most part, Romanian universities have contributed to the perpetuation of a patriarchal authoritarian culture and not to one leading towards civic participation. This finding is based on the fact that both the previous and the current legal framework do not stimulate universities to develop truly responsive behaviour and civic engagement. Although the current legal framework does not have explicit references to the civic engagement of universities, however, the new methodologies developed through the new NEL condition Romanian universities to adopt within the next years a responsive attitude towards the communities they serve, and to be actively involved in developing programmes and projects aiming to help developing civic participation and educualization of citizens. In this regard, consistent with the new methodology for the universities' classification and ranking of the study programmes, the new methodology for evaluation and quality assurance should provide a distinct criterion and specific indicators regarding the responsiveness and civic involvement of the institutions and study programmes found under monitoring and evaluation procedures. At the same time, it is necessary for universities to be encouraged to embrace a civic-reflexive behaviour by establishing national contests for state and private universities. The context of the stratification of universities, launched with the enforcement of the new legislation in the education field, conditions the HE actors to adapt their institutional mission so that it can also include their civic engagement dimension.

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ⁱFor a more detailed account of Romanian HE institutional good practices, see “University Civic Engagement: A Case Study”, article published in the present volume.



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UNIVERSITY CIVIC ENGAGEMENT: A CASE STUDY

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Abstract:

In this article, we aim to present an illustrative case study concerning civic engagement of Romanian universities. Some of the initiatives of the Department of International Relations and European Integration (DIREI) of the National School of Political Studies and Public Administration are analyzed. We believe that DIREI's initiatives could be considered good practices examples and could provide useful guidelines for developing university civic responsive role.

Key words: civic engagement, university civic responsive role, good practices.

1. Case Study: the Department for International Relations and European Integration, from the National School of Political and Administrative Studies and Civic-Reflexive Activities

The following case study illustrates some examples of how academic structures can contribute to the development of a pro-active civic culture within communities. There are some first steps being made in re-defining university governance and internal structure by including civic engagement as a necessary completion for knowledge transfer and academic innovation. The case study presented in this article is approached from a theoretical perspective encompassing three main principles: responsibility, responsiveness and accountability¹.

The Department for International Relations and European Integration (DIREI) from the National School of Political and Administrative Studies is a founding domain at the university, ensuring the link between theoretical and practical training in foreign, security and defence policy, and, starting in 2007, in European integration. For all these domains, DIREI has developed solutions for connecting academic and expertise areas. One example is the European Union studies, which are well represented both in terms of teaching and research. DIREI has set its own set of academic standards, has developed its European Centre for Documentation (part of the European Commission network), the Centre for European Studies and, together with its students and alumni, the Academic Club of European Studies.

1.1. The Conference Series “The Lisbon Treaty and Romania's Role in Deepening the European Integration Process”

Short description

Our first example is the series of conferences „The Lisbon Treaty and Romania's Role in Deepening the European Integration Process”, organized in partnership by DIREI with the Department of European Affairs (Romanian Government), with the support of the Academic Club of European Studies in June-December 2010ⁱⁱ.

Compliance with the responsibility principle

The series of conferences illustrated the availability of higher education institutions to switch from an inside-oriented definition of responsibility to a wider one, including external responsibility. The conferences were meant to present to different target-groups the main modifications entailed by the Treaty of Lisbon for EU's institutions and policies. The Treaty modifies to a great extent the policy-institutional EU dynamic, presenting new challenges and opportunities for participation to policy-making. Studies indicate that Romanian citizens know very little about these modifications, which is why the conferences approached issues such as: the future of the EU, the institutional changes, the modifications to the decision-making process, the development of economic policies, the Europe 2020 Strategy, the Charter of Fundamental Rights of the European Union, etc. The conferences focused on target groups such as public employees, NGO representatives, unions, employers, mass-media representatives and academia representatives.

Compliance with the responsiveness principle

University interventions for stimulating community activities (local, professional and cultural) through offering alternative solutions or through elaborating specific development scenarios are very important. DIREI has adopted a reflexive stance of guidance for the beneficiary target-group. The conferences' concept involved local authorities from the eight development regions, each conference being targeted at a particular regionⁱⁱⁱ. Therefore, the themes and target groups were adapted together with local authorities who were partners in the project. From a list of proposed themes, each region could choose whatever issues it considered important for its own development after the Treaty of Lisbon.

No.	Panel Title	Themes/content	Target Group
1	New challenges to the European administrative space	<ul style="list-style-type: none"> The decision-making process in the EU, modifications in the Treaty of Lisbon; The new dimension of economic, social and territorial cohesion for Europe 2020: a more competitive Europe; Local regions and communities - the Treaty of Lisbon and the subsidiarity principle; The new architecture of EU competences. The relation with the member states. 	<ul style="list-style-type: none"> Public employees from central and local administration.
2	Perspectives for intelligent, durable and inclusive development	<ul style="list-style-type: none"> The European economic-social model; The representation of EU interests. The necessity for a new social European partnership - reforming the economic and social committee; The new social dimension of the EU - the 	<ul style="list-style-type: none"> Representatives of employers' organizations and confederations; Representatives

		convergence of economic and social policies for Europe 2020; <ul style="list-style-type: none"> • The role and importance of social, employer and market networks in the decision-making and policy-implementation process. 	of unions' organizations and confederations
3	The European Public Space- A Europe of Citizens	<ul style="list-style-type: none"> • The charter of fundamental rights of the European Union - transforming European citizenship; • The role of mass-media in EU democratic governance; • The Lisbon Treaty and the representation of citizens' interests - a union closer to its citizens; • Democratic governance in the EU; • Participative democracy; • The communication strategy of the EU -informing citizens on policies for a better life. 	<ul style="list-style-type: none"> • NGO representatives; • Local and National Mass-Media representatives

It is important to mention the fact the DIREI supported and financed this activity without soliciting budgetary or extra-budgetary funds, which indicated the fact that the DIREI leadership was aware of the need to invest its own financial and material resources, together with its cognitive ones, for the development of communities.

Compliance with the accountability principle

This conference series also serves as a reminder of the need to recognize the existence of a public responsibility of universities. Thus there was a switch from being accountable solely to the “employer” or the “client” to a wider understanding of public accountability. DIREI’s activity was innovative because it constituted a dialogue platform between governmental local and central structure and the academia, and also because it opened up to other actors. The process of selection of themes to be addressed was innovative in its flexibility. The structuring on theme sections ensured a good level of interaction between participants and led to a deeper understanding of post-Lisbon European Union functioning.

1.2. Strategy and Policy Studies: „The Lisbon Treaty. Impact on Romanian Institutions and Policies”

Short description

The study „The Lisbon Treaty. Impact on Romanian Institutions and Policies” was conducted between May and December 2010, under the aegis of the European Institute of Romania. The team selected for its preparation was composed of specialists from the Department of International Relations and European Integration (Bărbulescu *et al.* 2011).

The study analyzes the European Union after the Lisbon Treaty and Romania’s place and part in this new European context. Specifically, the authors identified the changes the Treaty brought and the way in which the Romanian institutions and policies should thereat react. The study also drew a picture of the state of play in Romania, seven years after the conclusion of the EU accession negotiations and four years after the official accession – i.e., an analysis of Romania before and after the enactment of the Lisbon Treaty.

Compliance with the responsibility principle

The admission of the importance of the responsibility principle appears in this case as an education and research service offering for a community defined this time in a much broader sense. The study appeared, therefore, from the awareness of the need for researches to be able to address "the needs of the city".

For this reason, the study is constructed on a *general to particular* logic. In the first part, the changes brought by the Lisbon Treaty are highlighted, analyzing the political and institutional consequences of the multiple novelties set forth by the Treaty. Questions of values, of a European model and its possible spillover, as well as the EU's "Europe 2020" and "Europe 2030" Strategies are also addressed. The second part of the study was dedicated to the analysis of the Romanian state of play. On the occasions of finalizing the accession negotiations and of becoming an EU member, Romania undertook some commitments and the authors intended to see to what degree at least a part of these commitments were followed upon. For example: to what degree has Romania managed to realize the touted improvement of its administration capacities, a key element in the enhancing of the advantages of EU accession? Or, which is the situation of the European funds, of the institutional, legislative and administrative framework or of the social dimension, democracy and position of the citizen? The guiding marks of the analysis were the situation existing at the moment of Romania's accession to the EU and Romania's situation after the coming into force of the Lisbon Treaty. The conclusions of the study are accompanied by proposals of a Romanian political and institutional design meant to ensure the better enacting of the stipulations of the Lisbon Treaty.

Compliance with the responsiveness principle

Enhancing the above principle, the orientation towards responsiveness is evident in this case by identifying alternative solutions for community development; an argument to prove the relevance of the identified solutions can be found in the debates organized in order to analyze the study results and the recommendations for policy and institutional design^{iv}. The most important subjects can be grouped in the three large themes proposed by the authors:

- Theme 1. The Romanian Administrative space. Developing administrative capacities. Institutions, policies, strategies. Recommendations regarding the need: to continue the professional training in the field of European integration of central and local administration civil servants; to establish a culture of public and, especially European, programmes and policies evaluation; to establish a tighter cooperation with business-owner and social networks in order to ensure the accomplishment of the EU's objectives set forth by the "Europe 2020" strategy; to struggle against the internal informational deficit; to define the relations between the Legislature and the Executive Branch in the context of the Treaty of Lisbon's meaning of subsidiarity and enhancement of the national parliaments' role; to enhance Enhancing the capacities for the absorption of EU-funds allocated to Romania through structural instruments, etc.;
- Theme 2. The European Model. The social dimension. Recommendations regarding the need: to address the gender dimension in the efforts to reduce geographical disparity in wages and accessing healthcare; to improve the living standards for the Roma minority, especially through providing access to education and professional development programmes; to encourage the linking of social-exclusion related concerns with the European Year of Volunteering 2011; to approach social inclusion in a holistic way –

strengthening the access to the labour market, the engagement in society, the access to social welfare, etc.

- Theme 3. Democratization. Recommendations regarding the need: to increase media's role of providing accurate information and promoting active citizenship; to increase the role of the public authorities to inform in regards to the opportunities of active citizenship within the European Union; to increase the collaboration between European institutions and the European and national social partners (employers, trade unions, NGOs); to promote the European citizenship and the participatory citizenship; to enact the recommendations stated in the *Dismantling the obstacles to EU citizens' rights* report; to strengthen the civil society, including through the accession of European funds; to strengthen the participation of citizens belonging to vulnerable groups, etc.

There are significant aspects one needs to take into account, in view of the following issues:

- (a) the persistence of institutional and public policies flaws, on the one hand, and the persistent lagging behind of Romania in fulfilling the already undertaken commitments on the other hand; and
- (b) the major transformations the Union is undertaking as a result of the Treaty of Lisbon's enactment on the one hand and the radical measures already enacted or in the course of being enacted by the EU to counter-balance the economic crisis through the strengthening of the European Economic Union, on the other hand.

Hence, Romania needs to decide on using the reformative circumstances offered by the Lisbon Treaty to gain a new momentum for its European integration, setting up a new beginning for a process that has insofar failed to materialize.

Compliance with the accountability principle

For this study, observing the principle of accountability comes as a completion of the before mentioned lines. The proof is that both the conclusions and recommendations are based on discussions held within the series of conferences "The Lisbon Treaty and Romania's role in deepening the European Integration Process" (see section 1.1. of this article), as well as on a sociological research conducted on this occasion.

The sociological survey consisted in a applied survey designed and implemented by the DIREI research team, to a 300 subjects sample with the following structure – representatives of the public central and local administration (53%), representatives of the non-profit sector – trade unions, civil society members, business-owners' organizations (32,5%), representatives of the media (4,8%), representatives of the Romanian research and education establishment (9,6%). The survey was designed in order to mark the perceptions of the representatives of different societal sectors (the public sector, the private non-profit sector, etc.) in regard to the following issues: the way in which the EU informs its citizens in regards to the policies for a better living; the modifications brought by the Treaty in regards to the development of the EU; the effects of the treaty on the internal politics of each Member State; the implications of the Treaty over issues such as the subsidiarity principle and the relations between the EU and the Member States; the way in which the EU ensures a correct representation of the European interest groups; the importance of business and ownership networks in the decisional and policy-implementation process of the EU; accessing the structural funds; the contribution of the

structural funds to the accomplishment of the cohesion objectives; the extent to which the “Europe 2020” Strategy will reach its targets across its multiple dimensions, etc.

The results obtained following the sociological survey served as a rough guide and offered an image as to how the investigated population’s perceptions were grouped against particular reference points. The authors have used this basis for the selection of the items analyzed in the study and in the formulation of the politico-institutional recommendations, in order to meet the needs of the client / of the direct beneficiaries of the university research.

1.3. The Jean Monnet Teaching Module “Rights and Identities beyond the State: Managing Diversity in the European Union”

Short description

The third example we present is the „Rights and Identities beyond the State: Managing Diversity in the European Union” project, a Jean Monnet Teaching Module implemented by the Department of International Relations and European Integration. Benefitting from the financial support of the European Commission’s Lifelong Learning Programme, the module consists in summer courses offered to high-school teachers from the Centre Development Region. The duration of the project is 1 March 2011 – 31 August 2013.

Compliance with the responsibility principle

This Module is another example to understand the external responsibility of the university. Based on studies showing the relatively low level of awareness of the pre-university level teachers on subjects such as citizenship and European integration, deficiencies which have an impact on the quality of education in disseminating the EU related agenda, the module comprises four basic courses on (a) EU institutions, (b) EU public policies, (c) EU citizenship and (d) EU rights, freedoms and values. The beneficiaries of the project are high-school teachers from the “The Human Being and Society” curricular field and, at the end of the three-year project, DIREI expects it will have trained around 90 teachers from the multiethnic “Centre” Development Region. Therefore, one can speak about two connected objectives: (a) helping a specific number of teachers in acquiring additional competences (cognitive as well as applicative) regarding different EU topics; (b) increasing the chances of the high-school pupils to learn about the EU in a multidisciplinary manner.

The aforementioned region has been chosen because it represents one of the few administrative examples where the majority population and the most important national minorities co-exist and cooperate in a political and cultural environment that is often challenged by this multiethnic feature. Therefore, it is important to offer both teachers and pupils a European citizenship fundament for their interactions; the universities that have the competences to intervene in this process are directly responsibly to get involved pro-actively.

Compliance with the responsiveness principle

It is important for the universities to provide educational programmes suited for the external communities and to develop competences that are validated in this broader context. In other words, it is also important to empower these communities in building their own development

scenarios. This is the reason for which the Module is not addressed to high-school teachers from a specific discipline, but from a whole curricular area. The opportunity to train staff from different disciplines (for example, history, geography, religion or social sciences) guarantees in a larger extent the presence of European themes in their lessons, as well as a multidisciplinary and cross-curricular approach of these issues. Besides the deliverables of the project (courses, roundtables, different theoretical and applicative teaching materials, a website for encouraging the local network etc.), another instrument used by DIREI in its empowerment activities is the intention to obtain the accreditation of the module, a measure which ensures both the beneficiaries and the provider of the sustainability of the obtained or delivered competences.

Compliance with the accountability principle

DIREI's positive answer in observing this principle can be mainly seen in the fact that the Module addresses important objectives of EU's Lifelong Learning Programme; for example, the project aims "to contribute to the development of quality lifelong learning and to promote high performance, innovation and a European dimension in systems and practices in the field", "to reinforce the contribution of lifelong learning to social cohesion, active citizenship, intercultural dialogue, gender equality and personal fulfilment", "to reinforce the role of lifelong learning in creating a sense of European citizenship based on understanding and respect for human rights and democracy, and encouraging tolerance and respect for other peoples and cultures", "to promote co-operation in quality assurance in all sectors of education and training in Europe". Specific for the Jean Monnet priorities of the 2010 call for proposals, the project is "contributing to lifelong learning (including adult education) and open to participation by civil society groups (such as primary and secondary school teachers, journalists, members of professional organisations etc.)" (EACEA 2010).

Moreover, by choosing this specific target group, the module represents an opportunity for the teachers to obtain certified professional competences in an area usually accessible to them only through formal, long term education, such as BA, MA or postgraduate courses on European topics. This is, therefore, another illustration of the way universities can facilitate citizens' access to knowledge.

1.4. Adapting the Study Programmes to the Needs of the Community by Organizing New and Necessary Specializations in Romania

Short description

The *Evaluation of European Public Policies and Programmes* (EPPPP) M.A. programme is the first of its kind in Romania. It was launched from the academic year 2010/2011 and it is developed as a consequence of implementing the "Development of a Professional Evaluation Community in Romania" project (PHARE RO/2005/017-553.05.03.02). The master programme is opened to persons who practice or want to practice activities related to the implementation of European public policies and programmes, especially activities within the field of evaluating this kind of policies and programmes^V. The curricular approach is assessed from the perspective of Political Sciences, but, given the nature of this specialization, it contains many inter-disciplinary connections: European integration, economics, communication and public relations, etc.

Compliance with the responsibility principle

The main mission in EEPPP M.A. Programme is to train professionals in this field, in order to meet the demand for persons qualified for this market segment faced with a process of expansion and diversification. Through its mission and objectives, this M.A. programme contributes to attaining the goals of the National Evaluation Strategy, namely to strengthen the functioning of the national evaluation system through training the human resources in order to meet the evaluation demand which will increase significantly in future years.

In the context of deepening the European integration process and of harmonizing the national practices with those of the European Union, the EEPPP M.A. Programme fully values the EU legislation and the European Commission's working documents for the financial period 2007-2013 in aspects regarding the evaluation of programmes specific for the implementation objectives of the structural funds, as well as the evaluation of EU's policies. These working documents are used both in the process of developing and adapting the curriculum for this master programme, and within the training process. In this way, the M.A. programme contributes to a better use and information on EU's approaches regarding the evaluation of European public policies and programmes.

Compliance with the responsiveness principle

The conception and the development of this M.A. programme answer to a specific need of Romania's EU integration, by enhancing the administrative capacity of an effective and efficient management of structural funds. Thus, the programme contributes to:

- the development of flexible professional initial training routes in the evaluation of European public policies and programmes;
- the increase of the supply of qualified human resources in the evaluation of European public policies and programmes;
- the improvement of the evaluation culture and capacity in Romania;
- the improvement of the regulatory process at the level of the central and local public administration.

In order to contribute to promoting a evaluation culture at the national level by providing initial training programmes, DIREI developed the "Inter-university cooperation for the development of quality courses and master programmes in the field of evaluating public policies and programmes" SOPHRD funded project. The project is (at the moment of elaborating this article) in the contracting procedure and it will be implemented in partnership with the Babes-Bolyai University of Cluj-Napoca and with the University of Oradea during the 2011-2013 academic years.

Compliance with the accountability principle

The design and development of this M.A. programme was consistent with the provisions of the study "The actual and forecast demand for evaluation services"^{vi} which shows that in the coming years the demand for people trained for evaluations of public policies and programmes will increase significantly. Therefore, that study recommends:

- To develop short and long term training programmes on evaluation, addressed both to the internal staff responsible for the evaluation within different institutions, and to external providers of evaluation services;
- To train the internal staff (who is responsible for the evaluation) of different institutions and, at a minimum necessary degree, to also train the management level. Only by developing the theoretical and factual understanding of the evaluation by the management level there can be created the foundations for the development of an evaluation practice at the institutional level.

Taking into account these recommendations, the EEPPP MA programme offered by DIREI is an answer to the aspects indicated by the before mentioned study. In this respect, the programme is accountable both to the central and local public authorities, as well as to the private for-profit and non-profit environment that will benefit from a highly qualified human resource in the field of evaluating European public programmes and policies.

To achieve the desired results, DIREI also initiated a process to develop partnerships and collaborative agreements with academic and research institutions from the country and abroad, and with public institutions, agencies, for profit and non-profit organizations from Romania and from other EU member states. For example, for the first semester of the 2010/2011 academic year, DIREI has developed an agreement with CNDIPT (the National Centre for Vocational Education and Training) for providing internship activities.

2. Conclusions

The selected examples indicate, therefore, the appearance of a reflexive type of institutional structure. Basic elements of such universities have been outlined: the focus on the external communities by offering educational programmes and by developing professional and cross-cutting competences for the communities they serve. We underline the fact that one can consider the offered educational programmes as truly answering the needs and aspirations of the specified communities, if, among others provisions, there exist specific mechanisms to approach the general public and to facilitate citizens' access to knowledge disseminating services. While the provided case study illustrates a provisional blueprint of university civic engagement, still to be more fully developed, it can serve to provide useful guidelines and considerations for universities seeking to develop their own civic oriented approach.

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ⁱ For a more detailed account of our theoretical perspective, see “University Civic Engagement Role: New Environments and Challenges in the Romanian Higher Education System. Theoretical Considerations”, article published in the present volume.

ⁱⁱ The *Department for European Affairs* (DAE) is a structure with legal personality within the apparatus of the Government; its powers are stipulated in Law no. 102/2007 on the establishment, organization and functioning of the Department for European Affairs, published in the Official Journal of Romania No. 275 of 25 April 2007. Given that since its EU accession, Romania participates in EU's decision-making process, the Department for European Affairs functions as a Government-level structure able to coordinate the process of preparing the national position in European affairs and to ensure that Romania meets the obligations arising from the EU membership.

The *Academic Club of European Studies* (CASE) is a non-governmental, non-profit and independent organization, whose members (teachers, students, alumni, researchers) aim to develop and support academic initiatives that promote European values and practices, encouraging the participation of the university environment within the Romanian society.

ⁱⁱⁱ The series of conferences was opened on 24 June 2010 in Bucharest (being addressed to the Bucharest-Ilfov development region). They followed conferences in Oradea (30 June for the North-West development region), Galati (30 September for the South-East development region), Timisoara (October 7 for the Western development region), Craiova (21 October for the South-West development region), Piatra Neamt (28 October for the North-East development region), Alba Iulia (4 November for the Center development region) and Calarasi (18 November for the South development region). The series ended with a new conference organized in Bucharest on 10 December 2010.

^{iv} The first occasion to present and discuss the topic of the study was at its public launch at the conference „Launching the Strategy and Policy Studies - SPOS 2010”: 30 March 2010, at the European Commission Representation Office in Bucharest. The second event was organized by the European Affairs Committee of the Chamber of Deputies and the European Institute of Romania on 18 May 2011, at the Parliament Palace. A third debate is scheduled (at the time this article is elaborated) on 11 July 2011, at the Central University Library.

^v For the concept of public policies evaluation, evaluation criteria and types, or evaluation methods see Miroiu 2002, chapter 7.

^{vi} Developed between October 2008 - February 2009 for the Ministry of Public Finance within the "Development of a Professional Evaluation Community in Romania" project.



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THE INTERNATIONAL, NATIONAL AND INSTITUTIONAL IMPLEMENTATION OF THE BOLOGNA MODEL AT THE IULIU HATIEGANU UNIVERSITY'S MEDICAL SCHOOL - Impact on medical education -

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Abstract

Romania is participating in the Bologna process since and actively acting in Prague 2001, Berlin 2003, Bergen 2005, and London 2007. From 2002 the faculty was the leading higher education institution in the negotiation process in respect for European directive No93/16/EEC and 2005/36/EC

Instruments, criteria and implementation: 1. Adoption of a system of easily readable and comparable degrees 2. Adoption of a system essentially based on two main cycles, undergraduate and graduate: We are concerned about negative consequences in implementing a two-cycle structure in medical education. 3. Establishment of a system of credits such as the ECTS system. Implementation of ECTS and the grading system as measure of the workload involved in a specific learning/teaching activity. 4. Promotion of mobility: continuous growth in international mobility and student exchange 5. Promotion of European co-operation in quality assurance: cooperation with WFME, GMC, IIME, LCME, CIDMEF, AMEE – AMSE – MEDINE etc. 6. Promotion of the necessary European dimensions in higher education: Focus on language learning 7. Integrate lifelong learning into the overall strategy: CME and CPD by modern teaching methods. 8. Higher education institutions and students: Recognition of students as competent, active and constructive partners (25% from all structures). 9. Promoting the attractiveness of the European Higher Education Area: Attractive professional offers for both European and non-European students. 10. Establish a European research area: Research Methodology Master degree; Doctoral school.

Key words: ECTS, students, Bologna, medical schools.

1. Introduction

Romania signed the Bologna Declaration on the 19th of June 1999, joining other 28 European countries, which accepted to actively involve themselves in fulfilling the established goals.

Active Romanian Participation – took place in Prague 2001, Berlin 2003, Bergen 2005, and London 2007.

Bologna Process

European reform process having the goal of establishing the European Higher Education Area until 2010. This process has been started by 46 countries in co-operation with international organizations such as the European Council. The Bologna Process is not a treaty - it has a flexible structure therefore the implementation of agreed principles is up to each of the involved countries.

According to this process until 2010 the European Higher Education should be organized as follows:

- To simplify the mobility from one country to another within the European Higher Education Area, for study or work
- To increase the attraction towards the European Higher Education Area for non-European citizens to be willing to study or work in Europe
- The European Higher Education Area should provide high quality education, contributing to the development of European countries within a stabile, tolerant and peaceful community.

The Bologna principles have been stated in the Bologna Declaration (1999):

1. Adoption of a system of comparable diplomas
2. Adoption of a system essentially based on two main cycles, undergraduate and graduate – Bachelor and Master
3. Establishment of a system of credits such as the ECTS system
4. Promotion of academic mobility for both students and teachers
5. Promotion of European co-operation in quality assurance
6. Promotion of the necessary European dimensions in higher education

During the Prague 2001 meeting the following were added:

7. Promotion of Long Life Learning (LLL)
8. Higher education institutions and students
9. Promotion of the attractiveness towards the European Higher Education Area

Berlin 2003 meeting added:

10. The importance of all elements of the Bologna Process for establishing the European Higher Education Area and the need to intensify the efforts at institutional, national and European level.

2. Applying the Bologna Principles at the Medical Faculty of Cluj-Napoca

The reform of curricula at the Medical Faculty started in 1996, having as main goal - the implementation of the Bologna principles such as: student centered efficiency learning, lifelong

learning, forming of an independent critical and analytical thinking, using scientific methods in education, developing social, ethical, economy and communication skills as well as flexible learning methods. From 2002 the faculty was the leading higher education institution in the negotiation process in respect for European directive No93/16/EEC and 2005/36/EC regarding the recognition of diplomas and qualifications in higher education.

3. Main instruments and implementation criteria of the Bologna model at the Faculty of Medicine, Cluj-Napoca, Romania.

3.1. Adoption of a system of easily comparable and recognized diplomas.

Harmonization with EU Directives EC 93/16 Art.23/2 (medical education in Europe consists of 5500 h structured during 6 years) and 2005/36/EC Art. 24.2 (recognition of professional qualifications).

Introduction of Diploma Supplement

The Diploma Supplement represents an accompaniment to the official diploma, submitted to all graduates together with their diploma, with the aim of study transparency and enhancing professional integration. It contains brief information on the fulfilled studies, valid at issuing date, written in the study language and English and containing security elements.

In Romania the implementation of the Diploma Supplement was done in accordance with the law concerning the organizing of study programs, OMEN3659/200 and OMEN3741/200 Art.20 c) 2005.

3.2. Adoption of a system essentially based on two main cycles, undergraduate and graduate- Bachelor and Master (BA and MA).

The introduction of the system consisting of a two-cycle structure in medical education is perceived at this moment with concern about possible negative consequences.

Involvement of Romanian and European medical education in the Bologna process is still somewhat lacking.

Most European medical schools have been actively engaged in reforming their medical programs within the last decade. Nevertheless, it should be noted that different European region display differences in health care delivery systems and consequently differences in the use of physicians and in the needed qualifications of the medical graduates. Even larger differences can be observed in the governance of medical education, in medical curricula and the resources allocated to medical education - differences firmly embedded in cultural traditions, political realities and economic development.

The reactions in Romania to the actions within the Bologna process are evenly distributed between support and rejection of the Bologna process.

Up to date, at the Medical Faculty of Cluj-Napoca, the efforts have been concentrated on "spiral" integrative curricula that stresses upon the early integration of basic study objects and clinical science as being essential in forming better and more competent doctors, who are going to be able to have a competitive integration on the European health services market.

This type of curricula doesn't allow the medical studies fragmentation in two cycles, the separation being against the "spiral" integrative principle. Moreover the introduction of two-cycle structure could be harmful to medical education and its quality, to the medical schools, the students and the profession and in the last resort to the health care system and its patients. In this view, if medical education is based on two cycles should the undergraduate degree after 3 or 4 years (180 or 240 ECTS credits) in medicine provide immediate access to employment? If so, the curriculum for the first 3-4 years (180-240 ECTS credits) will have to be planned accordingly, thus endangering the quality of the full program in medicine by reinforcing the traditional division between the pre-clinical medical education followed by the clinical part of the medical program. One of the most widespread and irreversible international trends in quality improvement of medical education is integration of the basic biomedical disciplines and the clinical disciplines, hereby subordinating the teaching/learning of the basic biomedical disciplines to their present and future application in clinical practice. Also, in order to ensure employability of students and to produce curriculum useful to future employers, there must be a form of structured dialogue between all stakeholders (universities, hospital, ministries).

A key problem is that instruments that reliably measure the acquired competencies and the efficiency and efficacy of clinical training programs are still in their infancy. Professionalism, learning goals, curricula planning, evidence-based teaching methods (modular-structured, competency-based curriculum, including regular skills, lab activities, and other training sessions, and the use of portfolios and mini clinical-evaluation exercises for formative and cumulative assessment), and solutions for practical problems that interfere with the proper implementation of evidence-based learning should all be addressed.

Meanwhile in the name of Bologna principles we have implemented Masters at the Medicine Faculty after the 6 years of integrated studies (60 credits / year). Our aim was to identify successful strategies and approaches in involving different stakeholders effectively to improve medical training in Romania. The wider objective is to harmonize the medical education to allow greater flexibility and increased regional cooperation and to prepare the future graduates for general practice. For this to be achieved, the following identified problems need to be resolved:

- help the higher education sector propagate its knowledge outside academic institutions;
- enhance the skills of non-university teaching staff, develop modern teaching and learning materials and provide funds for buying computers and other teaching materials;
- Universities should be encouraged to provide career guidance to students. They should also track medical students after graduation so that this guidance can be aligned with the needs of the labor market.

We believe our initiative is more than adequate and there is a favorable timeframe for the development of this idea. The outputs will provide relevant solutions for the problems faced by the project stakeholders and the current medical teaching system in Romania:

- Lack of Skills;
- Lack of Targeted Courses;
- No Links Between Education and Market;
- Lack of Data / Information.

3.3. Establishment of a system of transferable credits: the ECTS - European Credit Transfer System

The implementation of this essential principle, for student mobility, is necessary for achieving an increased flexibility in the study process ensuring two functions: credit accumulation and transferability.

At the same time, the ECTS system supports the access of the graduates on the European employment market and ultimately contributes in increasing the competency and attractiveness of European Higher Education.

ECTS's fundamental principle implies that: 60 credits represent the entire workload for a student per year, 30 credits for each semester. The credits for a discipline cannot be fragmented.

There are four compulsory ECTS documents:

1. A copy of the transcript of records at the beginning of the mobility and on return, checked by both the home and host universities, before and after the period of study abroad
2. Learning Agreement
3. Information Package – ECTS Study Guide
4. Transcript of Records

Implementation

At the Medical Faculty of Cluj, as well as in the entire Romanian higher education, the implementation of the ECTS system was done by law in 2005. Each discipline from the study curricula has assigned a certain number of credits, which the student accumulates after passing. The total number of credits represents 60 per year, 30 per semester. There are extra credits for Graduation Thesis Preparation, voluntary activities or extra optional courses.

Initially, credits were allocated after the number of course hours, respectively practical activities/clinical internship. This allocation method, does not respect the definition and signification of the ECTS, therefore we are now undergoing a process of re-calculating ECTS credits considering the student's effort for learning that certain discipline. We are not yet prepared to implement the third calculation method implying learning outcomes.

In order to achieve a correct and steady implementation of the ECTS credit system and student evaluation criteria, we have defined specific teaching and learning activities or curricula units (module, course, discipline), having a precise description of the curricula units, their contents, level, learning/teaching methods and evaluation in the faculty's ECTS Study Guide.

3.4. Promotion of mobility

Bologna Process has as main goal the continuous growth in international student mobility through an increase in transparency, diploma recognition, financial support, foreign languages courses, co-ordination and involvement of student's associations in organizing this mobility. At the Medical Faculty of Cluj, we promote student mobility through international programs such as Erasmus, CEEPUS, as well as through the national program Transmed. Every year many students participate in international mobility programs in whose selection student organizations are actively involved. At the university level, there is an International Relations Department, dealing with co-ordination of student and teachers mobility within European programs. In each faculty of our university there is an ECTS responsible person who recognizes the studies carried out through student mobility and validates these studies.

3.5. Promotion of European co-operation in quality assurance

In achieving this priority goal for Bologna Process implementation, our faculty co-operates with various international organizations involved in education quality assurance such as: WFME, GMC, IIME, LCME, CIDMEF, AMEE – AMSE – MEDINE – NCME - EMA – UEMS – IFMSA – EMSA.

3.6. Promotion of the necessary European dimensions in higher education

Considering this promotion, we have ensured the due possibility for our students to improve their foreign languages knowledge. In the faculty's curricula can be found the main foreign languages disciplines (English, French, German) with medical specific among both compulsive and optional courses. The faculty's teachers have also been evaluated, the university offering foreign languages courses for the knowledge improvement of those whose level does not respect the required one, taking into account the existence of our study programs in English and French.

3.7. Integration of Long Life Learning into the overall strategy

LLL is an essential element in building the European Higher Education Area.

Within our faculty the continuous medical education (CME) and more complete continuous professional development (CPD) are accomplished through:

- Modern interactive teaching methods
- Long distance courses
- Selecting an individual education process depending on the student's skills and abilities by the development and diversity of the optional courses offer.

All these represent the background for the long life learning that we promote in medical education.

3.8. Higher education institutions and students of high quality training

Implementation of this principle involves a necessary partnership between higher education institutions and students as beneficiaries of the educational act.

In Romania the recognition of students as competent, active and constructive partners, is stipulated by the education law, representing 25% of all academic and administrative structures and being actively involved in taking decisions.

There is the involvement of the professionals: representatives of the health care delivery system, regulatory bodies, professional organizations, employees.

3.9. Promoting the attractiveness of the European Higher Education Area through attractive professional and extraprofessional offers for both European and Non-European students

This is one of the principles successfully implemented by the Faculty of Medicine Cluj through the English and French teaching programs. These were founded in 1997 (English section) and 2000 (French section), undergoing a continuous development, nowadays these study programs having about 1000 enrolled students (30% of the faculty's total students) coming from 54

countries around the world. The Faculty of Medicine Cluj has the greatest number of foreign students in Romania, based on our attractive educational offer, high performance teachers and convenient study environment, balanced ratio students-teachers (5:1), having intense practical activities and a direct patient contact, characteristic for the Romanian medical education. The professional and cultural integration of the foreign students is one of the challenges our faculty and university has to answer, the multicultural development of our faculty being a great gain and an opportunity for professional and personal development of both our teachers and students.

3.10. Establishment of the European Research Area

In accordance with legal stipulations of this issue, the Doctoral School has been founded and developed since 2005, within our University of Medicine and Pharmacy, offering one year of high doctoral education, 60 ECTS credits obtained by studying several disciplines aiming to improve the research abilities of master students (as example: Scientific Research Methodology, Scientific Research Ethic, Research Legislation, Publishing and so on)

Our University also offers a Scientific Research Methodology Master degree implying two academic years study.

4. Conclusion

Implementing a two-cycle structure (BA & MA) in medical education does not seem to suit our faculty for the moment and we are concerned about the possible negative consequences involved.

Meanwhile, though we don't agree upon the two-cycle structure, it doesn't represent an excuse for our Faculty not to implement the rest of the Bologna principles, implementation that has already occurred being a continuous and dynamic process.

In order to progress, before acting and thinking on local level, institutions must have a global view upon the implications of creating the European Higher Education Area, after 2010.

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IMPROVING THE TEACHING BASED ON STUDENTS' MENTAL MODELS

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Abstract

The idea of this paper came as a result of observation, for several years, the way students learn in their first year of study, the subjects reported that they had to go. As we know, first year university curriculum includes basic subjects of the various types, all of which form the first role of knowledge and professional skills. However, Statistics is part of a sad and undeserved fame difficult discipline, hard to tackle, which requires preliminary knowledge of the advanced students, and is less likely to get a good grade. This paper aims to investigate how we might identify mental models activated when subjects interact with a computerized statistical type of discipline (which involves classic theoretical knowledge and use of dedicated software - SPSS). Identifying mental model used by students when they process data in a given area, it is very useful because it allows the teacher guiding the way of teaching a "student-oriented" and determining that the transmission is significantly improved knowledge of the curriculum.

Key words: statistical knowledge, mental models, teaching methods.

1. Mental models

1.1. Theoretical notions

Mental model construction is internal, mental, purely based individualized learning and acquiring knowledge through experience, and internal structure of the user.

Craik (1943): Mental models are representations in the mind of real or imaginary situations and can be constructed from perception, imagination or comprehension of speech.

Johnson - Laird (1983) aims to provide a general explanation of human thinking, reasoning processes and verbal understanding. Instead of traditional theories of symbolic - he proposes a

logical theory of mental models to explain the reasoning and stresses that people consider the semantic content of the problem and not just syntactic structure.

Norman (1983): the mental model is the modal representation, which is built by interacting with the target - and is constantly changing through this interaction. The observation of different tasks, Norman concluded that mental models are incomplete, weak ties are unstable over time, are unscientific, contain matters relating to superstitions, are difficult and restricted, so economical.

The underlying assumption supported by Canas and Antoli (1998) is that a mental model is dynamic representation created in ML, by combining information stored in the MLD and the characteristics extracted from the environment.

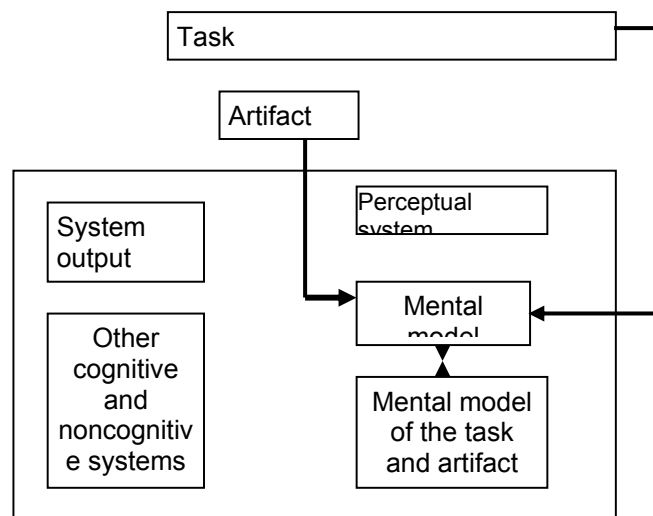


Figure 1. The role and place of mental models during interaction with a physical system. Adapted from Canas, and Antoli (1998)

2. The results of the study

2.1. Model Assumptions

Among the components of cognitive and non-cognitive human mind is an ongoing interaction that transpires in the characteristics of the solution found by the subject (quality, quantity, durability over time, flexibility in use, etc.).

Between external and internal components of the model is a close interaction. The components of the model occur in varying proportions in the solution of the subject and, as the solution are applied to several situations, both are more likely to generalize and to automate the application.

2.2. Applied objectives of the study are:

1. Building a mental model assessment tool by which to identify the structure and operation of a general mental model useful in the formation of statistical knowledge;
2. Finding a way of teaching the appropriate statistical information users' mental model (students), so that quality, flexibility and sustainability of statistical knowledge acquired by students to be better;

3. Develop knowledge tests to assess the existing statistical knowledge to students at different times from baseline of teaching information.

2.3. Research hypotheses:

1. Teaching style used by the teacher, interacting with students, for computerized statistical discipline influences over time, activation and preservation of the mental model on which it is formed by students.
2. The greater similarity exists between the activated mental model and teaching style, the structure formed on the basis of knowledge will be more stable over time.
3. The greater similarity exists between the activated mental model and teaching style, the mental model will be sustainable over time.

2.4. Experimental Design

Experimental design is a type test - retest, as follows:

Step 1 - applying a complex tool for the identification of preliminary mental model of teaching:

Table 1. Experimental design

TESTING	Ranking of the 15 elements / features in order to intervene in the internal processuality mental model	Questionnaires for assessing components of the model (semantic memory, procedural, etc.)	Ranking of the 15 elements / features in order to intervene in the internal processuality mental model
RESULT	Model 1	Data on the importance / involvement in operating the model components	Model 2

Step 2 - conduct the activity of computerized teaching statistical concepts, the two groups of subjects and conduct the first tests of statistical knowledge (TEST)

Step 3 - Testing of existing knowledge in memory 10 days after the deployment of teaching (RE-TEST 1)

Step 4 - re-evaluation of knowledge in memory and mental model, consisting of teaching vary from 10 months of teaching (RE-TEST 2).

2.5. Methodology used

1. We have built a mental model assessment tool MODMIN. The instrument is based on 15 traits / dimensions, presumed to enter into the composition of the student mental model, which is to acquire knowledge of statistics.

1. existing knowledge in my memory
2. way of being and the teacher explains
3. what happened the day I taught statistics
4. how I taught statistics
5. my general health status

6. my skills
7. my ability to be attentive and to concentrate my
8. my way of being (nature)
9. my emotions about what you learn in statistics
10. my expectations about how difficult it will be
11. my motivation to learn statistics
12. atmosphere around me
13. study conditions in the classroom / amphitheater
14. my talent and science subjects
15. my nature

2. Mental model questionnaires components (MODMEM, MOTAF, MODPER, BACKGROUND)

Dimensions above, we have grouped into four questionnaires:

- The assessment tool for long-term memory - MODMEM (semantic memory and procedural memory) - 20 items,
- Assessment Tool motivational and affective factors - MOT-AF (motivational factors, cognitive and affective) - 20 items,
- Assessment Tool-PER MOD personality factors (factors of personality: temperament, character, skills) - 30 items
- Assessment Tool external factors matter - CONTEXT (External factors: teaching style, default context) - 40 items.

3. Lesson plan is, how organized the information transmission from teacher to students. The structure of the lesson plan will identify the following elements:

- concept name to be mastered by students to describe operational
 - describe learning objectives and steps required for submitting concept
 - specify how to interact with students
- The first lesson plan was created by the criteria of classical teaching
 - The second lesson plan was developed after analyzing data from the second model mentally.

4. Knowledge tests and quizzes teach-back type. Tests for measuring statistical knowledge of their subjects in terms of skills, as representative for both the volume of information accumulated and the degree of experience. Working knowledge tests are equivalent and degree of difficulty to measure performance include subjects in computer operation, charged with publishing a database and perform various tasks of data analysis in SPSS. Tests were applied immediately after delivery (test 0), after 10 days and after 10 months.

The test of knowledge to solve a problem we've included, which makes use of theoretical concepts relating to statistical hypothesis testing, a computer application and a number of five open-ended questions designed to teach-back model for evaluating the use of knowledge.

2.6. Groups of subjects

The study was conducted during January 2008 - June 2009 in the University "Tomis" in Constanta, and involved a total of 125 subjects, students from the Faculty of Economic and Administrative Studies, representing a full range of students.

Of all students, we selected a total of 86 students, using as criteria the average results from the first semester exams, in the sense that subjects were using full promovaseră winter exam session. We chose this method of selection, because we considered that it reflects the level of

preparedness of students. We believe that this sample is representative of the reference population (users of statistical applications) as the label variables are heterogeneous in terms of age (between 19 and 42 years), occupation, skills in using computers.

Distribution in the two groups met the criteria of random distribution. Once established, lots were maintained until the completion of research. Group 1 and group 2 had 43 subjects each and were similar in terms of gender distribution feature.

2.7. Teaching style:

The model highlights four stages, two are dedicated to training new concepts (the "theoretical " rate, activation and fixation of theoretical concepts and creating links with the applied first) and the other two work skills training (ie the practice, where terms set by the practice and understanding the immediate and future practical applications).

- updating of knowledge stage semantic memory (prior knowledge are used as support for: the organization of new information, motivating students valuable, to create a favorable emotional states initial lessons)
- setting the stage of new information, delivered with visual aids in an interactive manner, with continuous support, the examples and analogies
- skills training phase of operation and interaction with the formulas taught assisted with the program SPSS (SPSS assisted navigation)
- setting the stage skills with independent completion of practical exercises, discussions on extending the framework for application of knowledge and skills formats (in other practical examples from other disciplines, etc.).

Between the two forms are important differences which have been introduced as a result of data collected and interpreted from model 2. A summary of these changes on the new way to teach the lesson of statistics include:

- introduction of power-point presentation,
- teaching concepts in the following sequence:

1.concept or group of similar-dated notions of semantic memory (recap) → 2. new concept - definition, characterization, examples → comment on the practical application example (without using SPSS) → ppt format viewing windows SPSS for practical application of the formula, with explanations, emphasizing the significance of the results → 3. assisted exercise, computer, group, practical examples, the correct view to resolving → 4. unassisted exercise, control and extension of the discussion commenting on the results and significance of test results on some examples from other disciplines, practical working example of such students in an interactive manner, supporting the newly acquired knowledge of them.

Above steps (1 → 4) comply with the steps identified in the mental model 2.

- Use the 12 slides commented and annotated SPSS windows, presented in logical sequence of operations to be performed
 - use graphic presentation and examples from other areas, so no computer for statistics and for the use of SPSS (for this purpose, it prepared three fully worked examples, placed in a graphic ppt, specially chosen to attract the interest particular students, they were presented only control group and only if they requested)
 - room to conduct classes, computer room has been equipped with computers with SPSS software, video and sound conditions appropriate distance between teacher and students were thus designed to allow easy communication, immediate.
- The duration was three hours of lessons. After classes, all subjects were tested on three occasions, immediately after the first hours, the second time within 10 days and the third time in 10 months from the course.

2.8. First test of knowledge (test 0).

This test took place immediately after the lessons and consisted of a technical part (solving two problems of content of the lesson taught) and some assessment of how the subjects were reported mental load and its solution.

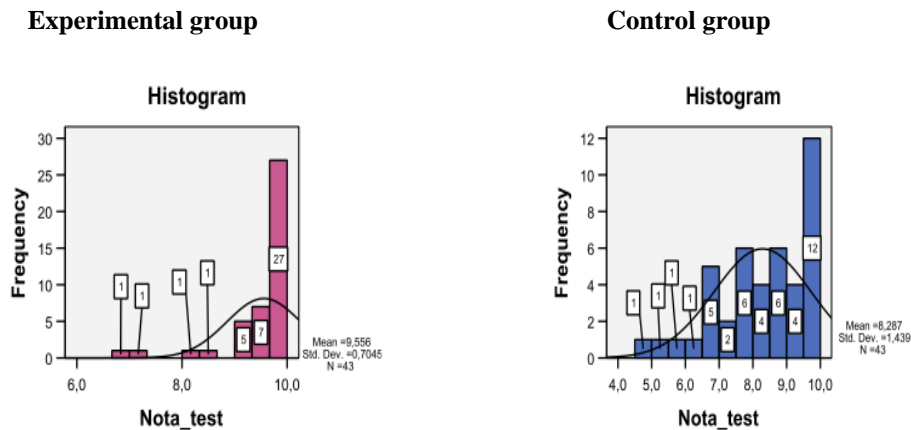


Figure 1. notes obtained from subjects in the two groups to solve problems in testing 0

It is evident from the above histogram analysis that notes obtained from subjects in the experimental group are high, the lowest being above 6.5. In other words, we have reason to believe that the interactive teaching method, with Power Point presentation can be effective. Basically, the purpose of teaching is reached. Important is to raise issues that need further explanations and applications, to cope with these situations positively.

Histogram analysis for students in grades identifies a heterogeneous control group scores, aptitude of potential subjects and their motivation for learning the course material leading to the differentiation performance in the test.

As a conclusion, was identified to be stressed more than the teaching, one on data analysis and interpretation. If entry and data processing can be performed without problems, analysis and interpretation still raises questions for many subjects. Applied nature of statistics will make it more accessible for students, future practitioners.

2.9. Testing performed at 10 days after the lessons (1)

Marks obtained by students in the experimental group are high, indicating a better assimilation of knowledge taught, leading to superior performance.

For the control group, scores of notes expressing the final assessment test varies between 4.0 and 10.

Experimental group

Control group



Figure 2 Notes obtained from subjects in the two groups at test 1

2.10. Testing performed at 10 months after the lessons (2)

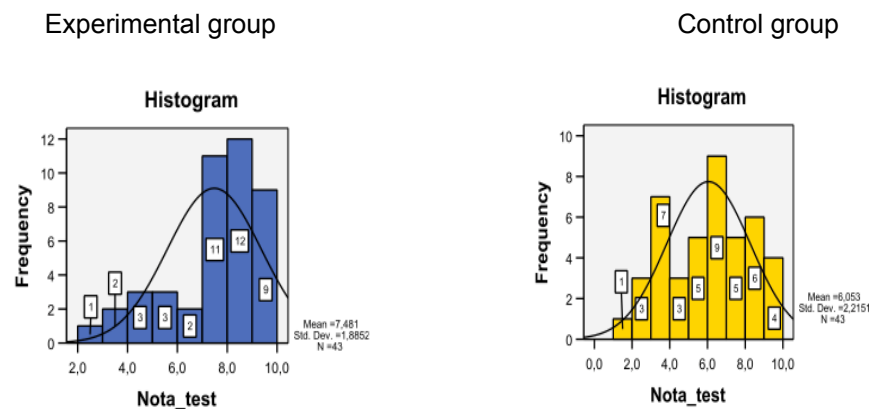


Figure 3 Notes obtained from subjects in the two groups at the third test of statistical knowledge

The observed prevalence of high scores in the experimental group, compared with the control group, where the distribution is relatively uniform grades. Total score in this test was to vary between 2.6 and 10 subjects in the experimental group, with an amplitude equal to 7.4. It appears that the prevailing generally high marks from students with interactive teaching, which shows a good stability of the mental model. For subjects in the control group, the cumulative marks obtained in the test of knowledge varies between 1.6 and 9.6, with an amplitude equal to 8. There is an emerging trend to one pole or the other notes, the performance is different.

2.11. Hypothesis testing

Checking the first hypothesis. From the dynamics data and mental models that enable them to form and subjects that, in terms of stability, that it preserves its features nine of the 15, if the experimental group, unlike the control group, where 3 store features the same model, the difference being statistically significant. If we take into account that the subjects in the experimental group's performance is significantly better than control-group subjects, knowledge

to preservation formats using a new style of teaching statistics, while the only difference between the groups is given teaching style, **that first hypothesis is confirmed.**

Verification of the second hypotheses. Experimental design developed and put into practice in mind, the experimental situation, the teaching style is closely related to mental model, while in the control situation, the teaching style to be independent of the mental model that students use it. In these circumstances, the collection and analysis of results obtained from subjects in the two groups clearly show that experimental group subjects were more stable results, so by comparing the transverse and the longitudinal analysis than control subjects of the group, was instrumental comparison test for knowledge. The differences in results are statistically significant level. In conclusion, we can say that **the second hypothesis is confirmed.**

Verification of the third hypothesis. A third case came in support of the previous scenario in that comparative analysis of models 2 and 3 show that, while the experimental group where a significant majority of the dynamic characteristics (processes located on the first two positions) to store, for group Control Model 3 is significantly different from Model 2. The control group 'edit' the initial activated partial mental model (Models 1 and 2) and this change may be related to poor structuring and durability while lower statistical knowledge formats. In conclusion, **the third hypothesis is confirmed**

2.12. Conclusions

Interaction with students can be shaped so that its results are not only "fruit" student work, but also the involvement and active identification by teachers, new teaching methods. There is probably disciplines that can not be taken into account the student's mental model, as long as everyone thinks that discipline, in advance, and try to form expectations that will confirm or not.

We considered the mental model for the identification and use of statistical discipline, an interesting point for discussion and further research of this direction is what might happen if teachers should take into account every discipline, students' mental models (I attend, probably to improve the quality and quantity of knowledge managed by students, so the more quality in the workplace, future profesionii), well, an issue that deserves consideration of the variability in time of mental models average (it is therefore necessary to test the mental model to the beginning of each discipline, or can we rely on the fact that if we identify a mental model at a time, it will be used for several years in a row, without significant changes).

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QUALITY LIFE CYCLE OF THE STUDY PROGRAMME AND METHODOLOGY FOR EVALUATION

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Abstract

Quality improvement of the study process and study programmes has been a topic of great interest of recent years in the European Higher Education Area. The methodology for evaluation of internal and external quality of the study programmes is being developed at the Faculty of Information Technologies, Latvia University of Agriculture. The methodology is developed based on the analogy with quality model of the software products, and it can be applied to the defined study programme. Evaluation of the quality attributes included in it answers the following questions: are the necessary elements of knowledge and skills included in the programme; is it easy to teach and to learn the programme; how efficient is the programme; and how easy it is to modify the programme. Methods of quality evaluation in different stages of quality assurance and involvement of the students in quality assurance activities are discussed in the present paper.

Key words: quality model, software quality, study programme quality.

1. Introduction

Quality improvement has been a topic of great interest of recent years in almost all the branches. The situation is that the quality today to a certain extent is all the vogue. On the one hand, it is good, since it attracts overall attention to the quality, facilitates possibility of implementation of certain work, and encourages attraction of investments. All together this contributes to the growth of a certain branch. On the other hand, it may be hazardous, since it devalues the quality concept. One may think that speaking a lot of quality is a way to quality improvement. This is one of the mistakes admitted in the sphere of quality assurance.

Quality improvement in the European Higher Education Area during recent years plays a particular role between overall quality activities. The necessity for continuous improvement of learning process becomes the question of the day in the system of higher education in Latvia, as it is in Europe and all over the world [1], [2], [3].

Another characteristic of the quality today is that the quality assurance is really a necessity. It is one of the possibilities for efficient improvement of the work and quality of the results. Higher education plays an exclusive role in this aspect. On the one hand, it is a sphere of activity, which should take charge of quality improvement of its own [4]. On the other hand, specialists of a certain branch are trained in the result of operation of the education system. Functioning and further development of the branch and the quality of the end product depends on their work quality. Thus, education including higher education with its operation establishes the quality of all other branches.

One more specific characteristic of the quality is that it is an ambiguous concept. Many various definitions, different understandings, and forms of evaluation can be found in literature [5], [6] [7]. The paper deals with the quality concept as compliance with the previously defined requirements, since the authors of the paper are connected with two branches – information technologies, particularly software development and maintenance, and higher education - training of specialists of information technologies.

The end product of software development has several specific characteristics:

- software is an abstract product by its nature, it cannot be physically weighed out, measured, or evaluated in other tangible manner;
- time of software development may be long lasting, and the results can be seen only at the end of the whole process; emergence of certain suspense and lack of understanding from the customer's side is possible;
- the requirements of the end product may change and may be changed during the development;
- two fully identical software development projects are impossible – opposite to manufacturing where the product development process shall be constant and unchangeable.

Analysing and comparing the software development and the education process [8], one can see that the outcome of education is also an abstract product, acquisition of which is a lasting process and the results may be seen after the end of process. Requirements to education may change likewise the software requirements, since request for specialists of a particular branch in the labour market changes in accordance with the development strategy of the state. It is impossible to carry out two fully identical education processes, even to provide identical delivery of one and the same course to two different groups of students.

Logically, the question arises how possible is the transfer from the methods used in the solution of software quality problems to education quality. During the past three years the staff of the Faculty of Information Technologies, Latvia University of Agriculture (LLU) dwells upon the problem connected with the possibility to tailor the software life cycle concept to the education quality. The study programme development and a model of its quality are built based on the analogy with the software quality models. The method is being developed for implementation of this approach [9].

This initiative is based on considerations that great and long-term efforts have been invested in software development branch as well as methods and standards are developed for quality

assurance and evaluation (Table 1). These results may be already used in the sphere of education of information technologies.

Table 1. Software Quality Standards

No	Number of Standard	Title	Description
1	ISO/IEC 9126-1,2,3,4	Software Engineering - Product Quality	Defines the software quality characteristics and subcharacteristics, external metrics, internal metrics, and quality in use metrics for measurement of the characteristics or the subcharacteristics
2	ISO/IEC 14598-1,2,3,4,5,6	Software Engineering - Product Evaluation	This series of standards provides the methods for measurement, assessment, and evaluation of software product quality
3	ISO/IEC 250xx	Software Engineering – Software Product Quality Requirements and Evaluation (SQuaRE)	SQuaRE set of standards covers three complementary processes: software product quality requirements specification, and measurement and evaluation

Proceeding with the extension of improvement of the initiated methodology for information technologies education, the present paper discusses methods of quality evaluation in different stages of quality assurance and involvement of the students in quality assurance activities.

2. Life cycle of study quality

2.1. Stages of study quality

The common quality approach is based on quality lifecycle defined in the ISO 9126 standard, which has been adjusted for the sphere of higher education [9]. This model describes four stages of quality assurance and evaluation: process quality, internal quality of the product, external quality, and quality of study results (Figure 1).

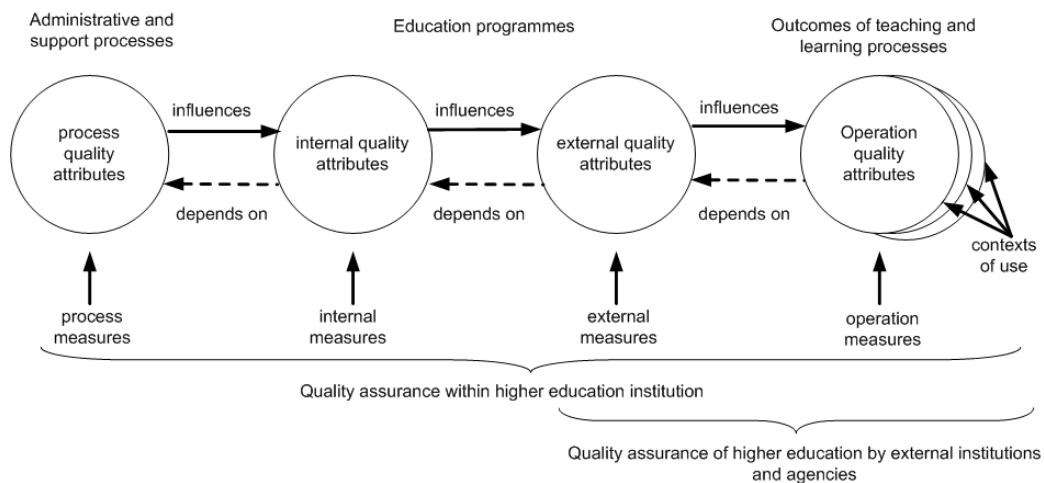


Figure 1. Quality life cycle in higher education

The mutual influences of the quality are directed forward and backward:

- quality of the process promotes improvement of the internal and external quality;
- quality of the product promotes improvement of the quality in use;
- process evaluation and improvement is a tool for product quality improvement;
- product quality evaluation and improvement is a tool for quality in use improvement.

Quality evaluation in each stage requires setting the aims of an evaluation, selection of the viewpoint of quality evaluation, selection of quality model (characteristics to be evaluated), and the metrics.

2.2. Process quality

From the view point of individual structural unit of an education institution (faculty or department), education process proceeds within the framework of general administrative and support processes, organised by the top management of the university, and the processes, controlled by the management of a faculty (department).

Development of the quality systems and certification of organisation's functioning in accordance with the ISO 9001 standard requirements is one of the approaches widely used in the world practice for process quality assurance. The idea of quality improvement of the end product through assurance of qualitative development processes is especially relevant to such products as software. The development and introduction of quality system in software engineering has become widely distributed and given good results. Despite similarity between study outcomes and software, quality systems in the sphere of education have demonstrated not so good results compared with the software development [10]. Nevertheless, the basic approach of the ISO 9001 standard – process arrangement and improvement is necessary already in education institutions. Estimating the experience of information technology companies one should take into consideration that IT companies are future employers for graduates of informatics studies, and thus, form a significant group of customers for education institutions. Simultaneously, IT companies are places for field practice, and first introduction to the work environment and process organisation should be given during the studies.

The process quality assurance is taught in special courses. Student inquiries are carried out regularly. Students' estimation of quality of administrative, managerial, and supporting processes are clarified during the inquiries.

2.3. Internal and external quality

Internal quality requirements specify the required quality level of study programme from an internal view. Internal quality requirements may be used for specifying the attributes of study courses and methodical materials. They can be plans and programmes of study courses, methodical materials, and other study regulatory and supporting documents. Internal quality requirements may be used for object of validation in different stages of study process development. They can also be used for definition of teaching strategy as well as for evaluation and validation activities during the development process.

External quality is the totality of characteristics of the study course from an external view, usually determined during the course delivery. External quality characteristics may be observed during the teaching and learning processes. They include requirements that have been obtained from quality needs of users, including quality in use. In this case, they are requirements to the professional level of graduates' work. External quality requirements are used as validation object activities during several stages of development and evaluation of the study process.

Common quality model of a study programme is used for internal and external quality evaluation (Figure 2). It has been set by analogy with the software quality model described in previous paper [9]. Five hierarchic quality characteristics and 19 subcharacteristics are defined in this quality model.

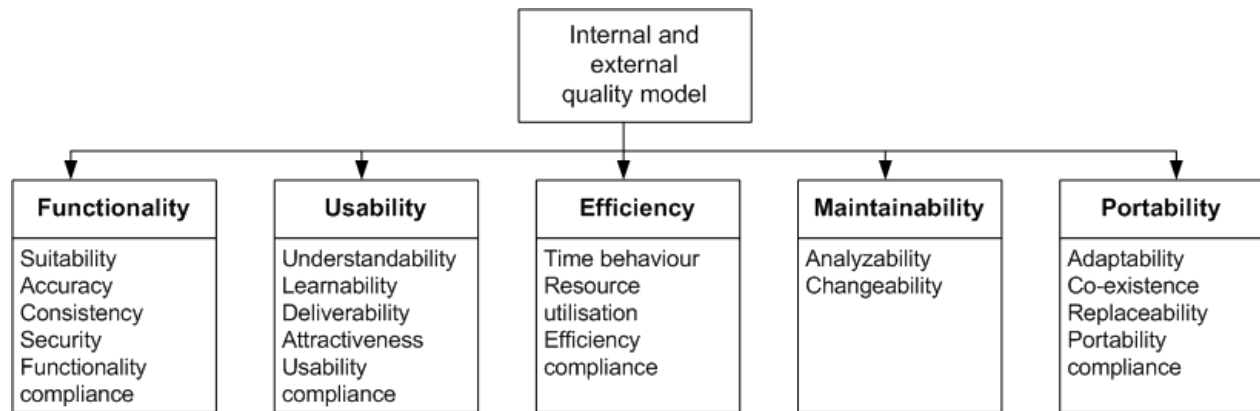


Figure 2. Internal and external quality model of a study programme

The full evaluation process of internal and external quality is organised similar to the software development. The first stage of the software testing is unit testing, during which the smallest units of software are checked. It is followed by the integration testing, which pays main attention to interconnection of the units during their integration into system. The testing process ends with the system testing. Evaluation of the study programme is planned similarly, starting from the smallest units – the study courses.

The method for evaluation of the internal quality includes several activities:

- reviews of full programme of study courses (quality of content);
- reviews of lectures and teaching aids (quality of teaching materials);
- inquiry of employers (content of study programme).

The team of peer review is organised for the evaluation of internal quality of study courses, including the representatives of academic staff of relative study directions, and representatives of graduates (currently students of master or PhD study programmes). Representatives from an external organisation may also be included in such a team (representative from employers or other university) [11].

Two activities are organised for evaluation of the external quality:

- inquiry of students on the study course (content and delivery of the course);
- inquiry of employers (qualification of young specialists).

2.4. Quality of study outcomes

Determination of quality in use is the fourth stage of quality evaluation in case of software. Quality in use is the user's view on the quality of software product when it is used in a specific environment and a specific context of use. Quality model for quality in use contains four characteristics: effectiveness, productivity, safety, and satisfaction.

Obviously, the employers should be the evaluators of quality in use for study programmes. In contrast to previously described evaluations, experience of the usability testing of software products cannot be qualified for this kind of evaluation. Therefore, inquiries of employers are organised. The questions include assessment of significance of individual study courses of the programme, and biased opinion on the desired skills, knowledge, and competences of graduates.

The students' evaluations have been included in graduates' questioner. It contains different questions including those on usefulness of the acquired knowledge in labour. This information less than the other may be used in correction of the study programme, since the requirements of the particular place of work are the uppermost for the employees. It is generally known that in branch of information technologies the specific requirements of a particular company may determine different priorities of knowledge.

3. Discussion

In accordance with software quality evaluation standard (ISO 9126-3), the evaluation process consists of 5 steps:

- 1) identification of quality requirements: during this step the weight is defined for each quality characteristic and sub-characteristic;
- 2) specification of evaluation: during this step metrics are chosen to be used for evaluation of each quality characteristic and sub-characteristic;
- 3) planning of evaluation – development of evaluation plan;
- 4) evaluation;
- 5) feedback to the organisation.

During definition of quality requirements, it is important to study the aspects, which may cause the greater risks.

Studying of experience shows that drawbacks characteristic for the quality improvement are usually connected with huge size of the required documentation, and misunderstanding of requirements of standards and regulatory rules:

- plenty of evidentiary good documentation of process quality assurance may lead to impossible implementation of documented requirements;
- excessively bureaucratically quality system's requirements degrade quality improvement idea in the opinion of all the workers of the enterprise and instead of promotion disturbs and embarrasses work;
- requirements to everybody of understanding and using quality terminology leads to misunderstanding of the essence of quality improvement actions;
- formal reading of standards and regulatory documents causes the creation of unnecessary and waste documents, especially reports.

Elimination of the growth of unnecessary documentation is the main precondition avoiding such drawbacks. Skills are necessary to notice the information required by quality assurance in the existing documents and in the branch terminology. The size of all kinds of descriptive and reporting documentation should be reduced; thus, finding of places where the required information occurs and has already been recorded in the basic processes.

Using the defined model of the internal and external quality, five quality characteristics are being evaluated: functionality, usability, efficiency, maintainability, and portability.

Involvement of students in the evaluation of external quality of study programme should become a regular activity of the education institution. Evaluation of study courses is an integral part of study process. It gives a feedback on the content of each study course, achieved outcomes, and desirable changes.

Quality evaluation of study outcomes is the most difficult stage of the quality evaluation. The result of graduate inquiries on usefulness of the acquired knowledge in everyday's work is not a competent material for correction of study courses, since this information is oriented only to the needs of the involved companies. Well-known is the fact that in branch of information technologies, the specifics of the particular company nominate very different priorities for knowledge of employees. Despite, education institutions should be serious about investigations on the graduates' movement in the labour market.

4. Conclusions

Application of the experience on implementation of the software quality requirements and quality evaluation in education sphere allows creating a common view on quality assurance in general. The main goal should always be clear in individual quality assurance activities and quality evaluation on different levels, and it is the quality of the end product. Such approach perceives the quality assurance as a continuous process, which has a beginning, but which never ends. This process should be maintained and continued always until the basic processes exist.

This paper describes the quality evaluation of the study programme and study courses, using the concept of the internal and external quality evaluation methods defined in the sphere of software development. Generally, the evaluation is being organised like the stages of software testing. The first one is evaluation of the units, which is followed by integration, and then evaluation of the system (in this case the whole study programme).

The initiated work is long lasting. Different activities, including organisational events and solving biased problems should be done before achieving substantial results. For example, in order to obtain assessment from satisfactory wide and valid group of users, i.e. students, first of all it is necessary to achieve wide and interested participation of them in this process; yet, it requires additional educational work. At the same time, participation in such process for former specialists of information technologies can be considered as a direct part of education process. It allows students in practice to acquire participation in such activities as reviews of the results and intermediate results, which are very necessary in software development.

Currently reading of many publications, which nowadays are devoted to quality problems of education process does not succeed in finding the ones describing practical or methodically organised approach to quality assurance and evaluation of the content of study courses. The work described in the present paper was initiated some years ago, and it is planned to be continued until final testing of all components of study quality models. For the time being, work is carried out prevailing in one department of the Faculty of Information Technologies. Developed recommendations and tested methods are introduced as a persistent part of work.

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THE CRITERIA FOR ENGINEERING GRADUATE PROGRAM EVALUATION VS. THE DEMANDS OF THE EDUCATION MARKET

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Abstract

This paper deals with the problem of the accordance between the demands of the education market and the criteria used by accreditation bodies for the evaluation of graduation programs. The demands of the education market have been evaluated considering the criteria presented by advisers specialized in education market. The ARACIS criteria have been selected as accreditation criteria. A SWOT type analysis has been performed for each implementation that the ARACIS procedures require relative (according) to the criteria identified on the education market.

Key words: graduate program evaluation, quality in education.

1. Introduction

In the early time of human society the basic needs of human beings concerned the ways to assure the daily existence (food, clothing and shelter). Starting with the rise of the industrial age, education was added as one of their basic needs [1]. In our days, education becomes more than that, it is one of the major industries of the world.

In a cynic way to see the education process, education could be seen now as merchandise: the universities sell education e.g. knowledge. Education critic Naoki Ogi [3] has the following opinion "Education has become merchandise. Customers are 'god' at department stores with buyers having absolute superiority over sellers.....". Of course the official point of view is different [12]: "Education is one of the founding categories in the idea of practising rights, and as a rule cannot be treated as merchandise. Education cannot be bought or sold. It is not possible to provide a trigger for egalitarian development, or to serve everyone if education is merchandise."

An honest way could be to correctly describe the offer for the candidate and to respect the promises during the studies. A question remains: is the graduate student the only responsible regarding the use of the achieved knowledge? When you buy an electronic device, you must carefully read the booklet. After you buy the device you can comply if the device does not work like was specified in the prospectus. But if you bought something you do not need it is not the fault of the vendor. It is the same situation with the education? After the industrial age, the next major change was the information revolution. Taking into consideration the changes linked with the information age, two major conflicts trends could be identified in the educational systems:

- The students try to avoid a large volume of work related to reading, memorizing and comprehending the content of the books and courses of professors – what they call “theory”. They ask for more “practice”.
- It is cheaper to receive education through the Internet than following the formal education in universities which have higher and higher costs.

If the industrial and information revolutions are technological steps in the development of the human society, from the economic point of view other trends have to be considered:

- The society is more and more concerned regarding that if the educational system produces unemployed or underemployed graduates.
- The governments of western countries try to make the education systems more profitable in term of costs vs. directly measurable results. Many teachers should consider that the Bologna system could be considered as such type solution.

Concluding, these conflicts depend on the demand of the education market: the students ask for a less expensive education, for a non-memorizing teaching system and for certitude in finding a job after graduation. The governments try to cut costs.

2. The criteria for choosing a graduate program from the candidate point of view

In order to have a more detailed image of the education market demands, we take into consideration the position of education advisers. Browsing the internet we identified the main sources advising in regard with this subject, we selected two and synthesized their answers to the following question “What are the criteria for choosing a graduate program?” [4], [5]. [6].

A - Accreditation: There are two main types of accreditation: institutional, referring to universities, and program – specific, referring to diploma offered. Accreditation should be an indicator of quality. The detractors of the accreditation systems consider that it is more a procedure result, but even they admit that the graduates could face negative consequences if the program does not have accreditation.

B – Student's Selection: the advisers recommend choosing a program that selects few candidates amongst many, programs working with a larger group that may end up lowering the quality of your graduate education. The candidates should look for schools publishing this kind of information: the number of applicants compared to the number of acceptances, the admissions requirements.

C – Future Career Opportunities: One of the main goals of advanced degree diploma candidate is to obtain in the future strong opportunities, if not a certitude, regarding the career advancement - either getting a new job or entering a new field. The advisers ask students to inquire about the extent of career assistance provided throughout the years of their studies and beyond, including resumes, interview training and career guidance.

D - Cost/Financial Support: The education cost has many components: the overall tuition and associated costs, including books and supplies, housing, and miscellaneous fees and expenses. The financial support includes all types of financial assistance including grants, loans, and fellowships. The simplest way to evaluate this ratio is to choose the cheaper offer, but the students are advised to consider that a higher tuition cost might correspond to better resources like high-technology laboratories and libraries and student amenities.

E – Overall Facilities: The students' concerns about the condition of the facilities mainly related with buildings and laboratories, but also libraries, communications, transports and sports. For example, if a student plans to specialize in applied informatics program, he will want a program that not only has great computer facilities, but also one that has behavioral labs for different applications from real life. Usually an academic team tends to have a specific strength or focus in one or two areas within a specific discipline, and the candidate should fully investigate the faculty interests and research areas of each program.

The candidate should appreciate the balance between the facilities related to the main field of interest of the academic group managing the program and the overall needed facilities imposed by this specific program. E.g. an academic group was focused on mechanics but they also offer a diploma in mechatronics. The question is if they offer all the facilities related to the electronics, computer and control components of this program.

From another point of view, the information sources must be evaluated. We used to talk mainly about library resources here (number of volumes, periodicals, etc. in a specific field), but information resources really means just about anything that supports the program, including endowments and foundations that support student research and publications.

F - Institution: The advisers state that a graduate program is only as good as the institution which offers it. It is important to choose a program into an institution, university and/or faculty, respected and known in the specific field. Some really basic measures are the percentage of classes taught by full-time, terminally qualified faculty, the number of scholarly publications, the national or regional acclaim of faculty members, and/or the professional experiences of the faculty.

The candidates are advised to find the answer on the following questions from students who attend the school: Are there professors whose work is geared toward your interest in the field? Are mentors readily available? Do research on the faculty in the department of interest to see if there are any renowned scholars and how they fare in general as educators.

If there are organizations ranking for graduate programs, this had to be a very interesting source of information for candidates. Another problem occurs: how trustful is this organization? There are advisers considering that ranking may not be as important as other criteria here because of the flaws in the ranking process, including the ability for a school to have a high ranking while the program that interests a candidate could still be weak. Anyway, the ranking of the program among other programs in the field is still important with regard to how the diploma may be perceived in the professional world.

Related to the institution, the size is another parameter to be considered. There are two aspects of size that the candidate should evaluate - size of the program and size of the entire institution. The size of the institution should be important in terms of resources available. It is possible to give examples of "factories of diploma" having by consequence a huge number of students.

More important, however, could be the size the graduate program - where the student will spend the bulk of his time.

G – Context: Here advisers include a lot of indirect information concerning the culture, the location, the multiculturalism, the surrounding community.

From the culture point of view, the candidate should be able to identify "the way things are done around here" and to appreciate if that fit his style and comfort-level so that he will have a better chance to excel. Every institution assumes to have a different culture. There are small graduate programs where amicable relationships are encouraged between students and competition is not valued as much as individual progress. Conversely, there are small graduate programs with a strong competitive culture based on how well one student does in comparison to others. There are institutions having graduate departments with large yearly classes and less focus on interactions with professors.

Location is an important factor because the student will leave in that geographic area for several years. More important, except for top-tier programs, the value of an advanced degree should be strongest in the region where the school is located and known.

From the point of view of multicultural/diversity opportunities, someone should consider that better programs tend to be diverse - because diversity (of all types) often leads to a broader world view.

Sometimes, local regulations and residency requirements could be taken into consideration because it should introduce unexpected restrictions. The surrounding community could define constraints for the student life: an urban, rural, or suburban setting; large city or small town.

3. The criteria for the graduate program evaluation from ARACIS's point of view

For the accreditation of a graduate program there two are levels of evaluation: an internal one at the institution level and an external one where the evaluation is performed by an organization recognized for this task. In Europe a very well known association, which includes the national bodies specialized in the evaluation of the quality in high education, is ENQA - the European Association for Quality Assurance in Higher Education [2], [7]. The Romanian Agency for Quality Assurance in Higher Education (ARACIS) was established in 2005 and is an autonomous public institution, of national interest, whose main mission is the external evaluation of the Romanian higher education's quality, at the level of study programs, as well as from the institutional point of view [11]. As of September 2009, ARACIS is a full member of ENQA. In Canada a key roll in defining the quality procedures has the national council of the rectors from the main universities [10]. In USA, like in other domains, the evaluation process is more decentralized and the roll of the universities is more important [8], [9].

All the evaluation procedures are a mixture of criteria between what specialists in education consider is good for the quality in the domain and what the education market ask for. If the universities had no limit to funds, then the procedures should be in position to ignore the market demands and should impose all the measures indicated by the theory of education as benefic. Designing the evaluation procedures only to fulfill the market demand should be considered an abdication from the academic requirements.

Here we take into consideration the external evaluation procedures established by ARACIS and, by consequence, the case analyzed is the evaluation of the Romanian high education system.

The author considers that it is no contradiction by putting face to face the education market's demands synthesized from like western countries information with the quality evaluation procedures used by ARACIS. This way we could obtain a measure of the difference between the actual situation in the Romanian high education systems and the desired level to be attained.

Using the author's experience as permanent expert of the specialty commission Engineering Sciences II, a like SWOT analyze will be presented in order to evaluate the correspondence between the criteria A to G listed before and the criteria used by ARACIS for graduate program evaluation.

A SWOT analyze considers the following terms:

- **Strengths:** characteristics of the enterprise that give it an advantage over others in the domain,
- **Weaknesses:** are characteristics that place the enterprise at a disadvantage relative to others,
- **Opportunities:** external chances to obtain better results in the environment,
- **Threats:** external elements in the environment that could cause trouble for the enterprise.

A – Accreditation

- **S:** In Romanian higher education system, by law, only accredited programs are recognized and by consequence their graduate will receive a diploma under the authority of Ministry of Education.
- **W:** There are examples of programs that use the accreditation obtained for certain conditions (e.g. location of the teaching activity, number of students, curricula) to function in different conditions (in other locality, with a different number of students, following different curricula). Not clear and strong measures were defined to be used against the institution breaking these rules.
- **O:** The new National Education Law has explicit statements regarding this issue and the roll of ARACIS in it.
- **T:** No classification for institutions and programs was performed during the ARACIS evaluation. A future process of classification will be put in work by involving a non – Romanian quality agency. Now this procedure is not known. It is possible that the results of this process to be somehow contradictory related with the results obtained until now by ARACIS evaluation.

B – Student's Selection

- **S:** Following the ARACIS procedure, the evaluation process mentions the process of student's selection. The evaluators verify if the criteria are coherent and non discriminatory and if the procedure of selection is known in due time by the candidates.
- **W:** Nor the way of selection (exams or records) neither the number of candidates for a specific program has a direct impact to the final results of the evaluation. In order to receive a greater financial support, which depends on the student's number enrolled, the institution tries to increase the number of students despite their level of knowledge.
- **O:** A different procedure to define the amount of money received by a graduation program from the state budget was announced. This fact could determine a major change in recruitment strategy of high education institutions.
- **T:** The confidence of the firms employing the diploma owners should continue to decrease.

C – Future Career Opportunities

- **S:** The ARACIS procedure imposes the check of this assistance provided by the institution under evaluation to students for finding a job after graduation.
- **W:** In fact, most institutions have specialized assistance offices, but mainly these offices are focused to promote the programs between candidates and, only after that as priority, to help their graduates to obtain a job. The statistics regarding the graduates finding a job in concordance with their competences are untruthful. I do not know any unsuccessful accreditation caused by the weak activity in this direction.

- O: A future classification and ranking of universities and programs could include some parameters related to the percent from graduates obtaining a job corresponding with their diploma. That will force the institutions to change their policy regarding this subject.
- T: The level of development of the real regional and national economy will continue to represent an obstacle hard to be overcome.

D - Cost/Financial Support

S: - This item is also under the check of any ARACIS quality evaluation process. A quite adequate measurement of overall costs is possible.

W: - No important differences were detected between the ways in which the universities act in this direction. The majority offer grants following the state system. No major financial resources are available in order to support the students from this point of view. Different, better or weaker, social services (hostel, cantina, sport facilities) are offered. No institutional way to use loans were put in work.

O: - Despite major changes regarding the procedure to finance the universities will be implemented, no opportunities were detected.

T: - The evolution of economy will be an important factor in changing the situation from this point of view.

E – Overall Facilities:

S: - This item is also under the check of any ARACIS quality evaluation process. A direct check procedure implies a visit in laboratories, libraries, buildings and all facilities.

W: - Sometimes the facilities exist but are not used in a proper way. During the visit, the experts could verify the existence of the equipment, but it is possible that the existing equipment is not used with all their functions during the classes in order to be conserved. The same for different equipment needing consumable and for different rooms resting closed. Each visit had in its schedule a meeting with students from the program. The experts question the students regarding the use of the facilities. Sometimes the students try to “improve” the image of their program and avoid a negative answer.

O: - Increasing the criticism attitude of students should force the universities to use all their facilities and to try to improve the facilities they have.

T: - Many academic teams switch from real applications to simulations. Instead to use real equipment they use virtual ones. Even they will work in enterprises using a lot of informatics techniques, the lack of practical works using real equipments was signaled by students as a major drawback of the engineering higher education system in Romania. The money available for facilities improving are highly under the needed level.

F - Institution:

S: - ARACIS implemented different procedures both for institutions and for programs' evaluation. Each visit for program evaluation is a new opportunity to check how the institution works from the quality point of view.

W: - Evaluating individual programs one after the other, at different moments of time could catch some weak points in their activity. For example, if all the master program of a faculty would be evaluated in the same time it will be easier to identify the concurrence for resources (specialists, labs etc.). Someone could remember the movements of Finnish army units during the War II creating the false impression of a much important number of fighters! Regarding the size of a program or institution, a major mistake produced important damages to the Romanian academic system. For an important period of time, the ARACIS evaluation regarding the number of students for a program (it is the number for which the institution has the resources to support) was eliminated from the government decision published in the Official Monitor. Speculating this

lack of precision, many universities increased their number of students much upper their real resources (teachers and facilities).

O: - A future classification and ranking of universities should be an opportunity to give the correct image from this point of view.

T: - The same process of classification and ranking of universities should create a false image if it will be developed without a right design and if the responsible of this process will replace the well defined parameters with their "own impression as reformatory specialists". A very risking procedure should be the strategy "the state financial support follows the students". Taking into account the actual level of reasonability of our scholar population, putting in work this procedure it is possible to "help" the institutions that give the diploma in the easiest way!

G – Context:

S: - No direct specific evaluation for this type of advantages in the ARACIS procedure. Indirect effects could be present at the institutional evaluation level, but I do not know any case of appreciation/depreciation of the final result following the multicultural, diversity or local opportunities. The language of the program, other than Romanian, imposes specific procedures for the evaluation. The location of the program, other than the main location of the university, it is not a reason for weaker quality performances.

W: - Regarding the location where the activities for a specific program take place, a major mistake produced important damages to the Romanian academic system. For an important period of time, the universities spread their activities in locations where they do not have the needed facilities. The universities obtained the accreditation for the main location, but, in order to have more and more students, relocated the programs to other places, practically all over the country. This way, from the point of view of multiculturalism or diversity opportunities may be a progress could be assumed! But from the point of view of quality of the teaching process the loss was important.

O: - Important local, over borders or European resources could be attracted in order to develop programs in specific location (small towns, multiethnic region etc.). Some local communities are interested in supporting specific programs to work in their region. I know few cases of small towns having specific industrial enterprises which are able to support a corresponding program from a well quoted university to work in their town.

T: - The local authority could use the developing local academic programs in their area in order to promote both their political image and their non-academic interests. Discrimination could be avoided and it is checked by ARACIS procedure.

4. Conclusion

The paper presents a synthesis of criteria proposed by the advisers for the use of the candidates to a graduate program. For each of these criteria, a like a SWOT analysis was proposed taking into account the actual situation of the Romanian higher education. The analysis is based on the experience of the author as ARACIS evaluator.

Most of the criteria taken into consideration by the candidates are evaluated, directly or indirectly, by the ARACIS procedures at institution or program level. Drawbacks related to final results of these procedures were identified.

A better result is possible by improving the ARACIS's procedures. A real satisfactory result for the Romanian higher education system could not be obtained by a quality evaluation organization – no matter which one – alone. A better cooperation between ministry, quality evaluation organizations, universities and other bodies (like CNCS, UEFISCDI) is a condition for this goal.

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PARTICULARITIES OF A STRATEGY FOR TRAINING THE INTERCULTURAL COMPETENCE

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Abstract

The contemporary society is increasingly characterized by expansion of its intercultural dimension, so that the latter has become not only a circumstantial one but also a structural one. The contact between cultures highlights problems whose solutions imply the transition from multicultural to intercultural vision (from juxtaposition of cultures to creative interaction of cultures). In other words for solving intercultural problems is necessary a training of intercultural competence which assures the individuals' opportunity to understand in a coherent way people from different cultures. From this reason during this article we will present a strategy for training the intercultural competence. The strategy will relay on integrated training of students, development of standards and objectives for intercultural competence training, correlation between objectives of intercultural competence training and objectives for teaching, learning and evaluation of disciplines, and the last but not the least reorientation of training methodology from intercultural perspective.

Key words: intercultural education, intercultural competence, strategy, intercultural standards, intercultural objectives.

1. Introduction

The realization of an optimum strategy for building intercultural competence represents an active preoccupation of researchers, teachers, educational institutions and international organizations in the field of international studies, by approaching aspects about culture, interculturality and intercultural education, as a necessity for finding some solutions to the challenges facing the today's world and especially those that are foreseen in the future.

Investigation, in the context of some international researches, of concepts such as mono, multi or intercultural in some theoretical analysis, has opened opportunities of cultures' coexistence

and active interaction between them, relationships between intercultural, multiethnic and global education, place and role of intercultural competence. Intercultural education proves to be an increasingly pressing requirement in a world where contacts between individuals belonging to different cultures know unprecedented amplitude [1]. The dialogue between cultures is one of the main coordinates of world development. So, intercultural education is an educational form required by the existence of a new cultural parameter, created by the process of globalization [2].

Summarizing the many view points regarding the concept of intercultural education, we can say that it is “a complex of principles and practices that cross the entire educational environment in all its components, oriented towards the formation by and for cultural diversity with a direct effect on knowledge and appreciation of positive cultural differences, promote equity in education and equalization of opportunities” [3].

Intercultural education has as a main goal the training of a new individual identity, richer, through the assimilation of some characteristics specific to the target language and culture. In other words, intercultural education follows the training of *intercultural competence*. As a definition we can say that intercultural competence is *the person's ability to adjust their attitude, behavior and knowledge to the interaction with people from other cultures, ability to demonstrate openness, flexibility and a positive attitude towards persons of different cultures, the ability to revise beliefs and values in relation to other cultures* [4].

Adaptation to the new culture assumes the training and development of an intercultural competence with cognitive, emotional and behavioral aspects. From cognitive stand point is necessary the assimilation of knowledge – information about rules by which society works, at formal and informal level, about the way that cultures decipher the reality, based on their own experiences and expectations, and the last but not the least knowledge about language as an essential communicating vehicle. In terms of emotional view point, the contact with a new culture assumes that the one who crosses this experience must learn to get used to the absence of familiar things, social networks and has to begin to find sources of satisfaction in the new circumstances of life. To meet these new circumstances, intercultural education can develop openness and interest in novelty, the new acceptance as a possible alternative, tolerance and respect for difference, positive thinking, respect for general human values and understanding of specific sensitivities. In terms of behavior, we must assimilate a new repertoire of interpersonal and social skills for interacting effectively in a new society. In this sense, intercultural education can develop for the ones who are expected to interact in the international environment, the ability to communicate in formal and informal situations, the capacity to understand and avoid unpleasant situations arising from ignorance of different cultural codes, flexibility, ability to accept others reactions as a manifestation of what is human, etc.

Based on these ideas we consider that is more than necessary to present a strategy whose goal is to train the intercultural competence. The proposed strategy can be an instrument used as a starting point for those who want to train and develop intercultural competence.

2. The strategy of intercultural competence training

The purpose of this strategy is to present to you a modality of training for a new professional competence, in our case intercultural one which on the one hand will facilitate the integration in intercultural environments and one the other hand will lead to the development of personality traits for individuals (tolerance, empathy, flexibility, etc).

2.1. Theoretical and praxiological landmarks of intercultural training

Based on the analysis of international studies we have identified the following theoretical and praxiological landmarks in training from intercultural perspective: setting the values of nonviolence, tolerance, fairness, equality as a cultural and moral basis of officer's training and their integration in the teaching, learning and evaluation of disciplines; teaching, learning and evaluation of representative values belonging to national and foreign cultures using intercultural reports and their dissemination by the cultural and discriminatory tendencies; identifying the specific of disciplines' teaching, learning and evaluation, of intercultural communication role in promoting democratic values; analyzing the positive character (negative), cohesion (separation), constructive (destructive) of attitudes, representations and stereotypes in intercultural relationships establishment; determining the teaching, learning and evaluation methodology of disciplines from intercultural perspective.

2.2. Stages of strategy for training the intercultural competence

Based on theoretical landmarks we have determined the stages of intercultural competence training strategy as we can see in Table 1.

Intercultural competence training includes cognitive capacity training (knowing the national and foreign culture and language), skill capacity training (abilities for establishing the interactional intercultural relationships) and behavioral capacity training (abilities for expressing the attitudes, respecting other, empathy, etc).

Table 1. Steps of intercultural competence training strategy

Theoretical and praxiological landmarks for training intercultural competence		
Objectives and standards of intercultural competence training		
Cognitive capacity <i>to know</i>	Skill capacity <i>to know to do</i>	Behavioral capacity <i>to know to be</i>
knowledge about oral and written understanding of foreign language; knowledge with cultural, historical, social character, specific to foreign culture; moral, spiritual, ethical knowledge as a way of cultural integration.	cultural understanding abilities; intercultural communication abilities; abilities for promoting tolerance.	promoting proactive and combat attitude against cultural stereotypes and the ones that emphasize the marginalization; promoting cultural values using intercultural communication; promoting alterity.

2.3. The standards of intercultural training

For intercultural competence training is necessary the establishment of intercultural standards and objectives. The operational standards and objectives can facilitate the process of intercultural competence training. So, the strategy of intercultural competence training involves the standards and objectives development, moving the accent from theoretical training to behavioral and praxiological one.

Table 2. Intercultural curricular standards

The individual will be capable	Learning activities
to understand and accept their own fillings and others, seeking sympathy and tolerance development;	activities regarding the understanding of own and other cultural environment (the description of a situation regarding the interaction in intercultural context);
to accept and understand the persons belonging to different cultures;	awareness activities for negative attitudes and stereotypes in intercultural communication;

to manifest a critical spirit and opening to the new;	activities for developing national and universal identity (debates);
to develop social desirable behaviors;	discussions about social-cultural subjects (globalization, interculturality, change);
to sensitize the negative consequences of egocentric manifestation;	activities that require cooperation, exercises to combat xenophobia and acceptance of other (brainstorming: generating ideas regarding the problem of xenophobia in communication with others);
to combat and eliminate stereotyping and prejudices from intercultural interaction (solving of intercultural conflicts);	activities for solving conflicts generated by intercultural interaction (exercises for solving conflicts of interest, essay – description of a cultural situation where misunderstanding and intercultural non-acceptance elements predominate);
to manifest capacities for training loyalty, acceptance of other (national identity tolerance and acceptance as a citizen of the world);	activities for national identity awareness, as a citizen of Romania and of the world (debates and comparative analyze);
to analyze the interference between national and foreign culture (recognizing one's own and foreign cultural landmarks);	activities for recognizing and understanding the cultural values (analyze of a city, character, traditional holidays from different cultures);
to possess tolerant personality traits;	activities to combat distrust of self and of others, acceptance of different ideas, interpretations and cultures (modeling of intercultural relations, role play – simulation of an intercultural situation);
to have intercultural communication competence (constructive dialogue in communication and relationships).	activities for training the intercultural capacities and attitudes (developing individual creativity, role playing exercises, debates).

2.4. The objectives of intercultural training

The intercultural competence training is determined by the correct formulation of training objectives on the three capacities of intercultural competence: cognitive objectives, skill objectives and behavioral objectives with an intercultural singularity.

Table 3. The objectives of intercultural competence training

Objectives	The student will be capable
Cognitive (gnosiological)	to possess historic, geographic, social-cultural knowledge specific to own culture and foreign culture;
	to know values, habits, customs and mentality of nation whose culture learns;
	to realize the importance of learning foreign cultures as a mean of integration into the universal society;
	to analyze individual values and the essence of cultural interaction in a multicultural environment;
Aptitude (instrumental)	to achieve intercultural interactions during classes and specific activities;
	to understand and accept the diversity;
	to build and maintain intercultural relationships;
	to use the most optimal methods for achieving intercultural interactions depending on the intercultural context;
	to analyze in a critical way distorted perceptions about the representatives belonging to other cultures;
	To develop the attitude for accepting the other;

Attitudinal (behavioral)	to promote communication skills, to enter into interpersonal and intercultural relationships;
	to promote critical thinking to their own identity and culture and also to combat the phenomenon of egocentrism, xenophobia;
	to participate actively in promoting intercultural tolerance;
	to question their own norms, values, traditions and acceptance of what is foreign;
	to participate in activities that require open for communication, tolerance, mastery of emotions, empathy, acceptance of what is foreign;
	to notice the differences between identities;
	to solve the intercultural problems.

2.5. The content of intercultural competence training strategy

It is necessary that the achievement of intercultural competence training strategy to relay on: integrated training of students (aims to creation of intercultural knowledge, skills and behaviors based on an appropriate methodological approach and a system of integrated, creative, participatory and social-cultural activities); establishment of standards and objectives for intercultural competence training; correlation between objectives of intercultural competence training and objectives for teaching, learning and evaluation of disciplines; determination of stages for intercultural competence training and reorientation of training methodology from intercultural perspective.

The components of the proposed strategy are: design and conduct activities, the components of intercultural competence, active-participative activities and intercultural objectives.

Table 4. The strategy of intercultural competence training

Design and conduct activities	Components of intercultural competence training	Active-participative strategies	Intercultural objectives <i>The students will be capable:</i>
	<p><i>Cognitive ability:</i></p> <ul style="list-style-type: none"> - the capacity to know foreign culture; - knowledge of norms, principles and relational requests (collectivism, responsibility, honesty, tolerance) and the capacity to transfer in the field of social-cultural relationships; 	<p><i>Projection and learning specific disciplines through:</i> heuristic conversation, group discussion, spontaneous speech, guided discussion, problem solving situations, expressing own opinion;</p> <p><i>Method of cooperative learning:</i> cooperation in solving of some received</p>	<ul style="list-style-type: none"> - to distinguish the key information and specific details about fundamental human rights, declaration of tolerance principles; - to develop a dialog about actual educational politics; - to integrate in the foreign culture contents values such as: acceptance, diversity

1. Main activities for substantiating and conducting the intercultural education (activities for teaching, learning and evaluation of disciplines from intercultural perspective).	- acceptance of own values and those belonging to different cultures in the process of interaction with their representatives; - perception and acceptance of all what is foreign.	cultures; <i>Method of problem situations</i> : mediation and resolution of possible intercultural conflicts; <i>Analyses-synthesis method</i> : developing critical thinking and attitudes by comparisons between cultures, traditions, etc; <i>Research method</i> combined with reading, guided discussions, debates; <i>Other interactive methods</i> .	
	<i>Aptitude/affective ability</i> : - willingness for intercultural adaptation by trying emotional, motivational and emphatic aptitudes; - aptitudes to understand tolerance and mutual respect under the circumstances of multiculturalism; - understanding the specific of dialog with another culture; - openness to other, foreign, unusual; - manifestation of tolerant behaviors based on guidance of own emotions, interest manifestation to other cultures, objective appreciation of intercultural situations.	<i>Work group method</i> : training abilities used for efficient expression of their own cultural identity; <i>Effective feedback method</i> : factors' updating which contribute to development of culture and intercultural community using intercultural interaction; <i>Brainstorming method</i> : training abilities to build together the consent in situations characterized by divergence of views, opinions, values; <i>Learning method</i> : discovery and application of models to combat the stereotypes and prejudices; <i>Role play</i> : training aptitude to build concrete relationships.	- to establish intercultural interactions during classes and activities; - to understand and accept the diversity; - to build and maintain intercultural relationships; - to select adequate methods for establishing intercultural interaction and for developing the attitude of other acceptance; - to understand and to analyze in a critical way the distorted perceptions towards the representatives of other cultures (ethnocentrism, nationalism).
2. Social-cultural and scientific activities (participation in organized tours in cooperation with other educational institutions from other countries; participation in international	<i>Attitudinal/operational ability</i> <i>(capacity to behave in a certain way, to experience positive intercultural behavior)</i> <i>Attitudes</i> : - express adequate attitudes (maintaining a dialog, arguing their own stand point, but also respecting other opinions); - to promote self	<i>Personal involvement in intercultural activities</i> <i>Debate method</i> : the training of their interpersonal relationships to communicate in an effective way, training compassion towards other cultures; <i>Critical incident method</i> : combating conflict situations; <i>Role play</i> : justification of	- to promote aptitudes to communicate, to enter into interpersonal intercultural relationships; - to promote critical thinking to their own identity, to their culture and also to combat the phenomenon of self-absorption, xenophobia; - to participate actively for promoting intercultural tolerance; - to participate in activities

scientific conferences organized by own university or other universities; participation in partnerships for experience exchange; participation in research projects in the intercultural field).	respect through: addressing their own moral rules, recognition and fulfillment of their own social-cultural landmarks, combating attitudes of neglect, marginalization of culture; - to promote intercultural tolerance using acceptance of ideas, opinions, and their own responsibilities for respecting cultural values.	own position, positioning ethnocentric, xenophobic, nationalistic ideas, stereotypes and prejudices; <i>Round table method:</i> modeling traits necessary for acceptance of people belonging to other culture; <i>Project method:</i> accepting new members into the groups, mediation and resolution of intercultural conflicts inner the group, maintaining friendships, negotiating behavioral models, emphasizing personal and group activity in intercultural environments.	that require open communication, tolerance, mastery of emotions, empathy, acceptance of what is foreign; - to perceive the differences between identities; - to get in charge with a research subject; - to master the techniques of information and documentation; - to solve an intercultural problem and to draw up a solution using the process including observation, hypothesis, experience, results, interpretation, conclusion.
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In addition to the strategy presented above we will give you some examples of practical activities for building and developing the intercultural competence, based on our and other experience. Therefore the subjects can become intercultural competent using direct interaction with the studied environment. Interactions may take place either in the classroom (by inviting some members from the studied community to take part in the classroom activities) or by making some study visits in the geographical and cultural environments belonging to the studied community. Another way for intercultural training is the participation in cultural events organized by the studied community either in the country of subjects who want to become intercultural competent or in the community country (this imply making a visit in the community country). Also, the students from different universities can organize spectacles and exhibitions with intercultural thematic which involve the information collection and processing, its understanding and structuring in order to obtain the desired product.

For developing the tolerant personality of trainees are used integrated didactic activities and trainings such as “The measurement of cultural awareness”, on levels: level 1 – information relating to culture may include stereotypes, trainees perceive culture in the same manner as they perceive the cultural shock, cultural barriers can be considered rude and ignorant; level 2 – trainees focus on more extensive cultural knowledge (the contrast with their own culture); level 3 – trainees begin to accept foreign culture at intellectual level and can observe aspects specific to cultural values; level 4 – level of tolerance, trainees begin to perceive culture from inside.

To raise awareness and to combat cultural stereotypes is necessary to develop a set of didactic activities, for instance: “Read very carefully the following sentences. Decide which are stereotypes and which are cultural generalizations: French people are selfish; In France gifts are often provided at the end of negotiation; To obtain a meeting with a French man can last 2 or 3 days; ...”.

To put into practice this strategy is necessary that curricula to be focused on didactic experience of student have an interdisciplinary character and integrate the theory with practice, following the training of intercultural competence. Also very important is to develop and to implement some

optional courses, for example “Developing cultural understanding” organized on study groups, focused on building skills, attitudes, problem solving situations and participatory activities.

3. Conclusions

The proposed strategy is important because it can represent a modality **to build** the intercultural competence by presenting its components, by objectives’ operationalization, by selecting the interactive teaching strategies and integrated activities in the process of disciplines’ teaching, learning and evaluation.

Regarding the implementation of the strategy we consider that it is necessary to improve teachers and trainers’ intercultural training (assumes a resizing of their professional responsibilities) and to change the vision for teaching disciplines from intercultural perspective (is necessary to replace traditional teaching with modern type which is focused on student as agent and not as an object of learning). Using modern teaching, teachers have to use a methodology predominantly formative which include praxiological methods, oral methods, written methods, oral-visual methods, interrogative methods, case study, modeling the situations based on interaction and ethical behavior, experiential learning, mutual and cooperation learning. Speaking about tools, modern teaching uses: real tools (objects, different collections), substitution tools (iconic tools), ideational tools (concepts, reasoning, theories), actionable (experimental models, tools based on learning using computer), Gutenberg (manuals, books, courses, magazines), tools based on computers, assessment tools (written, oral, practical, based on computers) and audiovisual (movie, television, video).

As a final thought we consider that the effectiveness of the proposed strategy depends on: selecting an integrated, creative and social-cultural activities oriented towards valuing and integrating cultural historical, ethnical, moral knowledge for understanding own and foreign culture; creating a flexible framework for free expression of student; permanent adjustment (feedback); selecting a variety of teaching methods and techniques (simulation, analysis of cases, situations, role playing, discussion, participation in scientific circles, international scientific communication, round table, etc) synchronized in a coherent system for training the intercultural competence.

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STUDENTS' EVALUATION OF TEACHING EFFECTIVENESS

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Abstract

Students' Evaluation of Teaching Effectiveness (SETE) is one of the four indicators of performance for teaching-and-research staff quality established by the Romanian Agency for Quality Assurance in Higher Education (RAQAHE) and its primary goal is increasing of academic performance. Insomuch as SETE may rates popularity or performance, faculties treat students as customers/ products of their teaching programs. Objective rating requires specific training and a quality culture is necessary to sustain those condition parameters of the educational process that are established as standards of value, at this beginning of century when teaching aims at being evaluated as Professional Behaviour. The case study used data offered by SETE, for the first semester in two academic years, 2007/2008 and 2009/2010, at West University of Timisoara (WUT). Conclusions suggested a certain positive relation between smaller number of teaching staff and higher quality teaching (higher SETE ratings).

Key words: teaching, performance, evaluation.

1. To turn mirrors into windows. Starting point and history

The *External Evaluation Methodology of the RAQAHE (The Romanian Agency for Quality Assurance in Higher Education)* establishes in its Second Part (*Criteria, standards and indexes of performance for quality assurance and accreditation*) the Students' Evaluation of Teaching Effectiveness (SETE) together with other three other indicators of performance for teaching-and-research staff quality:

1. The ratio between the number of teaching staff and the number of students;
2. The Peer Appraisal of lecturers;
3. The Students' Evaluation of Teaching Effectiveness (SETE);
4. The Evaluation by University's Management.

Evaluation by students is compulsory, SETE form is endorsed by the Senate and it is used at the end of each semester of the academic year. SETE results are discussed individually, statistically processed on chairs, faculties and university, and analysed at faculty and university levels, in search of transparency and in order to establish policies on teaching quality.

The modern history of formal teacher evaluation can be divided into three overlapping periods (Medley, Coker, Soar, 1984), as from the turn of the twentieth century to about 1980. The first period was configured by the *Search for Great Teachers* and actually started in 1896, when 2,411 young Iowan students were asked to describe characteristics of their best teachers, so as a benchmark for teaching quality could be established. The second period brought forth the *Inferring of Teacher's Quality from Student Learning*. But early correlations between teacher characteristics and student learning were rather discouraging, as most showed no relation at all. The third one focused on *Examining Teaching Performance*, so as to reveal what related teaching behaviours to student learning.

At the beginning of the twenty-first century, teacher evaluation is entering a phase of transition to a period of Evaluating Teaching as Professional Behaviour.

2. Goals of Teacher Evaluation. Distorting mirrors

Either *formative* or *summative* in nature, the teaching evaluation aims essentially at improving the teaching staff as a whole. Suggestions are made (Meyer and Rowan, 1977) that there are yet other goals beyond teacher evaluation, as for instance to maintain public confidence and support by leaders through assuring they are legitimate. *Teachers must be held accountable, or in some way evaluated* – this is a convenient principle to offer the public, and thus one that enhances a leader's or system's legitimacy.

SETE appeared out of the need for determining teaching effectiveness – and yet, it often acts as a disincentive of rigour use! One can easily think further that teaching evaluation should be based on outputs. If no associated instruments are used besides SETE, as usually happens, then students are the primary determinant of the succeeding or failing academic career. When such a great role is left to students with respect to their professors' career, while asking for more consistent courses, increasing number of incoming students and an increased satisfaction, long term results will be an overall decrease in program quality. (Emery *et al*, 2001).

Business schools tend to consider students as **products** of their training programs, rather than their **customers**. The customer-oriented approach focuses on student *satisfaction increase* at the expense of learning and program quality; the product-oriented approach emphasizes *student capabilities* and holds business programs responsible for “producing” knowledgeable, effective students whose skills and talents are largely valued by public and private corporations.

Under such circumstances, SETE will express professors' popularity and will be not worth assessing teaching effectiveness. Many of the present evaluation methods do not meet the global educational objective of improved student learning. SETE has the advantage of being a cheap and available instrument, but definitely it is not the best source of information on teaching effectiveness. When evaluation becomes a popularity contest among teaching staff, charismatic and enthusiastic professors will be rewarded with high ratings, irrespective to their level of expertise and their students' outputs. *“Instructor expressiveness had a substantial impact on student ratings, but a small impact on student achievement”*. (Abrami *et al.*, 1982) It is the so-called “Dr. Fox effect” or “educational seduction”: the professional actor introduced as Dr. Myron L. Fox fooled three separate audiences of professional and graduate students and was awarded

high numerical scores and praises for “excellent presentation”, “warm manner”, “good flow”, “lively examples”, “relaxed manner” and “good analysis of subject”. Despite the emptiness of his lecture, his warm, enthusiastic, and lively nonverbal behaviours ensured him overwhelmingly positive evaluations. Hence, one may ask “if style can trump substance so easily, even in the minds of a trained, professional audience, then what role do nonverbal behaviours play in more routine student evaluations?” (Deborah J. Merritt, 2007) Although this is not the case anymore, some doubt still exists that outstanding expressiveness might blind student somewhat for a time (Smart, J., Editor., 2007). As already demonstrated, when students evaluate teaching staff’s competence in correlation with their characteristics of personality, student achievements are positively influenced in just a low degree by student’s affection for their professors, and the most accurate measurement of teaching effectiveness keeps being the evaluation of students’ output. Therefore, SETE should not be used as a criterion in influencing teaching staff’s career, as mainly based on professors’ personality (“charismatic and enthusiastic”) rather than student achievements. (Abrami *et al.*, 1996)

3. Necessary specific training

Teaching staff asserts many times that students are not qualified to rate their professors, because every person who supplies data for evaluations must have specific training. Otherwise, one person’s evaluation by another may give rise to juridical problems like defamation.

Users who lack specific training makes decisions based on invalid interpretations or ambiguous/wrong data (Franklin and Theall, 1990) as follows:

- *interpretation of deeply invalid data*, that can lead to different results for employees whose performances do not differ;
- data are valid but the *interpretation does not distinguish between significant and insignificant differences*: in such a case, an outstanding professor will not be rewarded accordingly – or even worse, they might be penalized!
- significant differences exist, but the source of difference is not recognized: some user who manifests preference for a certain teaching style might misinterpret the SETE, assigning negative meanings to positive ratings.

A number of conclusions that resulted from evaluations used in industries emphasize shortcomings that might be relevant to higher education too:

- the tendency to encourage mediocrity while discouraging risk undertaking might make professors increase rigour in order to be awarded higher ratings by students, and thus students achievements will increase too!
- a focus on measurable short-term results might entail long-term disadvantages;
- a focus on individual might ruin the cohesion of working teams;
- *detection* is favoured rather than *prevention*;
- inaccurate results through lack of sincerity and fairness;
- inability to distinguish between factors that pertains to evaluated persons and factors pertaining to system.

Business environment has already been replacing traditional evaluation of employees by a *process of planned improvement*. Management meets employees to set new standards, training needs, to offer necessary guiding and to reward continuous improvement. On the way of total quality integration within higher education, the evaluation process should be directed towards *best practices* and *continuous quality increase*.

4. Case Study based on SETE at West University of Timișoara (WUT)

Data offered by SETE with respect to the first semester in two academic years, 2007/2008 and 2009/2010, have been considered in order to find out whether some relation might exist between the size of teaching staff and student ratings, from quality point of view. Input data are the resulted average rating/professor in each faculty, on a 7-degree scale as follows: 1-extremely weak, 2-very weak, 3-weak, 4-medium, 5-good, 6-very good, 7-outstanding.

In the academic year 2007/2008 the SETE included 9 faculties with 728-person teaching staff. The distribution between faculties and the rating average are shown in Table 1.

Table 1. Average rating and number of evaluated teaching staff, on faculties (2007/2008)

Crt. No.	Faculty	Average rating	Teaching staff number
1	Law & Administrative Sciences	5.62	41
2	Physical Education & Sport	5.67	38
3	Political Sciences – Philosophy – Sciences of Communication	5.84	84
4	Chemistry – Biology - Geography	5.89	73
5	Mathematics - Informatics	6.04	78
6	Sociology - Psychology	6.07	149
7	Physics	6.13	28
8	Letters - History - Theology	6.15	226
9	Teaching Staff Training Department	6.34	11
	Total Average	6.01	728

Source: UVT data base

In a graphic form, one can remark the direct relation between the two characteristics: the average rating size (left side scale) and the teaching staff's number (right side scale) for each faculty.

Source: Table 1.

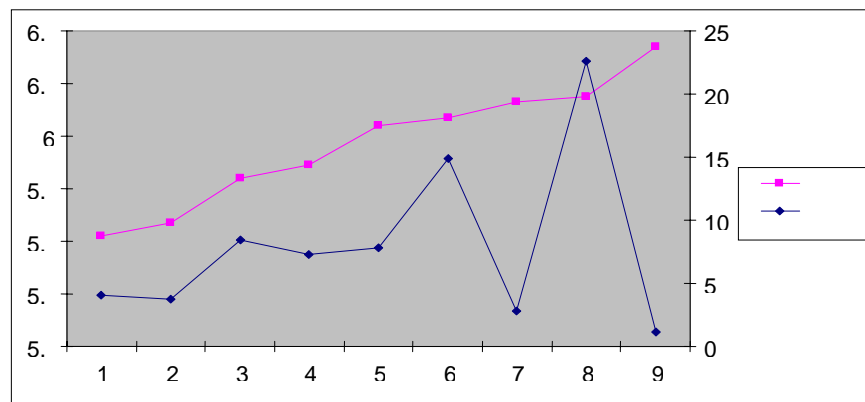


Figure 1. Average rating (AR) and number of teaching staff (NTS) evaluated on faculties (2007/2008)

The situation of teaching staff number on average rating intervals is shown in Table 2.

Table 2. Teaching staff's situation on average rating intervals (2007/2008)

Average rating intervals	Number of teaching staff
0-3.99	8
4-4.99	36
5-5.99	276
6-7	408
Total	728

Source: UVT data base

In the graphic representation above, the number of teaching staff in first part of the considered interval is 1%. In the graphic representation of table data, one can remark the exponential increase of teaching staff's number on the higher (positive) interval of measuring scale (7).

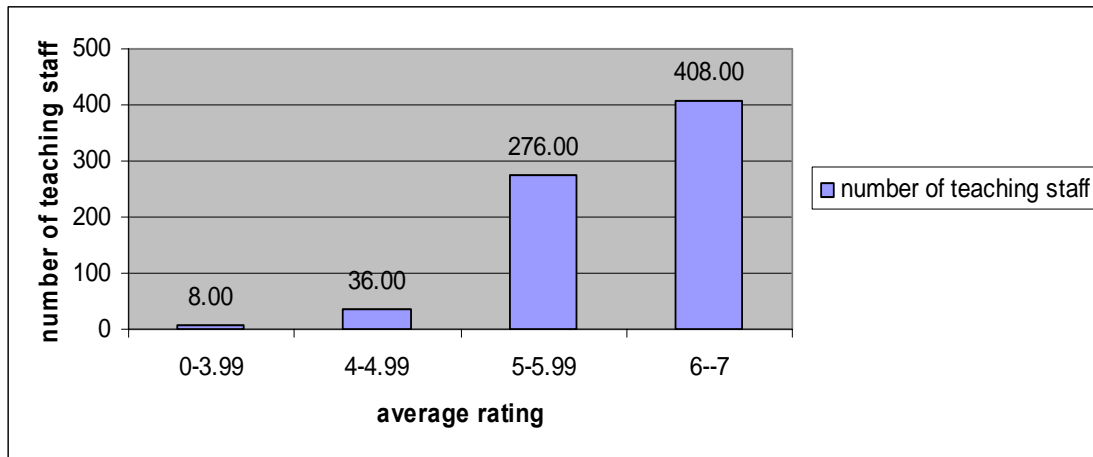


Figure 2. Teaching staff's situation on average rating intervals (2007/2008)

In the academic year 2009/2010, SETE included 11 faculties, with a teaching staff of 1,110. Distribution among faculties is shown in Table 3.

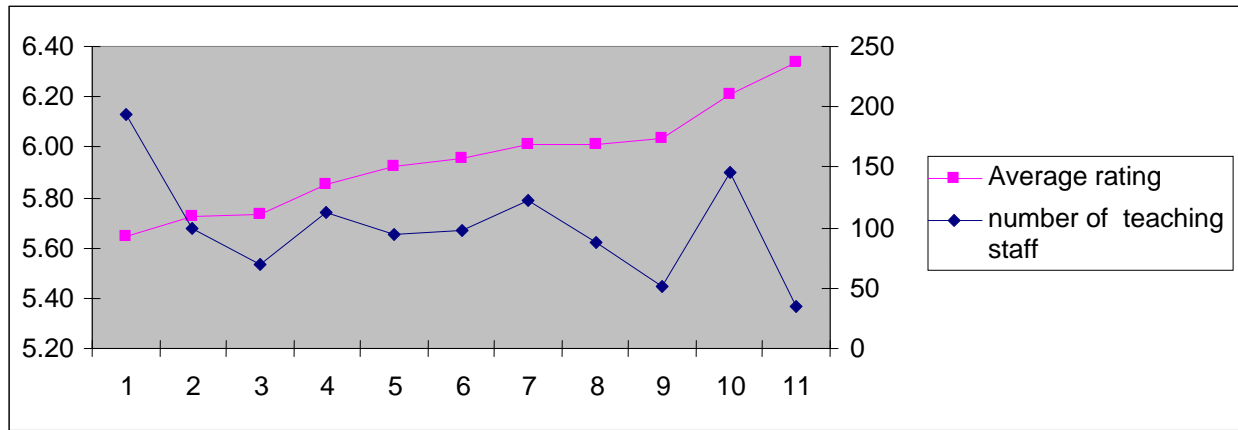
Table 3. Average rating on faculties and number of evaluated teaching staff (2009/2010)

Faculty	Average rating	No. of teaching staff
Economics and Business Administration	5.64	194
Political Sciences – Philosophy – Sciences of Communication	5.73	100
Law & Administrative Sciences	5.73	70
Sociology - Psychology	5.85	113
Mathematics - Informatics	5.92	94
Chemistry – Biology - Geography	5.96	97
Music	6.01	123
Fine Arts and Design	6.01	87
Physical Education & Sport	6.04	52
Letters - History - Theology	6.21	145
Physics	6.33	35
Total	5.91	1,110

Source: UVT data base

On the graph, one may see the direct relation between the two characteristics, i.e. the average rating (left side scale) and number of teaching staff (right side scale) for each faculty.

A minimal (weak) correlation can be identified as a negative linear relation between the average size and the number of evaluated teaching staff for each faculty. The level of this correlation, i.e. the intensity of the captured relation (R^2) between the two variables is 0.19. If the faculties of Music and Letters – History – Theology are removed from the evaluated statistic group (a teaching staff of 268), the intensity level (R^2) increases to 0.54.



Source: Table 3

Figure 3. The average rating and the number of teaching staff on faculties (2007/2008)

The situation of teaching staff on rating intervals is shown in Table 4.

Table 4. The situation of teaching staff on rating intervals (2009/2010)

Interval average rating	Number of teaching staff
s0-3.99	12
4-4.99	72
5-5.99	457
6-7	569
Total	1,110

Source: UVT data base

In the graphic representation, the number of teaching staff on the first part of the considered interval is equally 1%.

In the graphic representation of the table data, one can remark the exponential increase of teaching staff's number on the higher (positive) interval of the measuring scale (7).

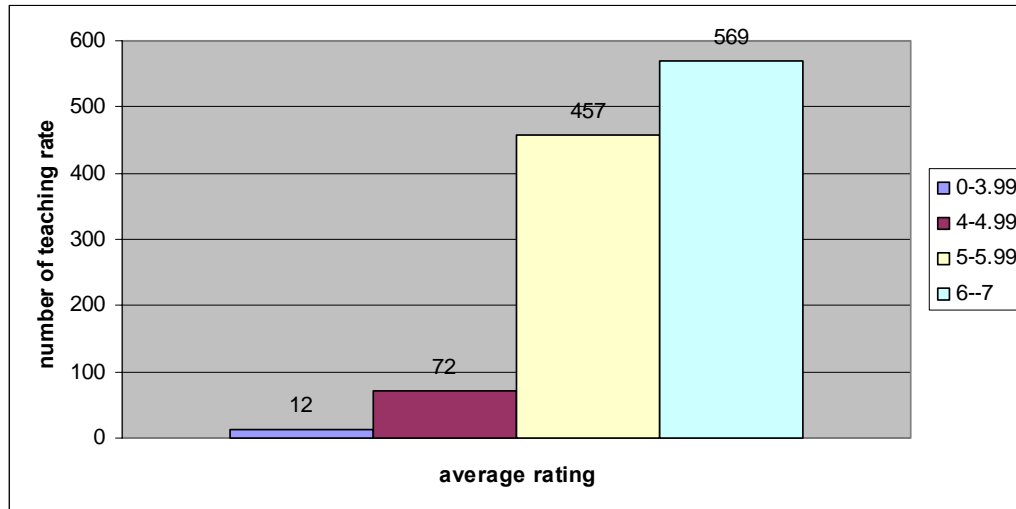


Figure 4. The situation of teaching staff on rating intervals (2009/2010)

5. Conclusions

First, it is necessary to find out whether SETE rates *popularity* or *performance*. Teaching staff who perceive SETE as popularity contests influencing their career will treat students as their *customers* rather than their *products*, in search of *satisfaction* rather than *achievement*. At the same time, several qualitative and quantitative studies pointed out that higher education rewards the *individualist professor*. The teaching process is essentially human interaction, hence students would not be able to leave aside their professors' characteristics of personality, but it is not to expect that business schools will encourage professors to sacrifice teaching rigour in order to be popular and keep their place in academic hierarchy.

The primary goal of SETE was the increasing of academic performance, but practice reveals that evaluation results are also used in making decisions. A great number of teaching staff consider SETE as a serious and unrecognized infringement of their academic freedom (Emery, 2003).

Leaving aside the degree of relevance of criteria underlying questionnaires, the global data that students provide across teaching evaluation are processed by evaluated teaching staff too! The scholars who investigate SETE must accept from the very beginning the lack of continuity and consistency, and work under circumstances of contiguity governing such analyse, for every reference point between *input* and *output* is in continuous change: questionnaires are not filled in by the same students and same number of students, each time; year after year, teaching staff is neither the same; curriculum changes may arise too, etc. SETE offer just a *slice of reality* as it is mirrored by students' perception and the only constant element pertains to meta-process: *increasing quality of teaching* and subsequently *increasing satisfaction of educational-service consumers* (students, families, industries, society as a whole).

Universities are certainly not to be evaluated in terms of *machines* with exact input and output. A quality culture is necessary to sustain those condition parameters of the educational process that are established as standards of value.

The case study of the present article revealed a certain positive relation between smaller number of teaching staff and higher quality teaching (higher SETE ratings), for cohesion is greater in such teaching groups. The West University of Timisoara (WUT) is in a good position in SCOPUS Ranking of the best research organizations in the world, according to "SIR World Report 2010" – just due to achievements of faculties with smaller teaching-and-research teams. WUT is the only Romanian institution of scientific research ranged into the yellow area at Physical Sciences, with 1.07 score, in line with prestigious world institutions. (Rector's Yearly Report, 2010)

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STUDENT CENTRED LEARNING FROM A QUALITY CULTURE PERSPECTIVE

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Abstract

According to the Bologna process, one of the requirements of a modern higher education system is the student centred learning. Alongside with tutorship, the student centred learning fosters creative learning, preparing students for a lifelong learning process. Literature shows that both at school and university level there has been a call for a shift from teacher centred to student centred learning models. A powerful student centred model integrates aspects of student choice of time and place for study, the content of study, the assessment of material, and acknowledgment of prior knowledge and skill. This view highlighted three core characteristics of student centred learning by promoting the idea that students should have more input into: what is learned, how it is learned, and when it is learned.

Key words: education, student, teacher, creativity.

1. Introduction

The University may be regarded as a specific organization offering education and research and artistic creation at the highest level. It has a special place within the community by supporting its cultural and social development. On the other hand, under financial and demographic constraints, universities are also regarded as quasi public entities providing educational services to an ever demanding business environment. Therefore, universities must adjust their mission statement, their objectives and strategies to a new competitive environment.

Quality assurance and creativity become centre points leading to a holistic approach of the entire educational endeavour. They confer visibility, development and prestige, efficient allocation of human and financial resources, ensuring the productivity transfer effect of funds.

There is no doubt that the quality of a higher education institution strongly relies on its governance including all the parties involved: teaching staff, students, management, stakeholders, community representatives, etc. The degree of involvement of each party influences the quality of the university as a whole.

Efficient governance considers quality as an aggregate of all individual efforts to improve the outcome of their work, strives for a quality culture within the institution aiming for a better transparency, accountability and credibility

During the last decade, the higher education system has faced a number of new challenges, such as massification, an increasing competition, financial constraints, new qualification demands on the labour market, etc.



Figure 1. The University governance

Consequently, the old paradigm concerning teaching, learning, and knowledge is changing, the shift passing from a teacher – centred learning to a student centred learning. The idea was promoted at the beginning of the 20th century by American pedagogue J. Dewey and reconsidered within the present circumstances.

The shift towards the student implies reconsidering the objectives of teaching as well as the manner of teaching. Moreover the final aim is to offer the students the kind of knowledge that would allow their fast employability, according to their qualification.

Even if the two approaches seem opposed, they are not mutually exclusive, but are, rather, complementing each other. It demands a new curricula design in such a manner as to encourage the active involvement of the student, self study, creativity, and stressing of the formation of abilities. In addition, the curricula should be conceived in such a manner as to answer the specific demands of each study cycle (bachelor, masters, doctoral).

This new paradigm of reaching should not be regarded as being imposed by quality assurance or governmental bodies, but a way to improve education and an efficient use of all resources. If all the peers are willing to make an effort towards changing the approach of modern education a higher degree of professionalism may be acquired.

2. Quality assurance and quality culture

The concept of education quality is not approached unambiguously. Although various descriptions of education quality can be tracked, the definition of education quality as a holistic phenomenon composed of several components is rather common. For example, a holistic quality of education is composed of not less than five essential components. They are: • initial conditions quality; • process quality; • output quality; • education output quality; • value added

It must be stated that universities are special organizations having, besides educational, research and efficiency goals, a social *responsibility*. Though up to a certain point their managerial approach may resemble the management of any other entrepreneurial organization, it differs given that the bedrock of their activity is *the human capital formation*.

Under these circumstances, quality assurance means *building trust* within the community, in the sense that the higher education institutions have an educational, research and artistic creation offer that meets all stakeholders' expectations and accounts for the efficiency of all resources involved (human, financial, tangible and intangible assets).

The internal quality management includes a set of policies and tools aimed to determine and measure all quality parameters in all the academic departments and are a part of the university's management.

The level of effectiveness of academic activities (both education and research) reflects the impact they generate on the economic and social environment because, in the knowledge society, the mission of the university is to contribute to the welfare of the community through knowledge transfers.

In higher education institutions, quality is essential in a competitive environment. The globalization trends that touched even higher education led to: the diversification of curricula, transnational and virtual universities appeared, the massification of studies was embraced, the universities lost monopoly over research, the labour market is internationalized, the mobility of students and academics became a priority, the university decentralization and autonomy are widely accepted, the flexibility of the curricula and the possibility of the students to design their own curricula at master and doctoral level, etc.

Under the new approach brought by the Bologna process, *the final product* of the academic activity is *knowledge* offered to the community as: the competence of the graduates, the technology and knowledge transfer of research, consultancy and expertise, contribution to the welfare of the community, etc.

The main clients (beneficiaries) of the academic activity are the students as well as the internal and external stakeholders, each of them expressing personal views and expectations towards the academic products and processes. From quality assurance point of view the identification of these needs is the starting point of quality management. The degree to which these expectations are met, the perception of the clients is another valuable set of information for improving the activity.

According to [3], student-centred learning, though not new, has come into prominence due to several factors: *massification*: universities are no longer address elite student populations, *diversity*: large numbers of non-traditional and international students, *competition*: competing for students as never before, *employment*: there is great pressure to align the outcomes of university education with useful generic skills and jobs, *information explosion*: with the explosion of accessible information and knowledge, how people learn and manage information is becoming an essential outcome of a university education and sometimes more important than what they learn, especially when the shelf-life of information may be so short, *research*: growing understanding of how students learn, *practice*: the strong impact of values and departmental practices in shaping student learning.

3. Student centred learning vs. teacher centred learning

There is no clear cut and widely accepted definition of *student centred learning*. Nevertheless, different studies suggest that this concept has two dimensions: an academic and a social one. The academic side regards the quality of the education provided by universities involving the teaching staff, the research, the support offered by the universities for the professional development of students. The social side of the concept regards the financial support, health care, lodgings, and recreation facilities. It is clear enough that student learning is a concept that requires a paradigm shift from a lecturer – oriented study to a interactive and practical approach of teaching and learning.

An in depth analysis of the student centred approach emphasizes the personal autonomy the student must be granted in order to embrace creativity in learning. Therefore, the student is not regarded, anymore as a consumer of education, but is seen as an active part in the learning process, students being regarded as autonomous individuals. Autonomy is required since the future graduates will have to integrate in a dynamic society that demands lifelong learning. Universities should encourage *creativity*. It requires an integrated approach of students (clients) demand, educational offer, tutorship, academics teaching and research activities, financial resource and outcomes.

The quality assurance process, aligned to “the European Standards and Guidelines on Quality Assurance in the European Higher Education Area” is based on learning outcomes, evaluation of teaching and participation of students. Broadly, education is framed as a dichotomy between education (critical thinking, involvement in society, individual potential) and training (competence and skills, individual potential, involvement in market competition). Therefore, dealing with creativity ultimately means considering diversity in stating the mission of the universities, in setting the quality procedures, educational and disciplinary diversity.

Under these circumstances, education is seen as a democratic, collaborative system involving academics, students, university management. Since the final aim is the professional employability of students the curricula and the qualifications obtained by graduates should address their needs as well as the needs of the labour market. The students should be able to set their own study path, being allowed a larger freedom in selecting the elective courses.

When education is teacher oriented, then the teacher is the one controlling the students’ access to information. Therefore, students are not regarded as participating in the creation of knowledge, their learning abilities are not considered, while the evaluation aims to assess the quantity of information the students have stored. The teacher bears the burden to select and transmit the information while the students are often asked to memorize this information. The

presentation of the lecture, seldom involves projects, examples, etc, being mainly oriented on the mere presentation of the theory.

The main disadvantage is that it allows no space to process information into knowledge and does not aim towards working qualification based learning, involving very few thinking skills. The student has a passive role, follows the information that will be used during assessment, without critically analyzing it.

On the other hand, the student centred learning, relies on the effectiveness of learning, and the students performance (as opposed to the teacher's performance). The approach recognizes that students have different manners of learning, have different abilities and different interests. As an outcome, the approach seeks to uncover the professional abilities and skills of the students in order to meet their employability needs.

From this point of view, teaching and learning are two interconnected processes. The teacher gives up to merely providing the necessary information and relies on "knowledge as a continuous process" focusing on the learning needs of the student. The student is not expected anymore to reproduce the information provided by the teacher, but is involved in developing information.

Therefore, learning is regarded as a dynamic process, demanding a student – teacher interaction. The students are asked to comment on the presented facts and sustain their statements with arguments. They are encouraged to question the facts presented in class in a logic sustainable manner. They must supplement the class hours with hardworking self study by using the various means of documentation (libraries, internet, bookshops, archives, etc.).

The assessment is here formative, the manner of examination evaluating the degree of understanding of various facts. The student must prove that he can use and integrate different concepts and facts, can formulate views and can comment on different situations.

The syllabi and curricula stress on the learning process, consecutive learning levels are strongly connected and lead to a specific qualification. In order to reach these outcomes, interdisciplinary knowledge becomes the main pillar the study is based on. It requires a broader possibility of the student to choose among the elective courses according to his interest. Eventually, students should be able to build their own learning path.

To meet these requirements, the teaching methods must be adapted, the teacher acts as a facilitator, helping students to process information. The student takes up the responsibility of learning, asks for supervision and interacts with his teacher in solving the tasks.

From his own perspective, the student is involved in its own educational development. He is expected to give up memorizing techniques but to creatively process the information by searching for alternative solutions, by offering finding arguments to sustain his opinion, to draw conclusions, to summarize, etc.

The advantage for the graduating student is that in the process of learning he acquires certain abilities such as: expertise in a professional field, learns to communicate the results of his work, to work within a team, learns to follow ethical criteria and best practice principles, to use the appropriate tools required by his work, to manage intellectual property, may work in a international environment, can proceed to an objective self evaluation an peer evaluation, etc.

In order to effectively apply the student learning method, the university, as a higher education institution must offer the necessary resources: buildings, equipment, endowments, human resources, and financial resources, cultural and sporting facilities. In terms of education facilities, the university should allow for flexible curricula, a wide range of elective courses, adjusted to the students' needs, should encourage the involvement of the stakeholders, should encourage the mobility of students and academics and the harmonization of curricula in order to easily apply the ECTS.

4. Effectiveness and shortcomings of student centred learning

Many studies have shown that student centred learning is a technique which proves to be rather an effective and productive approach. Nevertheless, this method has as well its own critics.

A six-year study conducted in Helsinki, which compared traditional and activating instruction, found that the activating group developed better study skills and understanding, but were slower in their study initially [5]. Equally, Hall & Saunders found that students had increased participation, motivation and grades in a first year information technology course [2]. In addition, 94% of the students would recommend it to others over the more conventional approach. Students in a UK University elaborated on the impact of student-centred learning on them, i.e. they felt there was more respect for the student in this approach, that it was more interesting, exciting, and it boosted their confidence [4].

In addition McLean and Educational Initiative Centre [6, 1] emphasize that:

Students can benefit from working alone or in small groups, on and off campus by having access to a wide range of learning resources other than the ones provided by the tutor. Exams are taken at their own convenience and enrolment is at flexible times of the year. Students take ownership of their learning, become reflective learners and are empowered. They are more motivated and committed towards learning because they become partners in the learning process and last but not least, can work and learn in partnership.

Tutors can act as facilitators, guides, mentors, work in teams and draw on the help from technicians, librarians, etc. They are able to work with students to determine teaching and learning strategies, develop student's ability to become a 'researcher' by accessing multiple sources of information.

Institutions are able to attract non-traditional students and students from diverse backgrounds as well as, expand their participation into the community. They also manage to improve the performance and gain international reputation. The time of the tutor can be spent on research and attracting new research funding.

When looking at the student centred learning method from another perspective, a few drawbacks can be highlighted. "The concept of being an independent learner choosing his/her own route of learning, may in fact drive some of the sociability out of the learning process if care is not taken to emphasize the importance of peers" [7]. In relation to this individuality, [4]'s study on psychology students highlighted their concern over being abandoned or isolated from other supports in a student centred learning approach.

[8] describes student-centred learning as a Western approach to learning and may not necessarily transfer to the developing countries because of limited *resources* and *different learning cultures*. In addition, it can be often difficult to see how the approach can be economical in the large classes. A comprehensive study was conducted in 2004, by the University of Glasgow, on the use of student-centred learning with full-time undergraduate

students. In this study they found that student centred learning (SCL) was more prevalent in the later years of the student degrees, and this they believe is often down to class sizes [7].

Another concern regarding student centred learning is the *belief* that students hold in relation to their learning. Students who value or have experienced more teacher-focused approaches, may reject the student-centred approach as frightening or indeed not within their dispatch.

[9]'s study emphasizes the different belief systems held by staff and students. They found that lecturers with a teacher-centred approach held views that students should accommodate information rather than developing and changing their conceptions and understanding. The reverse was true for those with more student-centred approaches to their teaching.

Perry's work on the development of University students highlights how students move from a dualistic view that knowledge is right or wrong to a relativist view that all answers are equally valid [10]. This study highlights that even during the University years, students can change their view on learning and as they move through the years so to change their views on student-centred learning change.

Finally, *students' familiarity with the term* can be poor. [4] conducted a study on 48 psychology students in the University of Plymouth on students' attitudes to student-centred learning. They found that, despite a University student centred policy, 60% of the students had not heard of the term.

5. Barriers towards change

Often the legislation does not state, specifically, student centred learning, considering that the university autonomy and teaching autonomy must deal with this issue. Nevertheless, the educational system must be supported and enforced by official statements regarding student-centred learning. On a more down to earth approach, there is a fairly good consensus among the students and teachers that student centred learning is a good and advantageous method. Therefore, the higher education staff is not a barrier to change.

If this is the case it means that the problem lies at a lower level of education. Often students are not accustomed with this manner of study, because at previous levels (i.e. high school) student centred learning is not customary. Moreover, reforms in higher education are often slow, inconsistent with the actual demand, do not leave enough room for flexibility within the curricula design and do not emphasize the importance of lifelong learning.

An important barrier could be considered the lack of expertise concerning student centred learning, given the new pedagogical techniques it requires and that are not available on a large scale. Though the main mission of higher education is to provide the necessary qualification for a fast employability of the graduates, pedagogical methods should not be abandoned. Presently, for higher levels of study pedagogy may be regarded as the "missing link", but its role should be reinstated, otherwise students cannot be guided properly in their study.

Organizational adjustments must also be made: the size of the classes should be revisited in order to allow a real and active exchange of ideas among students and teachers. In addition adequate resources should be allotted to endow classes with the necessary software equipment and libraries with the necessary books.

As student centred learning requires longer off class preparation for students and teachers and fewer contact hours responsibility should be taken to set a realistic number of hours and a good division of tasks.

Student centred learning requires a pro active attitude from students and academics and therefore both groups should endeavour to understand the essence of this new learning paradigm. Students should understand that they must invest time and effort for self study and academics should be more open towards tutorship and communication.

6. Concluding remarks

“The changing demographics of the student population and the more consumer/client-centred culture in today’s society have provided a climate where the use of student-centred learning is thriving. The interpretation of the term ‘student-centred learning’ appears to vary between authors as some equate it with ‘active learning’, while others take a more comprehensive definition including: active learning, choice in learning, and the shift of power in the teacher-student relationship. The method is quite commonly used in literature as well as in University policy statements, but this has not necessarily transferred into practice” [7].

Although it is not an easy change, the aim of this paper was to provide a better understanding of the term student centred learning and its characteristics in order to ease the move higher up the continuum towards a more student centred practice.

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THE CHALLENGES IN COPING WITH INTERNATIONAL BUSINESS ACCREDITATION REQUIREMENTS: THE IBAB CASE STUDY

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Abstract

This paper presents the experience of the Institute for Business Administration from Bucharest (IBAB) in their quest for AACSB accreditation for the Executive MBA (EMBA) program. This case study describes IBAB's: 1) motivation for field accreditation in general and more specifically AACSB accreditation, 2) the main stages an institution must go in getting and maintaining the AACSB accreditation, 3) the implementation processes involved and adopted by IBAB so far, 4) the steps taken to ensure alignment between IBAB's internal processes and procedures and the quality requirements of AACSB International. The conclusions refer to the future efforts and adjustments IBAB must make in order to achieve initial business accreditation.

Key words: field accreditation, business accreditation, AACSB accreditation.

1. Introduction

1.1. The importance and types of accreditation.

Accreditation in higher education is not a new concept. In certain regions of the world, the accreditation process has been implemented for more than 100 years ago. Accreditation is generally a voluntary, non-governmental process that includes an external review of a school's ability to provide quality education. It is helpful in many aspects, from ensuring that students are learning relevant material to allowing a school access to funding. The accreditation process usually includes self-evaluations, peer-reviews, committee-reviews, and the development of in-depth strategic plans. In most cases, the reviews focus on the school's mission, faculty qualifications, curricula continuous improvement, and assessment of learning.

Generally, a university can receive **two types of accreditation**. The first is “*institutional*” accreditation that includes an overall review of the entire university. A country’s national or regional accrediting bodies typically do institutional accreditation. The national agencies perform a review of the entire university, from its operating budgets to its student services. The positive decision of national agencies regarding accreditation is normally a condition for granting degrees gaining legitimacy in the country in which it operates. In most cases, institutional accreditation must be maintained, meaning a school is reviewed every few years.

Once institutional accreditation is earned, most universities in the world take accreditation a step further and seek “specialized” or “professional” accreditations for each of their disciplines. These specialized reviews are done by non-governmental, private agencies that are knowledgeable about a particular field of study. In the highly competitive education market, the specialized accreditation obtained by an university sends a powerful message to other schools, potential employers, and the general public that the university’s degree programs in a particular field have passed a rigorous review and that students are learning what they need to know about that area of study. Also, specialized accreditation must be maintained with periodic reviews every few years.

Not all specialized accreditations are alike. Some specialized accreditations are recognized only within their home countries and others are recognized worldwide giving the international reputation of specialized accrediting agency [5].

1.2. AACSB International and AACSB accreditation

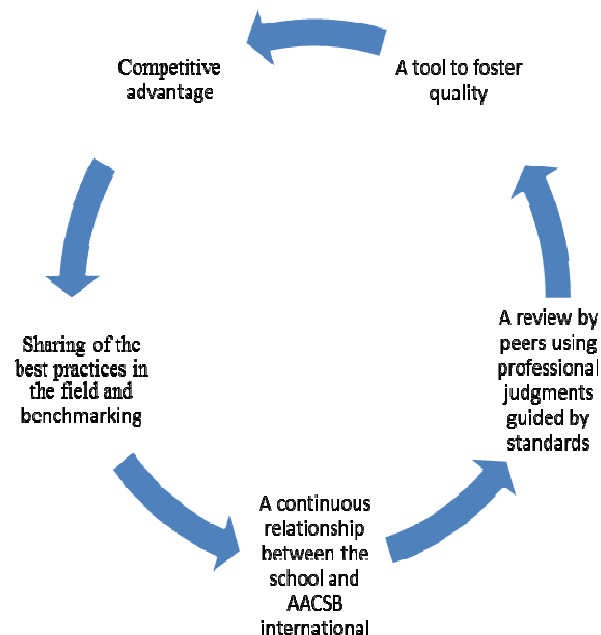
AACSB International is a not-for-profit association of educational institutions, corporations, and other organizations devoted to the promotion and improvement of higher education in business administration and accounting. AACSB International was established in 1916 as a membership organization for business schools—a place where business schools could network and discuss issues that affected the business education industry and their institutions. In 1919, the first AACSB Accreditation Standards were adopted with the primary objective of improving collegiate *business education*. In 1980, an additional set of accreditation standards were developed for undergraduate and graduate-level degree programs in accounting to address the special needs of the profession. Throughout the years, both the AACSB Business and Accounting Accreditation Standards have been continually revised to reflect the ever-changing needs of business and its students [5]. Currently, AACSB Accreditation Standards are used as the basis to evaluate critical areas of a business such as school’s mission, operations, faculty qualifications and intellectual contributions, programs, assessment of learning.

1.3. The importance of international business accreditation for a Romanian accredited higher education business school

Specialized accreditation is important. It can affect the ability of students/graduates to find employment, transfer classes between universities, and pursue additional degrees at other institutions. Business programs accreditation provides students and parent’s assurance that the business school is providing a top-quality education. It also ensures employers that business-accredited business school graduates possess the knowledge, skills, and abilities assumed by the school in its mission. Additionally, business accreditation provides many benefits to the faculty and staff at its accredited schools by attracting higher quality students, providing greater research opportunities, and allowing for global recognition.

For business degree programs at the undergraduate, masters, and doctorate level, AACSB Accreditation is the largest and most recognized specialized accreditation worldwide. The requirements for AACSB Accreditation are very stringent. In fact, 86% of AACSB-accredited schools say that the AACSB Accreditation Standards are the most stringent as compared to other accreditations they hold. Figure 1 summarizes and graphically presents some of the important reasons for AACSB accreditation.

Figure 1. Importance of business (specialized) accreditation



2. The AACSB accreditation

2.1. The stages of AACSB accreditation

A school become AACSB accredited by going through multiple stages. First, the school must be a member of AACSB International and offer degree-granting programs in business or management. There is no requirement for a school to apply for AACSB accreditation. The school's application is carefully reviewed for eligibility to pursue AACSB Accreditation. Once it is determined that a school has the potential to be accredited, it works with mentors, committees, and AACSB staff to develop a Standards Alignment Plan. Once a school follows through with its alignment plan and meets the AACSB standards, review committees and the AACSB Board of Directors decide whether a school should be accredited. The entire AACSB accreditation process is rigorous and requires a significant amount of work to achieve. Schools that earn AACSB Accreditation for their business and/or accounting programs must maintain their accreditations every five years. This means that a school undergoes a thorough review that is strategic and focused on the delivery of high-quality education, continuous improvement, market relevance, and currency. If those conditions are not met, the school can lose its AACSB accreditation. Having achieved AACSB Accreditation, an institution embarks on a continuous process of accreditation maintenance. That process includes 1) An annual report of data and 2) A periodic five-year review of strategic progress.

2.2. The eligibility requirements

Certain organizational characteristics determine institutional eligibility for accreditation. Figure 2 illustrates these characteristics. An institution must demonstrate these characteristics before it enters the initial accreditation review process and to maintain its accredited status.

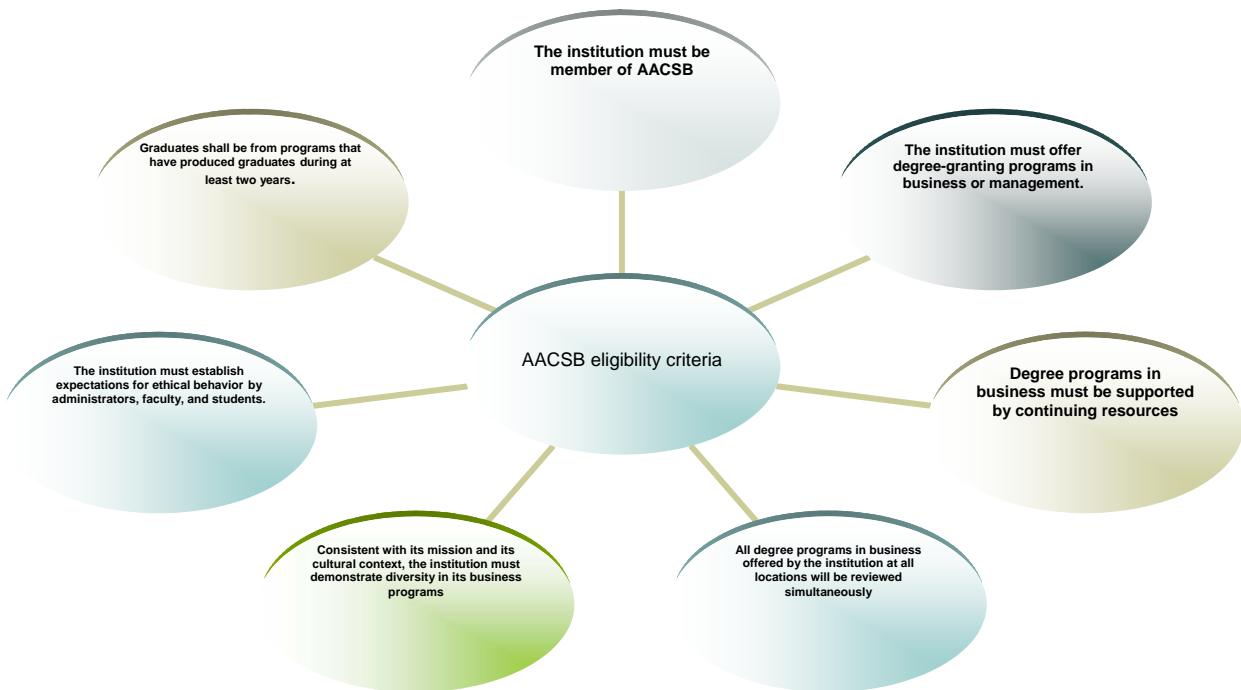


Figure 2. The AACSB eligibility criteria

In the eligibility stage, the identification of *the scope* of accreditation is crucial. In determining the "scope of accreditation" concerning degree programs, the "institution" which is seeking to earn or maintain AACSB accreditation must be identified. This is particularly important if, business programs are offered through an academic unit (or units) that is part of a larger organization offering degree programs across many fields. The institution and Accreditation Committee must agree on the degree programs list and exclusions before the accreditation review occur.

2.3. The AACSB standards

Accreditation focuses on the quality of education. The 21 accreditation Standards set demanding but realistic thresholds. They challenge educators to pursue continuous improvement, and guide improvement in educational programs. It is important to note that accreditation does not create quality-learning experiences. Academic quality is created by the educational standards implemented by individual faculty members in interactions with students.

The AACSB standards describe the desired characteristics of an accredited institution.

Strategic Management Standards (St.1-5): A school articulates its mission with its action items as a guide to its view of the future, strategic evolution, infrastructure, and resource allocation. The AACSB Accreditation review process is linked to a school's mission. The strategic management standards verify that a school focuses its resources and efforts toward a defined mission as embodied in a mission statement.

Participants Standards (St. 6-15): AACSB accreditation assumes that a direct link exists between a school's mission, the characteristics of students served by the educational programs, the composition, and qualifications of the faculty members providing the programs, and the overall quality of the school. Therefore, these standards focus on maintaining a mix of both student and faculty participants that achieve high quality in the activities that support the school's mission.

Assurance of Learning Standards (St.16-21): Student learning is the central activity of higher education. Accredited schools set expectations for learning and then provide assurance that its graduates meet expectations. The learning expectations are key features of any academic program. The learning expectations derive from a balance of internal and external contributions to the definition of educational goals. Learning goals should be set and revised at a level that encourages continuous improvement in educational programs [5].

3. IBAB's path toward AACSB accreditation

4. The IBAB first steps in the AACSB accreditation and the current status.

IBAB was founded in 1993 by The Romanian-American Postgraduate School of Business Foundation (ASEBUSS). Currently it is accredited by Romanian Quality Assurance Agency [6] and was set up by law as an autonomous high education entity on June 30, 2009. The core activity is the exclusive 20-month EMBA Program launched annually entirely taught in English. Since 2002, The Institute has a partnership with Kennesaw State University's Coles College of Business, Capzzolly (2006). The EMBA Program of Coles College of Business is offered since 1993 and launched annually. IBAB submitted the eligibility application for AACSB accreditation 2006 and it was accepted. The IBAB's Accreditation Plan and The Preaccreditation Report have been accepted in 2008 and an AACSB mentor appointed. In the pre-accreditation stage, annual progress reports were submitted each year (2009, 2010 and 2011). Currently IBAB will elaborate the Self-evaluation report and will receive the visit of the peer review team for initial accreditation – projected in the academic year 2012-2013.

4.1. The IBAB challenges to cope with AACSB standards' requirements

The key documents in the pre-accreditation stage include the Annual Reports and the Accreditation Plan, which form a basis for alignment of the organization with AACSB standard's requirements. They have been elaborated using standard-by-standard analysis based on critical judgments of Institute activities, practices, processes and infrastructure versus the standards' requirements.

In the standard-by-standard analysis and report, IBAB started from gap analysis in order to identify the misalignments of the school with the requirements of the standards. For each individual standard were identified the strengths, the weaknesses and the subsequent actions to maintain the strengths and to reduce/ eliminate the weaknesses. Those actions were aggregated in the Action Plan and the status in their implementation has been reported each year. The IBAB Strategic plan has been reviewed and adopted as key document in long-term decision-making process.

The IBAB approach to coping with the quality requirements is illustrated using the **Strategic Management Standards**.

Standard 1-The school publishes a mission statement or its equivalent that provides directions for making decisions. The mission statement derives from a process that includes the viewpoints of various stakeholders. The mission statement is appropriate to higher education for management and consonant with the mission of any institution of which the school is a part. The school periodically reviews and revises the mission statement as appropriate. The review process involves appropriate stakeholders.

In 2007, IBAB reviewed and revised its mission by placing a greater emphasis on the global dimension and on the values of the school. The mentor assigned by AACSB recommended expanding the mission to include research and to the quality of faculty needed for such type of program.

This standard has three components beyond the expectation that the mission statement exists. First, it states a feature of the mission statement—"provides direction for making decisions." Second, it specifies a characteristic of the process for developing the mission statement including the feedback from the stakeholders. Third, it insists on the periodic revision of the mission statement.

The results of alignment analysis are reflected in the table below:

Table 1. The alignment analysis for Standard one-Mission Statement

STANDARD 1: MISSION STATEMENT	
STRENGTHS	WEAKNESSES
<ol style="list-style-type: none"> 1. Existence of values, vision, and mission since the launching of the school, thoroughly revised in faculty council meetings, and adapted to the organizational and environmental realities. 2. The values, vision, and mission are clearly stated, motivating, and provide guidance for an activity aimed at satisfying the needs of students and business community. 3. Faculty and staff are committed to work towards the vision and mission. 	<ol style="list-style-type: none"> 1. Not all the constituencies' contributions were documented within the process that led to the creation and transformations of the mission statement. 2. Although IBPAB had a consistent relationship with Advisory Board members, using their ideas and inputs in order to revise the mission statement, this process was not documented.

For illustration *the actions* identified for the Action Plan that relate to standard one include: Faculty and staff will continue to monitor the environmental and organizational changes, in order to adapt the mission and learning goals accordingly. A formal procedure of revising and updating periodically the mission and learning goals will be implemented. All the discussions regarding the organizational alignment of IBPAB will be documented. These discussions will involve professors, students, managers in the business community. A form for mentioning the results of the visits to companies will be used the relationship and exchange of opinions with Advisory Board members will be carefully documented in the future, their valuable inputs continuing to be implemented

Standard 2-The mission incorporates a focus on the production of quality intellectual contributions that advance knowledge of business and management theory, practice, and/or learning/pedagogy. The school's portfolio of intellectual contributions is consistent with the mission and programs offered.

The judgments criteria for this standard required the school to demonstrate that the policies that guide the development of intellectual contributions should clearly specify: The expected targets or outcomes of the activity, clear expectations regarding quality of the intellectual contributions and how quality is assured, the quantity and frequency of outcomes expected over the AACSB Accreditation review period, and the priority and value of different forms of intellectual

contributions consistent with the school's mission and strategic management processes Dumitrescu (2008) (2010).

A generalized categorization of intellectual contributions includes contributions to learning and pedagogical research, contributions to practice, and discipline-based scholarship. Institutions customize these contributions, indicate their relative importance, and add additional responsibilities in the mission statement. The policies that guide the development of intellectual contributions should clearly specify the expected targets or outcomes of the activity, clear expectations regarding quality of the intellectual contributions and how quality is assured, and the quantity and frequency of outcomes expected over the AACSB Accreditation review period. The priority and value of different forms of intellectual contributions should be consistent with the school's mission and strategic management processes

Table 2. The alignment analysis for Standard two

Strengths	Weaknesses
The adequacy of faculty sufficiency and qualifications in the resource plan is ensured by the set of practices enforced both by the Romanian legislation enforced by ARACIS and the Academic Guidelines of IBPAB.	Lack of definition for the content and the outcome range for the 3 categories of intellectual contributions: contributions to learning and pedagogical research, contributions to practice, and discipline-based scholarship
The expectations for faculty intellectual contributions are specified and documented in line with Romanian criterion for getting tenure.	Lack of definition for the quality of outcomes in order to be considered valid "intellectual contribution"
IBPAB has in place a set of practices related to the faculty development consistent with the intellectual contributions.	The practices related to the faculty development consistent with the intellectual contributions are not systematically integrated and documented in a development plan.
The portfolio of current capabilities for all faculty members sufficient to support the IBPAB's mission	The distribution of the contributions is an illustration of the relative weight placed on the three categories, consistent with the mission assumed by the Program. The weight of intellectual contributions in each category is a natural representation of the scientific preoccupations of the faculty members oriented to serve the mission but not a documented process.
	The high performance of the faculty members is seen as a normal implicit requirement for a self-financed program competing in the market by quality and reputation of high excellence of the executive education

A result of the alignment analysis was the creation of a set of actions that were integrated into the Action Plan and their status reported on annually. For illustration the actions identified were: 1) IBAB explicitly defined the required elements by the standard, 2) IBPAB documented a development plan to support in a more systematically way the high quality intellectual contributions (clear specification of the dedicated time for the research, the support for the access to high level peer reviewed journals (PRJ) of each field, to support at least one national participation to national conference/year and 1 international conference /2years, and support the acquisition of the research tools- licenses for programs), 3) the faculty Council documented in a more consistent way and specified accordingly, the right balance between the three categories of intellectual contributions, 4) the Faculty Council decided that the Cv-s and the Self Evaluation Report will be updated and presented to the dean of the Program at the first of October of each academic year, and 5) starting with the academic year 2006-2007, all the members who are part

of the teaching faculty have to report in the Self-Evaluation Report the main accomplishments for the year IBPAB connected in a more consistent way the performance measurement process with the stimulation of the performance of the faculty members Alsup (2008). Table 3 reflects the impact of the alignment process with the standard 2 requirements:

Table 3. The evolution of the intellectual contributions in line with standard two requirements in IBAB

Period of time	Intellectual contributions			PR Intellectual contributions
	Learning and pedagogical research,	Contributions to practice,	Discipline-based scholarship	
2001-2006	26%	54%	20%	2/194
2002-2007	30%	55%	15%	15/245
2005-2010	25%	44%	31%	141/254*

*The American professors teaching in the program have been included (only Romanian 107/254).

5. Conclusions

Involvement in the international accreditation requires effort in terms of time and money allocation, extra work for all the faculty of the Institute and commitment to the process. It is undeniable that some standards require tremendous effort to understand because of philosophical differences and in finding the right specific conceptual definition in IBAB for specific elements required by the standards or new procedures and processes to be introduced (e.g. the range of intellectual contributions for each category, the quality of different intellectual outcomes, the school definition for Academically and Professionally qualified professors, the calculation for time to task, the assessment of learning process). In the same time, the Schools in different stage of accreditation reported important internal benefits of entering in the AACSB Business Accreditation. The experience of IBAB confirmed those facts. The models and methods of the accreditation process were beneficial in creating strategic plans that achieved missions. Other important benefits of the process were that (1) it brought focus and discipline to the goal of improving quality and (2) it helped clarify and strategically focus mission/vision and supporting strategic plans. In fact, the AACSB Accreditation Process provided an organized and logical framework for tracking progress and supporting internal operations. The last but not the least is the prestige associated with being part of a high quality of business schools from all over the world.

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ASSESSING QUALITY IN INFORMATICS DEGREE PROGRAMS THROUGH SUBJECT SYLLABUS

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Abstract

The adaptation process of the European Space of Higher Education (ESHE) has involved big changes for European universities. One of the most important changes has been the need of establishing quality assessment systems through the whole process. At Universitat Autònoma de Barcelona (UAB), we have established a special quality assurance protocol focused on our degree programs within the Bologna Process directives. That protocol is based on our academic curriculum memories as well as on the Subject Syllabus of every single academic subject, and it allows us to verify that required skills, expected learning outcomes and established evaluation activities all comply with the necessary requirements. In order to support the implementation of such protocol, a new software application has been developed. Its purpose is to guide and to provide for an easier evolution through the process, to all parts involved, (academic managers, academic degree's coordinators, teachers in charge of a particular subject, etc). This document describes the defined protocol, as well as the subject syllabus's structure of all subjects with their especially developed supporting software application. Likewise, it shows its application to the computer science engineering studies currently offered by UAB, and the way that this protocol allowed to detect errors and incoherencies in the deployment and in the teaching process of the first course of the academic program. Finally, it shows how we managed to improve the quality of our studies through solving those issues.

Key words: ESHE process, quality assurance, subjectsyllabus, quality protocol, computer science studies.

1. Introduction

Convergence towards ESHE meant to the Spanish university system, going from a structure based on the "studies' catalogue" concept, to a structure based on the "degree's log" concept.

Up until recent years, the working university system was heavily dependent on the Spanish central government. In time, consecutive higher education ministries defined a catalogue on academic degrees that Spanish universities were allowed to offer. This included the compulsory requirements regarding the subjects that the students had to sign up for, in order to be eligible to obtain a particular degree. Each university was entitled then to choose which degree programs to offer, and could move on to devise an academic program that complied with compulsory subject's requirements. Although that system had some advantages, like a bigger homogeneity

among the subjects offered by all Spanish universities, which made easier the mobility of students within the Spanish territory, at the same time it limited the freedom of universities as a whole. It made impossible to offer a bigger diversity of subjects, neither newer up-to-date programs that better suited the needs of the scientific community nor of the Spanish social and economic situation.

The concept of “degree’s log” has got a lot more in common with the model used in most EU countries, which allows each university to freely devise its own catalogue of available degrees, while the education ministry of each country continues to closely supervise the studies through different agents. The proposal of a new degree requires an initial accreditation by an authorized assessment agency, which assures its appropriate quality standards. The university’s proposal crystallizes in a previously designed report, that we’ll name “degree’s memory”.

Only once the corresponding agencies in each country, as well as the region authorities grant authorization, a university may begin to offer the approved degree studies. At the same time, authorized assessment agencies implement an annual monitoring system focused on continued improvement and quality assurance of each degree program. Besides, in order to obtain up-to-date credentials and to keep a study program active, all studies programs’ are subject to authorization revision and renewal processes, which take place at different periods depending on the type of degree. BA degrees programs (240 ECTS), are reviewed every 6 years, Masters degrees (60 or 120 ECTS), and PHD programs are reviewed every 4 years.

Thanks to the CODDII (Computer Science Directors and Dean’s Conference), computer science engineering studies have been able to preserve a relatively strong coherence among the different Spanish universities and technical colleges. With only a few exceptions, implantation of the new computer science engineering programs (240 ECTS) has started to take effect in the current academic year 2010-2011. Therefore, those programs are currently going through an activity peak’ phase, which requires not only starting all the mechanisms in every program, but also detecting any discrepancies that affect theoretical planning compared to real life implementation, in order to be able to develop the necessary tools and processes that guarantee the program’s quality standards.

Teacher’s subject study syllabuses and the processes, (action protocols), in which they are based, hold an incalculable value as tools to ensure the correct implementation of the studies in the exact manner they were initially planned in the degree’s memory. Also they allow to ensure the coordination of the teaching teams and to detect any situation that might need improvement as well.

2. Quality in BA studies' programs

Present day in the university community, quality assurance protocols are a well established fact, which specifically affect teaching programs. The advent of the European Space of Higher Education (ESHE) has implied an essential quality component affecting all programs taught at any university.

Bologna Process reform, concerning university studies, mainly focuses in the establishing of a specific list of skills that all students must have acquired in order to graduate. This set of academic skills is distributed among all the subjects that make up a specific curriculum. Skill

levels of each student allow to determine individual learning outcomes, which are measurable through specifically designed evaluation activities.

The introduction of the European Space of Higher Education, and all institutions involved, like Education ministries, central and regional administrations from each country, and ultimately universities, all demand specific quality standards for the process of skills' acquisition that every student must pass.

It is true that before the implantation of the European Space of Higher Education, degrees taught at Catalan and Spanish universities went through respective analysis processes, in order to find out their strong and weak points, along with improvement plans matching them. In addition, their financing depended partly on the compliance to those improvement plans, which certainly helped ensure quality standards. Those plans were conducted and monitored by public administration agencies, and followed a perfectly defined outline, which included reports, memories, internal and external analysis committees, etc.

With the coming into effect of the new BA and MA degrees programs under the process mentioned in the introduction, complying with quality standards becomes now essential for any curriculum, in order to receive initial authorization credentials, as well as its periodic renewal.

The same way it was done before the implantation of the new BA and MA curriculums, a quality improvement and assurance method must be systematic, structured, formal, public and available to audit. Besides, central and local administrations, through their respective agencies in the university system are still in the process of defining a monitoring and verification method for the new university degrees. Universities play an essential role in the definition of that process, since they may contribute with specific quality assessment methods that will be later validated by the corresponding agency.

In this case, the UAB has defined a process and developed a methodology that will allow establishing the suitable quality standards in order to developing specific contents for its curriculums.

As previously commented, curriculums are founded on specific sets of skills that students must acquire, and that are precisely detailed in each degree's memory. Concerning computing science engineering studies, main issue of this paper, the skills before mentioned, are even more important because they are defined not only by the university itself but also by the Spanish Education Ministry, and are absolutely compulsory in order to obtain the degree authorization. The reason for this is that in Spain, it is the Ministry that regulates all Spanish engineering studies, including computer science engineering. This means that the Ministry defines all aspects of the framework to obtain such degree, like the studies length, the list of skills, the specialties, etc. In addition, for its further verification, it demands that the student holds the specified skills.

The logical question that arises is: given the complex structure of a curriculum (courses, semesters, general and specific subjects, learning outcomes, test activities, etc.), how can we guarantee that those skills have been positively acquired by all students from all degrees?

In order to answer that question, the UAB has defined a quality protocol, which is thoroughly described in that document, and that is based in several elements: the degree's memory definition; the subject syllabuses of every subject; the supporting software application for creating subject syllabuses; and that is based in several agents like the degree coordinators and corresponding commissions, and the teachers in charge of every subject and of every class group. The subject syllabus is a public document which describes all aspects relative to a particular subject: learning objectives, skills to develop, learning outcomes that the students must prove, teaching and evaluation activities that will be performed, and the estimated schedule of every one of them, among others. The next point describes in detail the structure of the subject guidebook.

A subject syllabus, and the whole of subject syllabuses belonging to a particular degree, allows to verify whether the assigned skills and the learning outcomes are appropriate, and whether the testing activities really test those learning results. To sum it up, the subject syllabus is the central document which guarantees the quality standards of a particular degree program.

Considering the amount of subject syllabuses (one per subject), the amount of teachers that take part in their production, and their possible variation in time, it is extremely difficult to ensure coherence among all subject syllabuses, the same way it is to ensure that their content matches the degree's memory, which makes necessary a quality standard protocol as well as certain supporting tools.

This document describes the structure of the subject syllabuses belonging to the computer science degree, whose structure conforms to the general guidelines established by the university, as well as the quality assurance protocol which depends on the skills and the learning results, and must allow the periodical approval of the degree itself.

Such protocol, from the degree's memory, approved by the corresponding quality monitoring agency, establishes:

- 1) Who is in charge of assigning skills and learning outcomes to each subject, and by which methods is this done. Reminder: skills are determined in the degree's memory by groups of subjects, which requires that the task of distributing the skills is performed previously.

- 2) Who is responsible of writing the subject syllabus of every subject, according to the regulations of the corresponding university or college.

- 3) Who is in charge of the review of the subject syllabuses, and how the review is performed. And finally,

- 4) The official publication of the subject syllabuses.

Taking into account that a subject not always requires an evaluation of all established learning results, another point that must be decided among the teachers in charge of the different subjects within the same subject area, is which of the subjects will hold the test of a particular learning outcome, especially when such learning outcome is common to several subjects. It is also important to define the degree of thoroughness, (signature definition), that the evaluation of a learning result requires, mainly if the learning result is shared among different subjects. All those aspects demand a high level of monitoring that is able to go beyond the subject, the course or even the degree, which makes the subject syllabus an essential tool. Besides all this, the subject syllabus also defines the temporary contexts of all activities and monitoring mechanisms, which allows to verify that testing activities are linked to previously established learning outcomes, and that all skills are being properly covered.

The rest of this document is structured as follows: Section III introduces the need of the subject syllabus, and describes its structure; Section IV describes in detail the quality assurance protocol in the degree programs offered by UAB, and shows that it is systematic, structured, formal, public and available to audit; Section V introduces the software application developed to support the whole process of the protocol; Section VI shows the preliminary results of the application of the protocol to the computer science engineering degree from UAB; Section VII presents the conclusions and the future tasks to develop.

3. The subject's teaching syllabus

Within the context of the monitoring processes, necessary to guarantee the quality of university studies that we have explained, we find the subject syllabus. It is one of the basic tools needed to reach one of the key objectives in the European education system: the ability of comparing and the transparency of the methodological and testing/grading systems among different universities and studies and countries. In a more specific level, the subject syllabus is a really useful instrument for all participant agents: university community, faculties, teachers and students. More specifically, to the university and to the faculty where the studies are taught, the subject syllabus is really helpful as it allows establishing comparison and planning of all elements that come into play in the taught subjects. To the teacher's team, the subject syllabus allows a much better coordination and team work, in order to reach the objectives of every degree, and also to work in favour of their student's learning quality. And for the students, the subject syllabus allows them to be informed of what skills they are expected to learn, under which conditions, and how are they going to be evaluated and graded.

The subject syllabus specifies the educational offer of a particular subject, because it reflects the planning that will be made always according to: the degree's memory approved by the authorized agency, in our case the *Evaluación de la Calidad y Acreditación* (ANECA), and the Spanish Education Ministry; as well as the rules and regulations of the university community and of the faculty in which the degree is taught, UAB and Engineering School (ES), the specific details of the curriculum, established by the agencies responsible of the degree, and finally, according to the available human and financial resources.

The writing of a common model of subject syllabus for all studies offered at UAB allows a better planning and comparability, in addition to the ability of showing what is being done inside our degree programs, how is it being done, and which teaching and learning strategies are being used. After a thoroughly reading and exploration of the subject syllabus from other Spanish and European universities, [1, 2, 3, 4, 5, 6, 7], we have designed a subject syllabus model which is made up by the next elements:

1. Basic data of the subject
 - a. Name
 - b. Code
 - c. ECTS number
 - d. Subject type (basic, compulsory, optional)
 - e. Course/semester
 - f. Timetable and teaching location
 - g. Teaching languages
2. Teacher's team contact data

3. Recommended requirements for the student
4. Subject's context and educational objectives
5. Skills and learning outcomes
6. Contents and/or syllabus
7. Methodology and learning activities
8. Skills acquisition' evaluation system
9. Bibliography and linked websites
10. Subject's timetable for each of all students' groups

The first point of the subject syllabus will allow the student to know the subject's basic information, its name and code, the period during which it is taught, the number of academic credits of the subject and its type (basic, compulsory or optional). In addition, it also contains important information like the timetable and the location of the classes, the language or languages in which the subject is taught, and the teacher or teachers in charge. The next section includes the information relative to the teaching team; their contact data, and tutorship timetables. The third point of the subject syllabus refers to the knowledge that the student must have acquired previously, in order to have a solid comprehension of the subject. These are not official requirements, but recommendations for the student to know which level the subject starts off from. The next section intends to clarify to the student, how the subject contributes to the global profile of the degree, and its location within the curriculum. The section on skills and learning outcomes will allow the student to be aware on the general skills he will be entitled to prove, and also more specifically, on the learning results. This section offers detailed information about the skills and learning outcomes that were defined in the degree's memory, sorted out there by subject areas, making essential to decide which skills and which learning outcomes are linked to which subject. The section on content refers to the subject syllabus. This is what is going to be taught as academic knowledge. The seventh section has got two parts. A wider explanation on the sort of teaching methodology that is going to be used, and next, the detailed specification of each individual learning activities sorted out according its type (conducted, monitored or self-lead), as well as the estimated dedication by each of them in hours, and finally the learning outcomes that will be covered in each activity. The type of activities mentioned has been defined by UAB, and includes different alternative activities that can be made, along with the percentages of dedication that each activity requires. All this information has also been specified by each subject, in the degree's memory, therefore, the subject syllabus must be ruled by this information, and must specify the activities, timetables and learning outcomes that are going to work. The next element includes the evaluation and grading of the subject, and in a similar way to the previous point, it must clearly state how the level of acquisition of learning outcomes by the student is going to be evaluated. It must also state the evidences that the student must deliver, as well as the tests that the student is going to go through in order to be graded, along with its exact weight in the final score. It must also specify the testing criteria, and establish in which conditions the student will be graded as "absent". Finally it must establish the procedures to request a second review of an exam, a reevaluation or a new grading of the testing activities. The source of information for fulfilling this section is also the degree's memory. The next point includes all the information sources that are going to be used in the subject, and that are recommended as reference for the students. Finally, the last point specifies the course planning considering the different class groups, and basically it details the dates and locations of all learning and evaluation activities together with the necessary material to perform each activity. This information is extremely useful to the student, because it allows him/her to carefully plan all the tasks that must be performed for all subjects that he/she has signed up for. Having this information in advance is also important to the degree's coordination team, in order to

properly adjust a work pace for the students of a specific course, as well as to suggest adjustments in the testing activities of any subjects, which allow a better balance among all study weeks for the students.

4. Process of quality assurance

The entire subject syllabus's elaboration process of the computer science engineering studies from ES Faculty at UAB has been carried out following the action protocol shown in Fig. 1.

The first action consists in defining and/or revising which competencies and learning outcomes are going to be used, and tested in every subject of our curriculum. As already explained in previous points, the task starts off from the skills requirements' profile as well as from the learning outcomes linked to those skills, which are distributed in subject areas that comprehend different subjects. Therefore, the responsibility of that procedure lays on the degree's coordinator, who has to reach an agreement on the distribution of all subjects with the team of active teachers in computer science engineering. Finally, the subject's distribution goes through the corresponding teaching commission. The first year of implementation of the present curriculum has allowed us to decide which academic skills to be implemented, and up to which level they have to be studied and tested, always keeping in mind that they are destined to first year students, within a degree that lasts four years.

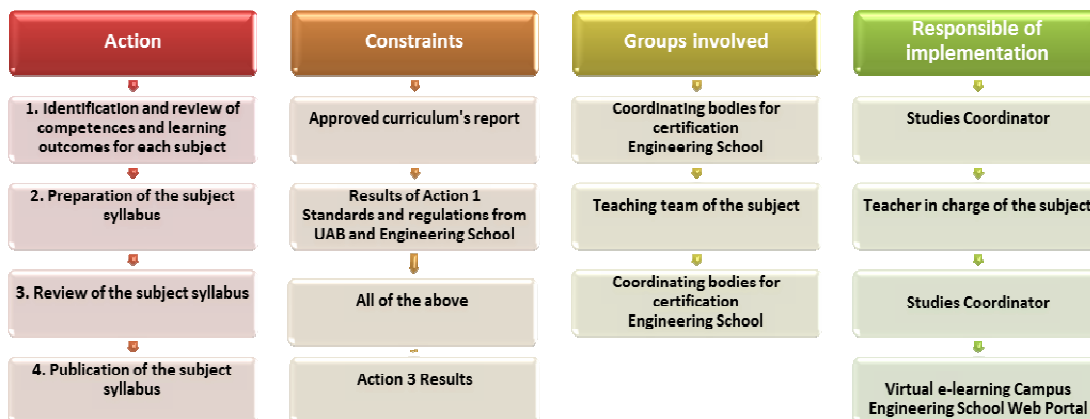


Figure 1. Elaboration process of the Computer Science Engineering subject syllabus

Once the degree's coordinator has completed the distribution of the skills and learning outcomes of all subjects, the teacher in charge of each subject must start editing each one of the fields that make up the subject syllabus. He or she will be the reference teacher for the students to contact or to direct their questions to. This teacher is also in charge of writing in the subject syllabus document the aspects that have been covered with the active teacher's team in that particular subject. The student's reference teacher and the teaching team must know the exact context where their subject belongs, in other words, the main subject area where their subject is located within the degree's memory. They must take into account all aspects defined in the subject area, in order to make them comply with all the points in the subject syllabus. The only elements that will be given to them are the skills set and the learning outcomes that will have to be worked and tested in their subject, but not the way to do it. This is the most demanding action to the teachers, since it requires detailed clarification on what is expected from the student, what is the

student going to learn, what is that we intend to teach him/her, and how the evaluation is going to take place. As explained previously, this point requires an excellent organization among all teaching team of the subjects that conform a subject area, in order for them to decide which learning outcomes will be tested and to what extent (specifying a evaluation signature), considering that the same learning outcome can be worked in separate subjects. In addition, evaluation of all defined learning outcomes must be evaluated from a global point of view from the degree's coordination commission, in order to avoid that a particular learning result is given an inadequate level of importance, or that on the contrary, its testing procedures are faulty or too superficial.

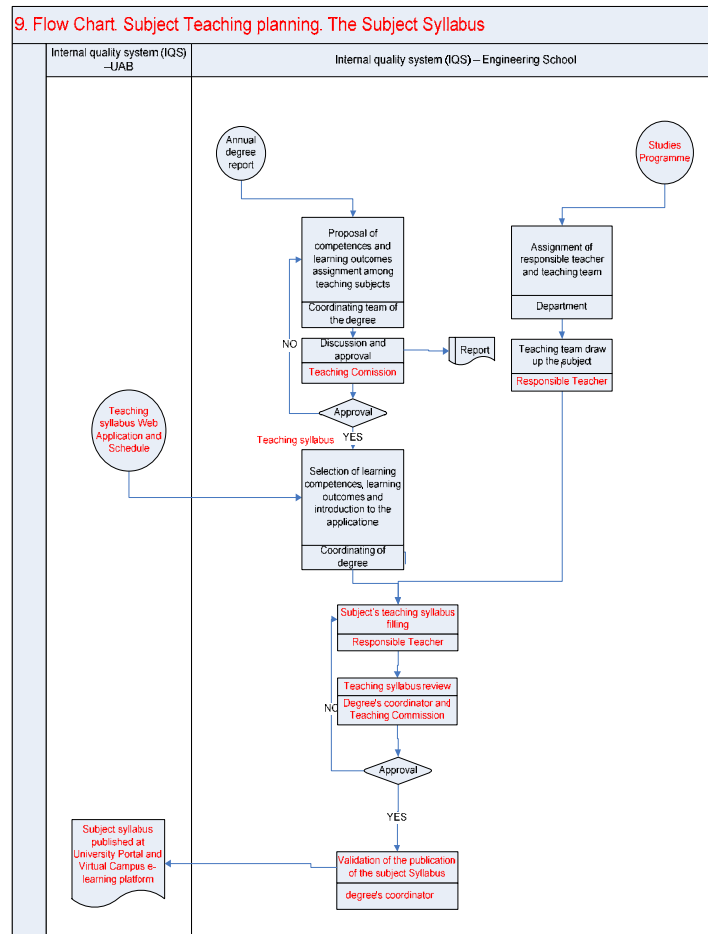


Figure 2. Flow Chart. Subject Teaching planning. The Subject Syllabus

This procedure ensures that the student will be able to prove his/her ability in the skill in which that learning result belongs to. The next step relies once more in the task of the degree's coordinator, and consists on reviewing the task made in each one of the subject syllabus by the teacher in charge of the subject and by the teaching team. Of course the degree's coordinator has got a global point of view on the curriculum, and consequently he/she is responsible of performing this action within the Coordination Commission defined by the ES Faculty. The flow chart that shows all this procedure is shown in Fig.2.

According to the ES and UAB regulations, and to what has been the proposal in the approved degree's memory, the degree's coordinator has got the power and the responsibility of reviewing each one of the subject syllabus, in order to locate those elements or parts that might not suit the defined requirements. As previously commented, the approved degree's memory takes into account subject areas as subject groups, consequently, skills and learning outcomes' definition, learning methodology and activities, testing, grading and contents form the context that every subject syllabus must be designed and focused into. It is from that information that the degree's coordinator must ensure the proper specification on: learning activities and their distribution in hours, or weight in ECTS credits, as well as specify which learning outcomes are going to be used, along with the proposed testing and grading system with the percentage distribution of every grade. It also must contain the evaluation of the skills and learning outcomes and the adequacy of the subject syllabus to the content's description proposal for the subject area. Finally, it must contain the right distribution of the activities always observing all the subjects in a course as a whole. If the degree's coordinator detects any incoherence in any of those aspects, the teacher in charge of the subject must be informed that the subject syllabus needs to be updated. Otherwise, it cannot be published. Once all the reviewing process of every subject syllabus is completed, the degree's coordinator has the task of publishing the syllabus, and making it available online through the university's virtual e-learning platform as well as in the ES Faculty's website.

During those first implementation years, the task of the whole teaching team in the production of the study syllabuses requires consistent dedication to adjusting and designing the subject syllabus. A task justified by the need of maintaining specific quality standards. The most part of the data that conforms the subject syllabus are usually definitive, however, they must be updated on an annual basis. For this purpose only, we established specific timetables shown in Table 1.

The most busy period (blue), corresponds to the editing of the subject syllabus, and is restricted, to guarantee that the students have access to the subject syllabus before the signing up period begins, as well as to avoid starting the syllabus's update process until all possible modifications of the curriculum have been taken into account. The editing process relative to a subject's planning is made in two periods, depending on the subject taking place in the first or in the second semester of the academic year. The process must also guarantee its completion before the class attendance period begins.

5. Yearly follow-up of the subject syllabuses

The above described process is completed with a revision process at the end of the year once the subjects' classes are finished. The task of his review process is to find weaknesses in the process of assigning competences and elaboration of teaching guides. It is shown in the Fig. 3. First, we define a schedule of meetings for monitoring the process through out the semester or academic year. They are attended by the teachers responsible for the courses and are led by the studies coordinator. The meetings discussed the outcome of the subjects and problems identified. In the meetings, improvement actions are proposed are collected in a document and brought to the school management. This document is called follow-up report for the studies and to elaborate it, several information sources like student employability, subjects' success ratio, received complaints, results of periodic opinion pools, etc. are considered. The improvement measures can be related to the degree itself, to the school or to the university in general and are sent to the proper responsible person.

6. Software support tool to quality assurance protocol

In order to ease the production of the subject syllabus at the Engineering School, as well as to be able to comply with the protocol specified in the previous section, give it a homogeneous appearance, and also to guarantee its spreading, the Higher Education Teaching Innovation (IDES) Unit and the Autonomous Interactive Educational Office (OAID) have developed a software application (AGD) that allows to start from a single data source regarding skills and learning outcomes principles (contained in the degree's memory). It also allows to ensure an appropriate planning of the students workload (ECTS vs. hours), and to guarantee the right planning of the evaluation process that covers all the skills in a particular subject's profile.

The AGD is divided in two clearly distinctive parts; a public and universal part, which we consider to be the most stable of all, and that will be available to consult from the

Faculty's website and that includes: the subject's basic data, the teacher in charge of the subject, recommended previous knowledge requirements, skills and learning outcomes, subject's content, learning methodology and activities, evaluation and grading system, as well as reference bibliography and links.

Month											
9	10	11	12	1	2	3	4	5	6	7	8
1r semester						2n semester					
								Ed. Subject Syllabus/Area			
								Ed. 1st sem. subject group planning.			
... Ed. 2nd sem. subject group planning								Ed. 2nd sem. subject group planning. ...			
... (tool maintenance/updating)										(maint./updating.) ...	

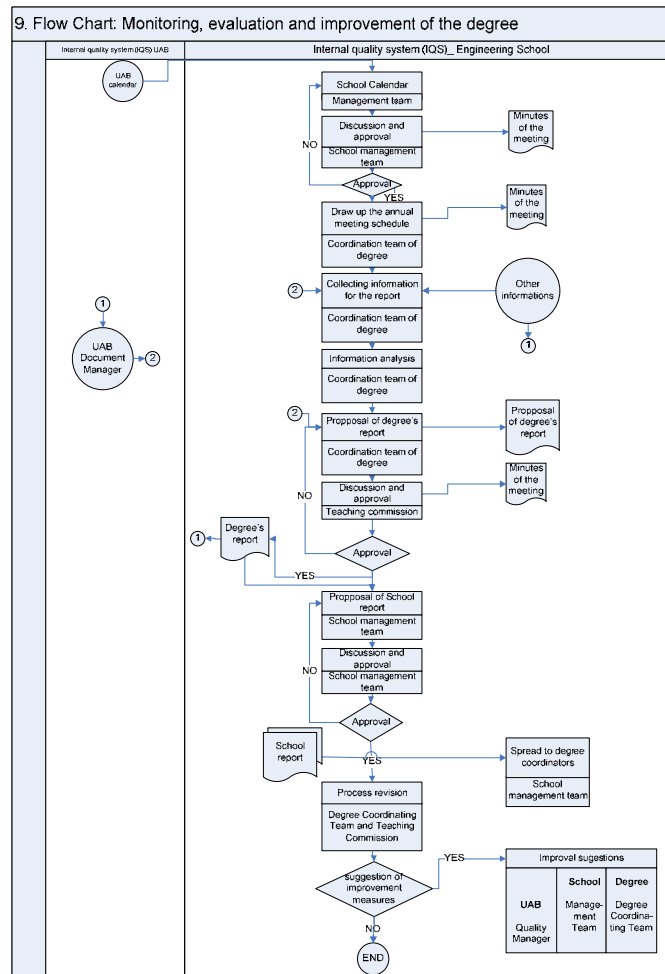
Table 1. Protocol's period timetables

Figure 3. Flow Chart: Monitoring, evaluation and improvement of the degree

The other part, that we consider private, will be available only to students that have signed up for a particular subject. That part is made up by the teaching team data, as well as the planning or timetable of all the tasks that the student must perform. Consequently, it will be different for each class group in the same subject.

In order to correctly perform all actions defined in the previous point, AGD has designed a series of distinctive roles for each one of the process' agents. The first role is the *application's administrator*. He is the person in charge of all the technical part, and who has access to every part of the subject syllabus at any moment of its elaboration process. The *software application's administrator* is also in charge of establishing the periods during which the syllabuses will be available to be edited.

The *administrator* is also in charge of supporting the academic aspects of the subject syllabus. The next role is the *degree's coordinator* (Fig. 4), that as have been anticipated from the previous section, must perform the next tasks: assigning skills and learning outcomes to all subjects, fill in or update the names of the teacher in charge of a subject in order for him/her to



start with the edition of the subject syllabus, and finally, validate the work of the teacher's in charge of a subject, concerning the public and the private part of the subject syllabus as well.

With these purposes, the person assigned with this role will be given access to reading and editing any syllabus at any moment, as well as to for changing a timetable from a subject syllabus that has been already published. Another of the defined roles by AGD is the *teacher in charge of a subject*, which has the task of filling in all the fields in the subject syllabus (Fig. 5), to fill in or edit the identity of the teacher responsible for editing or planning the subject, and validating the subject's program once all students have gone through it. The AGD allows the teacher responsible to grant editing privileges to another teacher in order to edit the subject syllabus together. The role of *teacher in charge of a class group* has the task of editing the timetable of the task that the students must deliver or perform for every class group. Like the previous role, this one has got the authority to grant access to editing the identity of any teaching team member.

Figure 4. General view of the AGD degree's coordinator role

7. Quality in the computer science engineering studies

Currently we are still in a very premature phase of implantation and deployment of the new degree in computer science engineering. However, we are totally aware on the commitment that

coordination has got regarding the monitoring and control of the new subjects yet to be developed. In fact, at the teaching commissions carried out within the degree, we have been able to detect certain situations and set out the proper alternatives thanks to the subject syllabus. Next, we describe them along with some of the specific cases detected:

a) The new subject syllabus have made it a lot easier and obvious for the degree's coordinator and the teaching commission to detect that all learning outcomes regarding a particular subject were linked to a specific testing activity; More specifically we have been able to detect that one subject had neglected to link the learning outcomes to the specified testing activities. The system allowed us to make up for it in time, (thanks also to the fact that the subject syllabuses are made up with an established timetable which anticipates to the beginning of the class attendance period).

b) In the cases where there are two or more subjects that are linked to a single subject area (to which specific contents and learning outcomes have been already decided), the subject syllabus are a really effective tool, because they allow to detect whether all the contents have been properly distributed among all subjects, and whether all learning outcomes are tested and graded at least in one subject within the subject area. The teacher in charge of each subject has got a permanent contact to the rest of the responsible teachers. But it is through the subject syllabus that any oversight affecting a subject's or subject area's contents or learning outcomes has become more easily detectable. It even allowed detecting simultaneous testing activities from the same learning result, concerning two subjects belonging to the same subject area.

c) The subject syllabus has proven tremendously useful in order to assess and balance the student's weekly workload, since it allowed to locate specific weeks with too many partial tests belonging to different subjects, and therefore suggesting a date change for the testing activities to the teachers in charge of the affected subjects.

d) In case the oversight of a specific content in a specific subject is within reasonable and acceptable limits, (and it is treated in the teaching commission, and considering that it may be due to subject's update reasons, etc.), we believe that prior detecting those oversights via the subject syllabus, as well as analyzing and treating a particular oversight, is a satisfactory turning point that may lead to a later suggestion for a modification in the degree's memory. In this way it will allow to guarantee a correct monitoring and updating of the curriculum. In that sense, it also contributes to improve the quality of the deployed degrees. The new degree is still going through an initial deployment phase, however, gathering and discussing those issues is a really important task in order to suggest future modifications in the plans.

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Universitat Autònoma de Barcelona

COORDINACIÓ DEL PLA "GRADUAT EN EMPRESA I TECNOLOGIA" (948)

Competències i resultats Assigna competències Assigna responsabilitats Valida la part pública

Competències i resultats

Tipus de vista:

[Col·lapsar tot](#) [Expandir tot](#)

- 1957 - Complementos de Gestió dels Sistemes d'Informació
 - 1957-E05 - Demostrar que es coneixen les normes fonamentals del dret i la manera com s'apliquen en l'àmbit empresarial i de gestió de la informació.
 - 1957-E08 - Identificar, analitzar i resoldre problemes i situacions complexes relatius a organitzacions empresarials.
 - 1957-G02 - Desenvolupar estratègies d'aprenentatge autònom.
 - 1957-T02 - Comunicar-se a nivell tècnic oralment i per escrit en català, castellà i en una tercera llengua, preferentment l'anglès.
 - 1957-T03 - Ser capaç de buscar i analitzar informació provinent de fonts diverses.
 - 1957-T05 - Comunicar amb experts d'altres camps i no experts.
 - 1957-T08 - Utilitzar els mitjans tècnics més efectius i al dia en la comunicació oral i escrita.
 - 1957-T16 - Demostrar sensibilitat cap a temes socials i mediambientals.
- 1958 - Empresa
- 1959 - Mètodes Quantitatius de Gestió

Figure 5. View of the AGD subject syllabus editable fields

8. Conclusions

Subject syllabuses are a key tool to quality assurance in university degree's skills. Subject syllabuses gather all specific information for a subject, ranging from student skills, learning outcomes, subject planning, activities. These syllabuses must conform to studies planning and to real students' level. The protocol defined at UAB and the web application developed to elaborate the subject syllabus help to follow a quality assessment process. This process applied to first year at Computer Engineering studies at UAB has allowed to us to detect some incoherencies and problems that could have been solved. For the future, we will extend this procedure to all the rest of years of the Computer Engineering studies and will deepen in the coordination among several agents to improve quality assessment.

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INVATAMANTUL SUPERIOR

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THE MANAGEMENT AND CONTINUOUS IMPROVEMENT MODEL OF QUALITY IN ACADEMIC EDUCATION FROM THE PERSPECTIVE OF THE EDUCATION – RESEARCH PROCESS

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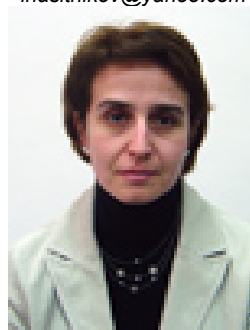
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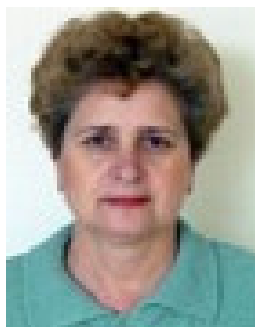
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Abstract

The paper presents the contents of a CNCSIS grant project which is meant to candidate within a future CNCSIS contest, a project targeting to create a model of quality management able to reunite the two main axes of higher education – education and research, and to ensure the sustainable improvement of quality from the point of view of the actors directly involved in these processes of university level education: students and professors. Starting from the current issue of quality management in university education and its trends at national and international level, the research team will analyze and evaluate quality management models applied in university education. For creating the original model, we will consider internal and external environment of institutions of higher education with the help of strategic management models aiming to elaborate a set of strategies and strategic objectives for quality. The research team will

build a knowledge-based structure that will allow development of the model. In parallel, we will assess the capacity of implementing the model in the Romanian institutions of higher education, based on a specific set of indicators developed within the project. In order to implement the management and sustainable improvement model of university education quality, the research team will design and elaborate the computing platform for this model.

Key words: academic education, quality management, quality model, strategic management, strategies of quality.

Importance and relevance of the scientific contents

European higher education is no stranger to change: for the last two decades, this sector has undergone reforms both in Western and Eastern Europe. However, starting with the early 90s, the rate of change was unprecedented, relying especially on three key aspects: the Sorbonne and Bologna Declarations (1998, 1999), their aim being to make compatible the European curricula as well as the entire European educational systems, and the Lisbon Strategy (2000), which aims at reform the still fragmented educational systems of the European states into a knowledge-based structure, more powerful and integrated. Subsequent reports have emphasized that the academic system is crucial for the welfare of Europe and, in fact, it acts as a true medium of support that brings together these key processes and strategies. Thus, the Bologna Process aims to define the European Higher Education Area until 2010. While each signatory country has interpreted the declaration in its own way and style, the process has registered a high growth, oriented toward a purpose and a much broader scope. Turning towards the reform of curricular programs on a structure with three cycles "license-master-doctoral degree", the Bologna process has generated concerns about comparability that led to the necessity of ensuring quality, accreditation and a certain degree of recognition, as certified by the Berlin Communiqué (2003).

The data of Bologna Process was later supplemented by explicit mention of *the importance of research as basis for the university education that is involved in the economic and cultural development of society and in the social cohesion*. Special attention was paid to the **quality or the quality movement** starting with the '70-'80. The main reason was represented by the competition between big companies and firms. Many companies have started to seek solutions to survive by shifting their orientation from quantity to quality and customer satisfaction. A similar situation is encountered at the level of university education, starting in the 90s, *due to continuous and rapid technological change, the increase of costs, legislation, ways and forms of subsidy, the more numerous stakeholders and growing international competition in terms of recruiting students, of faculty experience, of scientific research and its results. Once the customers of higher education are identified, it can be shown that the main objective of quality management and its model is to obtain profit as a result of satisfying the customer based on using continuous improvement strategy.*

The management and the ensuring of quality and improvement were assessed using models that are based on internationally accepted schemes, such as ISO 9000, EFQM Excellence Model, Malcolm Baldrige Award, etc. From the study of specialized literature and the referential assumptions, we found that distinction can be also made between national models of quality assessment and the ones chosen by each university separately. So, often, a higher education institution adopts a certain scheme of reference for getting better under the requirements imposed by the national approved bodies: Ministries of Education, accreditation institutions, etc. This is the situation in the case of higher education institutions in Romania, although there have been initiatives on the introduction of specific models of quality-oriented education – Programs' Assessment Model). Over the time, a large number of institutions of higher education put into

practice quality management models designed and developed for industry, generating both benefits in quality management as well as some disadvantages related to the application and the relevance of these models from the higher education's point of view.

The quality management models universally accepted and implemented at the level of higher education institutions are:

- The most frequently used model is that of **Total Quality Management (TQM)** and *is defined as an organization's managerial approach, focused on quality, based on the participation of all its members and pursuing long-term success through customer's satisfaction and obtaining of benefits by all members of the organization and society.* As this definition implies, TQM has the potential to include the perspectives of different stakeholders in an integrated manner, thus a comprehensive approach directed towards continuous improvement of quality management being constituted;
- **EFQM Excellence Model** is a non-prescriptive instrument which establishes the criteria that any organization in pursuit of excellence can implement, requiring the identification of those who make performance possible;
- **Balanced Scorecard** represents a strategic management and performance system built on four dimensions (finance, customer, internal process, learning), which requires the identification of performance indicators;
- Malcolm Baldrige Award was designed and created as a structure that seeks the achievement of excellence through improved performance in terms of seven criteria (leadership; strategic planning; orientation towards market and customer; knowledge management; evaluation and analysis; human resource orientation; process's management; results);
- Standards ISO 9000 is a set of international standards of quality systems, targeting the continuous improvement through preventive actions;
- Business Process Reengineering is a program that redesigns processes, systems and structures to achieve performance;
- SERVQUAL was envisioned as a tool to evaluate customer requirements in terms of services' quality based on five dimensions (reliability, clarity, commitment, trust, identification of losses).

The EFQM, Balanced Scorecard, ISO 9000 models have entered into competition with TQM, and are focused on the systematic development of processes necessary to achieve measurable quality outcomes. All models presented are applicable either at the institutional level or at the level of faculty / department and were tested on at least two or three global arenas. Despite their differences, **a key feature of all these models** is the necessity to evaluate their own contents compared with the predefined criteria. Testing these models has identified both the advantages and disadvantages of their application at the level of academic institutions.

The common advantages of the above models consists in the adoption by institutions or departments of a strategic approach to evaluation and quality management as well as in facilitating the identification of priorities for the quality's improvement. Also, these models include the perspective of students, seen as the clients, as an important element considering the current competitive market environment. As **specific advantages** we can mention:

- TQM model is associated with the improvement of services offered to clients;
- Balanced Scorecard aims to improve the financial activities, the allocation of resources and the bonus system;
- ISO 9000 has brought improvements at the level of working conditions between departments and students' registration.

However, these advantages must be reconciled with a number of disadvantages related largely to the controversy generated by implementing the business models in the academic:

- the bureaucratic structures within higher education institutions and a lack of effective leadership undermines the application of these models that relies on a team approach, providing a questionable character to the traditional independent role of professors.
- inherent difficulties in quantifying the outputs of academic education process in order to self-evaluate;
- lower applicability in the evaluation of research, teaching or learning processes' quality than in the assessment of services and management functions within higher education institutions.

Based on current controversies about the role of student as client or as a co-partner in the university education system, the only industrial-based model that treats the student as primary client and beneficiary of an education of quality is SERVQUAL, being focused on providing quality from a consumer's perspective. This represents the transition to a higher level, with a particular emphasis on evaluation and management of quality university education. Subsequently, efforts were made to create models of quality management that reflect the unique characteristics of university education and the importance of students learning ability. New models of university education quality management are: The Quality Management in higher education, Excellence Model, Academic Award Model, The Quality Assessment of student's degree of knowledge and learning outcomes, Multiple models of Quality in Education, Performance Indicators for university departments, Internal Audit, The Dimensions of Quality Framework, Programs Evaluation Model, Subject Quality Assurance System, ISO-based TQM Model, Model in five phases the implementation of TQM.

While some of these models recognize the importance of the student's learning ability as the main indicator in quality management programs, others contain a different set of quality criteria (organizational capacity, management culture, a systemic vision of university education). *However, none of the models of quality management in university education brings in a whole the two dimensions: the educational process and the research process, and this are actually **the premises of our research within the project.*** Since university education sector should be designed and managed in close liaison with managerial and economic reasons, we consider that only by maintaining and continuously improving the quality of student's learning will be achieved the society's imperatives. This raises the issue of re-evaluation of current approaches to quality management of university education, since the purpose of higher education institutions must be to determine how to provide quality education. Thus, through **the project we will aim to turn the quality management into a management for quality, and the quality of educational process and of research will be the central point of any management program for quality.**

Objectives of the project

Anchored in the realities of economic, social, technological and political environment, the university education has to define its own space and all connections with everything representing internal and external clients. As has been demonstrated over the last two decades, the university education must accept the conventional image, made famous by industry, of a quality management applied to the entire institution and led by the enthusiasm and awareness of the higher levels. Given that, originally, the education's quality systems were not able to guarantee and engage transformative teaching and learning activities, our project, through its objectives, seeks to place higher education institutions in the position of true practitioners of quality management and of its sustainable improvement. Thus, the entire system of higher

education will contribute to the practical application of knowledge-based society concept as a specific trend of European scientific and educational development. During this project, we want to achieve the main goal, followed by a set of specific and supplementary objectives, being created the premises for a recovery of skills in management and continuous improvement of quality at national level.

The main objective of the project (OP) is the management and continuous improvement of quality based on a model that aims at achieving quality strategies' goals.

1. The research of current issues and trends in the quality management of university education at national and international level (OS1)

The domain of academic quality management is currently characterized by an anchoring in the tandem of the concepts of control and quality assurance. In the context of new approaches used by higher education institutions to transfer the center of gravity from the non economic feature to the economic one, the profit maker, we propose as the **original element**, the translation of quality management from the orientation towards the quality of a process to *the orientation towards quality of the key stakeholders (internal clients – teaching staff and external clients - students)*. Also, **true originality** lies in emphasizing the role of predominant phase of Juran Trilogy that *quality improvement* must play as *a generating factor* of basic continuous cycle of quality management. In Romania, a reassessment of the current situation is required, when quality management makes its presence felt in the institutions of higher education, by creating and implementing quality assurance systems, the development of quality manuals and the accreditation of specializations based on quality standards imposed by ARACIS or, sometimes, on the ISO 9001 standards. From this perspective, through this project we aim to create a common model able to focus on continuous improvement of academic education's quality as basis for the future certifications and accreditations of quality systems.

2. Analysis and evaluation of quality management models applied in economic education university (OS2)

The continuous changes of internal and external environment in higher education have turned quality management into one of the main points of connection between the many processes and the stakeholders of higher education. Also, both the national and international forces are factors of change for higher education institutions. Despite progress made through research and practice, there is still no consensus on the best quality management model for university education that can be successfully implemented. *None of the quality management models currently applied does emphasize the importance of the two essential coordinates of education process: education and research. This is why the objective OS2 still acts as a logical continuation of the perspective of creating a common model of quality management based on the two dimensions badly needed - education and research.* From this point of view, the project aims, this is its original element, to create a set of indicators specific for the quality in education and academic research (professional development and recognition, the internationalization of the institution, research-development and innovation, etc.), based on which it will be made a comparative analysis of specific models. Following this analysis, the models will be grouped in categories and classes, given that there is currently no such classification in the theoretical or practical field. By analyzing each category thus created, the advantages and disadvantages will be identified and the main milestones in the construction of the quality management model and continuous improvement in university education will be determined. On the other hand, in the completion of specific objective OS2, the project aims at determining the degree in which the quality management in education and research has been realized and implemented at the level

of higher education institutions in Romania. As a result of this objective, it can be noted the *Creation of a knowledge base for the elaboration of a model, its implementation and the operation of its dynamic results (OSC1)*, according to the specificity and characteristics of university education in Romania. In this regard, the project will create a database of the main institutions of higher education in Romania and their characteristics from the perspective of quality management. Assessing the possibility of potentially implementing it in the university educational area, the capacity of adaptability of the model in the institutions of higher education in Romania will be determined. Choosing and applying some of the steps of the benchmarking strategy will be part of this goal, providing the **interdisciplinary nature** of the project by combining quality management with strategic management.

3. Definition of the set of strategies and strategic objectives of quality specific for the university education (OS3)

An increasing competition, the need for accountability and awareness of the importance of university education, compatible with the real needs of global and European economic space, and the growing volume of information change from one day to another the way universities operate in these years. For the university education to adapt to substantial and lasting changes in terms effectiveness, the institutional structures should integrated the new paradigm of quality and its assurance and continuous improvement. Among the basic instruments developed to measure the progress and success of these efforts we will focus in particular on the following strategies of quality: Customer Orientation, Strategic Planning for Quality, Continuous Improvement, Training in Quality Management, and Partnering. **The novelty of this research project** consists in changing the orientation of research from the restricted individuality of a single institution of higher education and its specificity to a much wider vision of the entire area of the university education, aiming to determine more completely all the elements that influence the actual results of *The analysis of internal and external environment of institutions of higher education with the help of strategic management models (OSC2)*. **On the basis of interdisciplinary character**, the SWOT matrix will be used, determining a set of quality strategies characteristic for the education in universities and their specific policy objectives. **The originality of the project** will result in combining Quantitative Strategic Planning Matrix (QSP - Quantitative Strategic Planning) to determine the most viable strategy applied to the whole space of university education with the generic benchmarking strategy.

As a result of achievement of previous specific objectives of the project, we can proceed to a further objective, represented by the *Identification of the availability of higher education institutions in Romania to apply the model (OSC3)* through the analysis of environmental factors specific to each institution in order to implement quality management strategy. In this way, we will determine the means by which the new strategy will be adapted to every institution of higher education in Romania, according to its characteristics.

4. Development of the management and continuous improvement of quality (OS4)

The model created by the project, the original element, comprises two dimensions - education and research - in pas a whole, following on this basis the growth and continuous improvement of quality at the level of higher education institutions. In this context, it will be enhanced the idea of university as a profit center, creating products (students) that are profitable in terms of quality. Thus, project activities are directed to achieving and improving the quality of key stakeholders: students as the finished product (graduates) and teachers seen as providers and beneficiaries (through research) of the knowledge. The management and continuous improvement of quality is designed based on the following coordinates: stakeholders, requirements, processes, education and research results, which ensure continuous improvement. These are interrelated

and they also coordinately interact: **stakeholders (students, teachers)** express their **needs** (learning and labor market integration, namely research and training) and they will **be satisfied** by **the processes of education and research**. The route will be designed as a five-phase, corresponding to the position occupied by the institution, and of related key indicators in terms of implementing quality management and quality assurance system:

1. Recognizing the problems quality and lack of measurement and evaluation systems;
2. Delimitation of quality problems in the given context of fragmented or inefficient systems;
3. Implementation of quality system through replacement or adjustment;
4. Improving quality by forming a real culture of quality;
5. Excellence through quality.

Each phase will have allocated processes, tools, methods and techniques with which it is aimed to shift to a higher position in terms of quality. At each level and between these phases, information flows will be provided through which the quality continuously improves. To facilitate the implementation of the model in the institutions of higher education in Romania, we correlate their grading scale (OS2 and OSC1) with the position (phase) corresponding to the model. As an additional objective, to implement the model thus established, we consider the *Design and Development of computer platform of the model (OSC4)*. **The computing platform of the model** will be tested in the first phase on the pilot institution (Faculty of Economics and Business Administration, University of Craiova) to determine its viability and functionality. Following the dissemination and exploitation of results of applying the model by other institutions of higher education in Romania, the project will reach a new additional objective *Measurement of the feedback resulted after the implementation of the project and the consequent upgrade of the model (OSC 5)*.

The importance for the domain consists in the translation of the strategic management of faculties from one coordinate – management of university education – to a complex coordinate that combines two components: the management of university education and scientific research management. Also, we designed through the project the management of university education on two dimensions: strategic and operational. *Strategic dimension* will aim to promote new educational programs and development of quality standards and performance for students and teachers. *Operational dimension* focuses on rules and procedures aimed at evaluating the quality of the educational process and students' knowledge, rules and procedures for evaluating and promoting teachers manage their educational programs, etc. Management of scientific research should be promoted by university education faculties on three cycles (bachelor, master, and doctorate) and refers to the evaluation criteria of performance in research and major research projects, contracted with various institutions and firms. University faculties which promote the university education management and scientific research management will structure their management on two levels: department and college, on each level being fixed both strategic components (development of new educational programs) and operational (supply of courses).

By the topic and objectives of the project we estimate a social, technological and economic impact. Thus, implementation of this model of management and continuous improvement of quality in higher education will help create an educational and research framework corresponding to the principles in the Declaration of Bologna.

Results of the research conducted during the project will be implemented both at the level of faculties' management and the actors directly involved in the educational process (teachers and researchers). It also takes into consideration the preparation and evaluation of students at faculties by establishing a new framework, appropriate to daily realities and requirements of

integration into European structures. By creating computer platform of this model and its implementation in the faculties will enable the processing of information from the database using built-specific algorithm, interaction with stakeholders and dissemination of research results.

Research Methodology

The research methodology used in the project is based on a multidisciplinary approach, and the scientific study is based on information from the national and international specialized literature and practice. The phasing of this project was made taking into consideration, on one hand, the correct dosage of effort and the guarantee of the information flow for the proper conduct of activities, and on the other hand, the correlation of activities with the specific foresight methodologies needed for achieving the project's objectives. The stages of the scientific research methodology followed within this project are structured as follows: 1. choosing the research topic, 2. scientific documentation, 3. explaining the phenomenon; 4. capitalization of the research. We had in mind, while choosing the research topic, its importance and timeliness, since it is targeting the management and continuous improvement of quality in university education. **The research topic** is the analysis and evaluation of quality management models applied in present days in university education and the quality management techniques and instruments used in university education as the basis for quality strategies. The principles for choosing this topic were based on a set of criteria, such as: degree of knowledge on the field researched by team members, ensuring the use of the researchers' creative potential; theoretical and practical timeliness of the research; the necessity of meeting the deadline. Particularly important is *the development and management of the scientific research program management of this topic* that involves the determination of the activities in accordance with the proposed; correlation of the targets and activities of the research topic with the deadline of the project; a good management of human resources and available materials.

In the stage of **scientific documentation**, the research team members will gather information and consider the main concepts, theories, models and trends manifested in higher education's quality management nationally and internationally in order to establish the viability of current quality strategies. *The scientific and theoretical support* for the project is complex and comprehensive, including papers on strategic management, quality management, quality models, etc.

To explain **the economic phenomenon** will undergo through two sub-stages: **the hypothesis formulation** (constructive creative moment); **verification of the scientific findings and hypothesis** (critical moment). In this project **hypotheses** on the impact of the factors of influence – internal and external - on higher education institutions' quality will be formulated in order to correlate them with quality strategies. As logical processes for the analysis and formulation of hypotheses, we will use the combined process of consistency and difference (to make a correlation between international developments in university education in the field of quality management and the prospects of its adaptation nationwide - objective OS1) as well as the process of interferences by analogy (by determining the correlation between strategic objectives and the possibilities of model's implementation - objective OS3). The research methodology used in the project is based on two types of research: quantitative research and qualitative research. The qualitative research will analyze the causes and the functional mechanisms of the discussed phenomena.

The methodology of investigation involves the general approaches of notion, content, classification in order to determine the specific characteristics of different models of quality management and selection of a group of models with a high degree of compliance and

adaptation to the evolution of university education in Romania. For making the researches, several methods, techniques and instruments will be used such as: typology, grouping, analysis, synthesis, extrapolation, allocation, deduction, and direct observation, interviews with representatives of higher education institutions within the objectives OS1, OSC1, OS2, OSC2 and OSC3. Quantitative research will highlight the size of causes' influences and will be based on an analysis of internal and external environment of higher education institutions made with the help of strategic management matrix (objective OSC2). Quantitative measurement methods used are: correlation and regression methods (objective OS1); operational research (OS2 and OS4); management and decision problems (OS3 and OSC3). Starting from the two-dimensional coordinates: education-research, the project will design a model of management and continuous improvement of quality in university education. It will also be developed the computing platform needed to implement the model in higher education institutions that will enable collaborative work, documentation, communication, carrying out specific activities (Delphi survey, virtual panels) including management activities (planning, decision making and implementation, monitoring, reporting). The computing platform adopted will provide the interface for communication with the external environment of the project and will be an essential tool in the project. Subsequently, verification of the model and hypotheses will be done by its implementation on the example of a pilot institution - Faculty of Economics and Business Administration, University of Craiova - thus revealing the possibilities of application of the model in the institutions of higher education in Romania. In implementing the project activities instruments specific for foresight methods will be adopted in analyzing the current situations, in the establishment of visions, in the elaboration of scenarios and proposals of action plans. These techniques of structured consultation will be used: Brainstorming, SWOT analysis, STEEPV, expert panels, Delphi surveys, Road mapping at the level of the following objectives (OS3, OS4, OSC3, OSC4 and OSC5). To explain the phenomenon analyzed in this project, we shall consider the following research directions: positive research, which involves a process of knowledge expressed in which the utterances are only accepted if theory is reflected and demonstrated in practice; constructive research, which is characterized by formulating own opinions and assumptions and their validation by performing demonstrations, using both scientific and experimental validation; standard research, used to achieve specific objectives and it targets the release of partial results and the exploitation of research results by developing reports and studies (OSC1 and OSC5).

Conclusions

The results of research carried out will be used in many ways by: developing an implementation guide for the management and continuous improvement of quality in university education model, publishing articles in magazines nationally and internationally recognized, development of economic lectures in higher education, research team members participating at national and international conferences, organizing workshops on management models of quality in higher education, creating a database with the results of this research. To exploit such methodologies, a foresight will be used to ensure the required openness of the project and attract a wide range of significant actors, with team members to properly reflect existing experience as well as major interests existing at national level in management and continuous improvement of the quality in higher education.

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HIGHER EDUCATION ASSESSMENT IN THE ERA OF THE DIGITAL NATIVES

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Abstract

The higher education is confronted with the collision of two very different conceptual sets concerning the teaching/learning, those of the students – more and more digital immigrants and those of their teaching staff – usually and yet Digital Immigrants. This event is requiring correspondingly changes in the designing, realization and the assessment of higher education programmes.

Key words: digital natives, digital immigrants, higher education, assessment, computational turn.

Our *first thesis* is that the higher education is becoming a territory of the Digital Natives.

This new reality is forever changing its contents and shapes.

And requires a correspondingly change in its assessment, too.

This is why “at this critical moment in brain evolution, Digital Immigrants and Digital Natives need to share one another’s knowledge and experience to move forward and thrive. As new technology becomes a seamless component of nearly every aspect of our lives, it’s becoming essential to interface both high-tech know- how and personal interaction skills in order to enhance job efficiency, while still maintaining our humanity. This is not only possible but necessary”¹.

The Chronicle of Higher Education is more and more reporting on the critical changes the universities are confronting with, worldwide.

The debates are very animated and the philosophies assumed very diverse, sometimes without any chance of reconciliation or of reaching of a minimal agreement.

The universities are confronting now with the biggest and deepest crisis they have experienced ever, in terms of differences between students and teaching staff. This is our second thesis. “It would be difficult to find an article or text about the current state of higher education which did not rehearse a litany of changes with which the system has been confronted, and the tone will very often be negative. We too have made several criticisms of the recent journey into mass education, and it

¹ Gary Small and Gigi Vorgan, **iBrain. Surviving the Technological Alteration of the Modern Mind**, HarperCollins, 2008, p, 191

does not seem unreasonable to claim that those involved in the “industry” are unhappy with where they have been led. With change comes trouble”.²

The reason seems to be quite simple: the nowadays *computational turn*.

In July 2008, *Science Daily*, starting from the second project report for the European Science Foundation (ESF), published under the title **Higher Education Looking Forward (HELF)**³ by the team chaired by John Brennan, launched the challenging question: *How will Academe change in the 21st century?*, only to introduce several other *cardinal questions* in the field of higher education challenges in the 21st century: “How are the changes in the balance of power between higher education's different constituencies affecting higher education's social functions?” – “Must universities adopt new functions and blur their boundaries with other social institutions to preserve their importance in nowadays society?” – “How do changes in the organisation of higher education institutions relate to changes in intellectual programmes and agendas?” – “Do different types of higher education institutions have different relationships with the larger social and economic worlds of which they are a part?” – “How do national, regional and local contexts help to determine the characteristics of modern higher education systems?” – “How much do universities vary in the size and nature of their international connections?” – “What does this mean for their development?”.

The questions that intrigued John Brennan's team are obviously the most important ones.

We have to agree with him that „universities do not exist just to produce economic benefits. They are also important in providing equity, social cohesion and social justice”. In the Knowledge Society it would be better to use, instead, the expression “the Engineered Society”, which is characterized by the transformation of the Tool / Artifact from an extension into a central dimension of Human Being.

Precisely this is why we have to pay attention to another cardinal question: *How is technology affecting Academe?* = *How do we need universities in a technological world?*⁴

And *that* is a problem with profound implications for the higher education assessment, too.

Let's detail. “If there is a single factor which illustrates the changes that have occurred in the higher education sector, and continue to do so, it is perhaps the introduction and proliferation of learning technology, observes Trevor Hussey and Patrick Smith. In a dramatically short period of time we have moved from those great grey, square metal boxes operating on little more than candle power to

² Trevor Hussey & Patrick Smith, **The Trouble with Higher Education. A Critical Examination of our Universities**, Routledge, Taylor & Francis, 2010, p. 101.

³ The project **Higher Education in Europe Beyond 2010: Resolving Conflicting Social and Economic Expectations** was launched in early 2006, with **Professor John Brennan** (Centre for Higher Education Research and Information, Open University, UK) as Chair of the Organising Committee. The project ended with a final conference in October 2007. A final report and research agenda were subsequently published in July 2008. The final report has the title: **Higher Education Looking Forward: An Agenda for Future Research** (July 2008) and can be downloaded starting from URL: <http://www.esf.org/publications/forward-looks.html>. The ESF press release of that project was published under the title: **The University of the Future**, European Science Foundation, 2008, July, URL: <http://www.esf.org/research-areas/social-sciences/news/ext-news-singleview/article/the-university-of-the-future-468.html>. A EUROCORES Programme: **Higher Education and Social Change** (EuroHESC), that can be accessed starting from URL: <http://www.esf.org/activities/eurocores/programmes/eurohesc.html>, has resulted from this Forward Look. The theme report, entitled **Higher Education Looking Forward: Relations between Higher Education and Society** was also published and can be downloaded starting from URL: <http://www.esf.org/publications/forward-looks.html>

⁴ See also: Viorel Guliciuc, **How Do We Need Universities in a Technological World?** in: *Dialogue and Universalism*, nr 1-2/2009:, special issue: *Metaphilosophy as Wisdom of Science, Art, and Life*, pp. 95-100

laptops little larger than a paperback and iPhones through which we can check our schedules, send and receive emails, access websites, follow satnav and log our travelling expenses. Simultaneously, it would appear that time has accelerated, as we do more varied tasks in a fraction of the time it once required, only to find that there is another tranche of tasks hurtling towards us out in the ether. Opportunities to lean back in the chair, glance out of the window and mutely commend ourselves for having done not too bad a job of work have evaporated, filled with yet more demands and challenges. Opportunities, or threats? We barely have time to consider”⁵.

They conclude that “Technology has reached every corner of the professional lives of everyone within the university. Managers could not function without their computers; academics prepare their lectures on PowerPoint and can amass research data without even having to stroll to the library – which is, in any case, now a ‘resource centre’. The speed of communication has enabled notes of meetings to be circulated within hours of the meeting finishing, or even before we leave the room. We can communicate with students remotely and, with the aid of cutting and pasting, reduce the time it took formerly to produce learning materials, reports and articles. Today’s students, by and large, are pretty much wired in to the possibilities of the electronic universe, whilst the majority of those who teach them may lag some way behind”⁶.

In Europe or North America, in higher education, too, we are fully experiencing the digital divide between the digital natives and digital immigrants.

Our third thesis is that *the differences experienced in higher education today are continuing and expanding those already influencing, from almost two decades, the secondary education.*

This is why we will continue the analysis we elsewhere initiated⁷, based on the concepts developed by Marc Prensky, to describe the divide that is reorganizing our teaching and learning experiences in the 21st century⁸.

Prensky considers that „technology’s role – and its only role – should be to support students teaching themselves (with, of course, their teachers’ guidance). Technology does not, and cannot, support the old pedagogy of telling/lecturing, except in the most minimal of ways, such as with pictures or videos. In fact, when teachers are using the old “telling” paradigm, adding technology, more often than not, gets in the way.”⁹

Among the concepts introduced by Marc Prensky one will find: *digital natives / digital immigrants*¹⁰, *digital wisdom*¹¹, *herding*¹², *digital multipliers*¹³, *21st Century Skills*¹⁴ a.o.

⁵ *Op. cit.*, pp. 105-106.

⁶ *Op. cit.*, p. 106.

⁷ See note reference no 2 here above.

⁸ In fact, Prensky is not only highly quoted but becoming nowadays a sort of legendary father of a new type of education, that adapted to Digital Natives.

⁹ Marc Prensky, **The Role of Technology in teaching and the classroom**, In: *Educational Technology*, Nov-Dec 2008

¹⁰ Marc Prensky, **Digital Natives, Digital Immigrants**, In: *On the Horizon* (MCB University Press), vol. 9, no. 5, Oct. 2001; Digital Natives, Digital Immigrants. *Part II: Do They Really Think Differently?* In: *On the Horizon* (MCB University Press), vol. 9, no. 6, Dec. 2001

¹¹ Marc Prensky, **H. Sapiens Digital: From Digital Immigrants and Digital Natives to Digital Wisdom**, accessible starting from URL: <http://www.innovateonline.info/index.php?view=article&id=705&action=article>; In: *Journal of online education*, vol. 3, no 3 Feb./March 2009

¹² Marc Prensky, **Listen to the Natives**, In: *Learning in the Digital Age*, Dec. 2005, vol. 63, no 4, pp 8-13.

¹³ Marc Prensky, **Let’s Be “Digital Multipliers”**. **Eliminating the Digital Divide Is Something Educators Can**

Grosso modo, one could try to resume his ideas using the following quotes:

1. There is a discontent, a gap, an increasing difference "between what students want and what they're receiving". There is a clear gap "between digital natives¹⁵ and digital immigrants¹⁶ in terms of how these groups utilize available technology"¹⁷.

This is why observes Julie Evans, CEO of *Project Tomorrow* "student frustration is rising."¹⁸

2. Our students – *no matters if in higher or in secondary education* – "are no longer the people our educational system was designed to teach"¹⁹. Our universities stacked in the 20th century, meanwhile students have already rushed into the 21st one. Without listen those students, universities cannot catch up and provide students with a relevant education²⁰.

3. It is now that we must find alternatives to the worst face of that mass education: the *herding*. „Herding is the involuntary assignment of students to specific classes or groups, not for their benefit but for ours. Nobody likes to be herded, and nobody learns best in that environment". In this case educators become "teacherds" rather than teachers. Moreover, „creating smaller schools or classrooms is no solution if the result is simply moving around smaller herds"²¹. We have to not forget that the digital world / digital learning resources are offering the desired escape from herding, as they are learner centered.

4. One of the explanations of the absolute need for alternatives to massification of education is the fact observed by Dr. Bruce D. Perry from Baylor College of Medicine that "today's students *think and process information fundamentally differently* from their predecessors. These differences go far further and deeper than most educators suspect or realize. "Different kinds of experiences lead to different brain structures. As we shall see in the next instalment, it is very likely that *our students' brains have physically changed* – and are different from ours – as a result of how they grew up. But whether or not this is *literally* true, we can say with certainty that their *thinking patterns* have changed"²².

Do, accessible starting from URL: <http://www.innovateonline.info/index.php?view=article&id=705&action=article>;
In: *Educational Technology*, Jan-Feb 2009

¹⁴ **Marc Prensky's Essential 21st Century Skills**, accessible starting from URL:
http://www.marcprensky.com/writing/Prensky-Essential_21stCenturySkills.pdf

¹⁵ The students.

¹⁶ The teaching staff.

¹⁷ Danika Rockett, Tamara Powell, Amy Massey Vessel, Kimberly Kimbell-Lopez, Carrice Cummins, Janis Hill, Richard Hutchinson, David Cargill, **Teaching Technology to Digital Immigrants: Strategies for Success**, in: Terry T. Kidd and Jared Keengwe, eds, *Adult Learning in the Digital Age: Perspectives on Online Technologies and Outcomes*, IGI Global 2010, p. 179.

¹⁸ Marc Prensky, **Young Minds, Fast Times: The Twenty-First-Century Digital Learner. How tech-obsessed iKids would improve our schools**. In: *EDUTOPIA Magazine*, June, 2008

¹⁹ Marc Prensky, **Digital Natives, Digital Immigrants**, In: *On the Horizon* (MCB Univ. Press), vol. 9, no. 5, Oct.2001

²⁰ See: Marc Prensky, **Listen to the Natives**, In: *Learning in the Digital Age*, Dec. 2005, vol. 63, no 4, pp 8-13.

²¹ *Ibidem*

²² Marc Prensky, **Digital Natives, Digital Immigrants**. *loc. cit.*

5. The biggest problem facing education today is this: “our Digital Immigrant instructors, who speak an outdated language (that of the pre-digital age), are struggling to teach a population that speaks an entirely new language”²³.

This makes highly questionable the belief of Gary Small and Gigi Vorgan can fully share the Digital / Technological World we are living in²⁴.

6. *Digital Natives*: “are used to receiving information really fast”; “like to parallel process and multitask”; “prefer their graphics before their text rather than the opposite”; “prefer random access (like hypertext)”; “function best when networked”. “thrive on instant gratification and frequent rewards”; “prefer games to “serious” work”. *Digital Immigrants*: “have very little appreciation for these new skills that the Natives have acquired and perfected through years of interaction and practice”. “These skills are almost totally foreign to the Immigrants, who themselves learned – and so choose to teach – slowly, step-by-step, one thing at a time, individually, and above all, seriously”. “Digital Immigrants don’t believe their students can learn successfully while watching TV or listening to music, because they (the Immigrants) can’t”. “Digital Immigrants think learning can’t (or shouldn’t) be fun.”²⁵ Having that unique accent of a Digital Immigrant means “dialling” a phone number; not using the Internet first; printing out your emails; printing out a document to edit; bringing people physically into your office to see an interesting website; “did you get my email?” phone calls; believing life happens off-line.

Let’s see some relevant data – US centered – from two researchers firmly believing the gap between the Digital Natives and the Digital Immigrants could be canceled: “younger and older generations differ not only in their technology and social savvy but also in their values, expectations, aspirations, and personal experiences. To better understand these influences, we should consider that within the category of Digital Natives there are two subgroups, the Millennials and the Generation Xers, while Digital Immigrants comprise two other subgroups, Baby Boomers and Seniors. The nearly eighty million Millennials (AKA Generation Y), born between 1981 and 2000—now mostly in their teens and twenties—appear to be the most technologically sophisticated. They value financial success as well as balancing work and play. The fifty million Generation Xers, born between 1965 and 1980 (currently in their late twenties to early forties), are often characterized as self-reliant and willing to take risks. If they don’t like a particular job, they’ll chuck it, just as they would with an outdated piece of technology. The eighty million Baby Boomers, born between 1946 and 1964 (currently mid-forties to early sixties), grew up in relative prosperity but also during the upheaval of the 1960s, so they are willing to challenge authority. Boomers work long hours to achieve what they want, and they value their individualism. Today’s Seniors, born before 1946, are the most traditional group and the most likely to stay with the same job over the years. They have great respect for authority and tend to be the least technologically sophisticated”²⁶.

7. „I believe fluency with multiple spoken languages will continue to be important, and that multimedia, interactivity, and other game-derived devices will be increasingly significant tools for communicating twenty-first-century thought. Nonetheless, I firmly believe that the true key literacy of the new century lies outside all these domains. I believe the single skill that will, above all others, distinguish a literate person is programming literacy, the ability to make digital technology do

²³ *Ibidem*

²⁴ *Op. cit.* See the final words of their book: “As we bridge the brain gap and learn to communicate and work together at all ages, we’ll be poised to adapt to whatever new advances come our way. As a result, we will not only survive the technological alteration of the modern mind but thrive because of it” (p. 199).

²⁵ *Ibidem*

²⁶ Gary Small and Gigi Vorgan, *op. cit.* p. 191.

whatever, within the possible, one wants it to do – to bend digital technology to one's needs, purposes, and will, just as in the present we bend words and images. Some call this skill human-machine interaction; some call it procedural literacy. Others just call it programming”²⁷.

8. “If we (and our students) are willing to be creative, I see no reason why there should be a digital divide at all anywhere” in the world²⁸. “There is also a second, more subtle, cause of the “digital divide.” Certain educators, who are themselves, afraid of the technology, are not making the best efforts to have all their students use technology as much as possible. Although this is often justified in “our kids don’t need technology to think” language, it is really just another form of digital division and deprivation. Finally, we could agree that “it is easy to pass off eliminating the “digital divide” as someone else’s responsibility, but it is really our own. This is a clear place where educators can be a big part of the solution – even without additional funding. I suggest we begin thinking of ourselves as “digital multipliers” – i.e. people who find creative solutions that bring every student, no matter what his or her background or income level, into the digital world – and get the job done”²⁹.

In order to successfully overpass the test of changing the Digital Immigrants generation with the Digital Natives generation, the universities urgently need to develop the skills of “transliteracy”

The majority of students use laptops, mobile phones and social software in their daily lives, both for study and recreation; they seek choice; they are used to flexibility and a degree of control over what they do and how they do it. “Universities need to develop an understanding of this generation of students in order better to address their needs”.

“It is argued that we need to develop the skills of ‘transliteracy’, defined broadly as ‘The ability to write and write using multiple media, including traditional print media, electronic devices and online tools’ (Word Spy 2008)”.

This concept provides “a significant means of thinking about how, as teachers and others, we might make use of what is available to the best advantage of those we are responsible for teaching”. It “implies the ability to adjust to and secure the maximum from a range of textual and graphic sources”. “Transliteracy suggests that, both learners and teachers need to be aware of the electronic opportunities which are available. It is a commonplace of contemporary technological developments that one has only to turn one’s back, for whole sections of the technological landscape to have been transformed”³⁰.

Let’s not forget that “educational theorists such as Dewey and Knowles have already established that we as educators do not really know as much as we might think”³¹.

²⁷ Marc Prensky, **Programming: The New Literacy**. In: *EDUTOPIA Magazine*, Feb. 2008

²⁸ It seems “Marc Prensky is not fully concerned about the understanding of the digital divide as the difference between those who have and those who do not have Digital Tools / Technology. Here, the digital divide is poverty based on the economic status of one's country or the social group one belongs to. He seems to be more attentive to the digital divide *inside* American society (inside a technologized nation), because there will always be people who do not have enough money for a PC, or who will not be interested in having one, or who will simply refuse all technology and consequently declare that we must respect digital ignorance. This situation is rejective of those critics of his positions, especially considering that even the concepts Digital Native / Digital Immigrant are somehow obsolete already” (Viorel Guliciuc, *loc. cit.*)

²⁹ Marc Prensky, Let’s Be “Digital Multipliers”. *Eliminating the Digital Divide Is Something Educators Can Do*, In: *Educational Technology*, Jan-Feb 2009.

³⁰ Trevor Hussey & Patrick Smith, *op. cit.*, pp. 106-107.

³¹ Danika Rockett, Tamara Powell, Amy Massey Vessel, Kimberly Kimbell-Lopez, Carrice Cummins, Janis Hill, Richard Hutchinson, David Cargill, *op. cit.*, *loc. cit.*, p. 180.

Amidst all this change, “it is important that we ensure that we are aware of what might be possible, always accepting that further changes will render what we know provisional”, in order to develop “those reflective and metacognitive skills which enable us to make the most appropriate decisions regarding what we use to support our teaching”. This will mean that “different knowledge areas and individuals within them will arrive at different solutions and approaches to what might be termed the appropriate blend”. The integration of the face-to-face and electronic interactions has to be at the heart of effective learning and teaching. “Students brought up on Google and Wikipedia will expect to be involved in their own learning but they must learn discrimination in the selection of sources and materials, and honesty in its use”. This will produce “significant changes in the nature of the relations between learners and teachers, as the former draw increasingly on their peers to explore and consolidate learning; interacting via social networking platforms such as YouTube and Facebook, and establishing discussion forums into which teachers might, or might not be invited”.

The education – not only the higher education – is democratization. Alongside this shift in relation to information and knowledge, “the desire of students to work more collaboratively will place increasing demands on conventional assessment systems, requiring them to acknowledge and accommodate collaborative work and peer assessment as well as the more traditional formative assessment and feedback”. “This process cannot be held back, it is already happening and requires academic staff to begin to ask different sorts of questions and formulate more appropriate forms of assessment”. Indeed, the theme of the themes in today’s educational discourse is the dangers of the gap between students and tutors. Trevor Hussey & Patrick Smith believe “it is possible for academic staff to become transliterate” which would make possible that, “both students and tutors can look forward to enjoying extraordinary and mutual opportunities in relation to learning”³².

“In the 21st century, the relations between the university and technology are critically linked to the skills that have to be developed thorough higher education”³³.

Some of them seem to be common to secondary and higher education³⁴.

Our third hypothesis is that the assessment of the higher education will have to mark clearly the difference between the essential 21st Century Skills³⁵ in higher and secondary education.

The Digital Natives are tough online learners. This is why “several large-scale initiatives being taken” in order to create and develop “repositories (or, *digital libraries*) containing catalogued *online learning resources*”. The objectives are “to provide teacher and learner access to high-quality learning objects in order to help improve both the effectiveness and the efficiency of education”³⁶. The National Science Digital Library (NSDL.org) offers, in U.S.A., a comprehensive collection of educational content and contains services to learners, educators, and academic policy makers – over 2.5 million high-quality, catalogued science, technology, engineering, and mathematics educational online resources³⁷.

³² Trevor Hussey & Patrick Smith, *op. cit.*, p. 107

³³ Viorel Guliciuc, *op. cit.*

³⁴ *Ibidem.*

³⁵ See: Marc Prensky, *op. cit.*

³⁶ See: McArthur, D. J., & Zia, L. L. (2008). **From nsdl 1.0 to nsdl 2.0: towards a comprehensive cyberinfrastructure for teaching and learning**. In: Proceedings of the 8th ACM/IEEE-CS joint conference on Digital libraries.

³⁷ See: <http://www.nsdl.org>

Let's agree that "these tremendous opportunities also come with a significant number of challenges"³⁸: "most mid- and late-career teachers are not digital natives"; these online stuff was "typically designed around the notion of temporally and physically constrained resources (e.g., textbooks) within the confines of a single classroom"; "the distributed and limitless access provided by the Internet"; those resources "are not always ready for classroom use". "In a very real sense, there is a gap between online learning resources produced by researchers and content experts, and the practitioners, with pedagogical expertise trying to adapt them for their own classrooms"³⁹.

Universities are moving from being "intermittent electronic cultures" to realize a more integrated approach of an electronic infrastructure⁴⁰.

However we have to remember that "technology is never the whole solution. The recent history of technology in education tells us that however good it is, it achieves little without the complementary human and organizational changes needed, and these are always difficult"⁴¹.

Let's conclude that developing new standards of assessment that are aware of the digital gap and the preference of the learners for the online content is very important for the higher education nowadays.

³⁸ F. Rennie & R. Mason, **Designing Higher Education Courses Using Open Educational Resources**, In: Myint Swe Khine & Issa M. Saleh *eds*, *New Science of Learning Cognition, Computers and Collaboration in Education*, Springer, 2010, p. 307.

³⁹ *Idem.* p. 308.

⁴⁰ Higginbottom, **Technology storms the ivory tower**. In: *Guardian*, 31st March, 2009.

⁴¹ Laurillard, D., **Open teaching: the key to sustainable and effective open education**. In: T. Iiyoshi and M. Kumar (eds). *Opening up Education*. The MIT Press: Cambridge, MA, 2008, p. 320



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MANAGEMENT OF EMOTIONAL INTELLIGENCE – DIMENSION OF QUALITY IN HIGHER MILITARY EDUCATION

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Abstract

Assuming that quality education requires continual improvement of socio-intellectual and human performance and given the pace of social changes, institutions of higher education should aim to continuous development of human resources, trying to find the right answers to students' needs, as well. From our point of view the students' needs often aim to both the needs of knowledge and to reality, life practice, while a proper management of emotional intelligence contributes to the improvement of the quality of learning and it is also a predictor of performance in the professional work. The article highlights the issue of emotional intelligence in connection with the quality of higher education and focuses on the perspective of emotional intelligence and performance in military organization. The main idea refers to the understanding and use of emotional intelligence within interpersonal relations in the military, in order to subsequently make the most of the acquired professional competence.

Key words: emotional intelligence, quality education, military organization, professional competence.

1. The context

There is currently a gap between the popularity of emotional intelligence as a concept and its application in society. From our point of view, this split has two explanations. First of all, people still do not understand what emotional intelligence is. It is often confused with a form of charisma or gregariousness. Secondly, emotional intelligence is not perceived as something which can be improved. You either have it or not.

In the area of national security activities, particularly that of intelligence (secret), emotional intelligence is, from our point of view, an essential component. The essence of intelligence is to establish relationships between officers and contact, relations whose success will depend on the ability of the officer, ultimately on his emotional intelligence. It is clear that a positive relationship

will improve his position, his image in the eyes of others, confidence to supply him with information. Generally, the success of a commander in the theater of operations will depend on his emotional intelligence. Intelligence activity be it in times of peace requires understanding of the enemy's strategy, so that his plans could be foiled, and evaluating the information received to determine whether they should be accepted as true, or should be considered an attempt of misinformation from the opponents, and last but not least, restriction or distortion of what the opponent can find. All in all, an important indicator of military skills in an officer is a high level of emotional intelligence.

The rational component is not sufficient in this activity, there should also be an emotional accompaniment. The emotion depends on how the person assesses and analyzes a situation. Affective and cognitive processes, although different in their nature, are inseparable in the information business, being closely interwoven.

Therefore, education of high quality is the education which addresses the needs of the beneficiaries. Training future officers, especially those prepared to undertake the task of national security information, each side of emotional intelligence must be considered.

2. Theoretical Background

To substantiate the theoretical assumption that the development of emotional intelligence should be an essential component of superior military training, we present some of the most relevant meanings of the concept. History made on intelligence research specialists has led to several opinions, different at first but quite similar after a closer look.

In the first sense intelligence includes eight types, namely:

- *Rational / Genetic Intelligence (IQ)* - refers to thinking. The ability to analyze, rationalize and communicate. It is also known as conventional intelligence;
- *Emotional Intelligence (EQ)* - refers to feeling. It represents a person's ability to acknowledge, to access and generate emotions and to assist their own thoughts, to understand emotions and emotional knowledge and to control reflexively their own emotions and to promote intellectual and emotional development¹. Unlike rational intelligence, emotional intelligence is learned and developed throughout life.
- *Multiple Intelligence (MI)* - is a relatively new concept belonging to psychologist Howard Gardner who believes that there is not a general factor of intelligence to provide consistent value, but rather there are some essential mental capacities, independent – intelligent: linguistic, logical - mathematical, spatial, musical, bodily - kinesthetic and personal intelligence.²
- *Spiritual intelligence (SQ)* - refers to being. *"Spiritual intelligence opens the heart, enlightens the mind and inspires the soul"*³.
- *Practice Intelligence* - is the type of intelligence, which requires skill in manipulating objects, actions, events, feelings, etc.

¹ Mayer, J. D. & Salovey, P., (1997): *What is emotional intelligence?* in P. Salovey & D. Sluyter (Eds), *Emotional Development and Emotional Intelligence: Implications for Educators*, Basic Books, New York

² Gardner, H., (2003): *Inteligența multiplă - după douăzeci de ani*, American Educational Research Association, Chicago, Illinois, <http://www.howardgardner.com>.

³ Vaughn, F., *What is spiritual intelligence*, <http://francesvaughan.com/work1.htm>

- *Social Intelligence* - is the ability of understanding the behaviour of other individuals, acceptance / the relationship to other people's behaviour and well adapting depending on different circumstances or expectations.
- *Public Intelligence* - is the development of a society composed predominantly of individuals with moral meanings, intellectual, that build intelligence company.
- *Artificial Intelligence* - ideally wants to know how to make machines as smart as humans.
- *Romantic Intelligence* - the art of enhancing any affair in time.

As we have mentioned above the components of emotional intelligence such as self-knowledge, self-regulating, self-motivation, empathy and ability to establish relationships with others - determines how we deal with our own emotions and those of others, according to Goleman.

An important step in forming the theoretical framework was the definition of emotional intelligence quotient: EQ, a step which has first been taken by Reuven Bar-On in 1997 in his doctoral thesis.

In 2000, Steven J. Stein and Howard E. Book describe a different organization of emotional intelligence. They refer to the organization of IE in the form of areas as follows:

1. Intrapersonal domain: emotional self-awareness, assertive character, independence, self-esteem, self-fulfillment;
2. Interpersonal field: empathy, social responsibility, interpersonal relations;
3. Field adaptability: reality testing, flexibility, problem solving;
4. Stress management: stress tolerance, impulse control;
5. Field general condition: optimism, happiness.

A recent study developed by Karl Albrecht mentions the need to model rearrangements of "multiple intelligences" by Howard Gardner, in other six primary categories:

1. abstract intelligence: symbolic reasoning;
2. social intelligence: interpersonal ties;
3. practical intelligence: the organization of activities;
4. emotional intelligence: self awareness and self-control;
5. aesthetic intelligence: the meaning of forms, drawing, music, art and literature;
6. kinesthetic intelligence: physical capabilities such as sports, dance, music, etc..

David Caruso continued the research work begun by Mayer and Salovey. Going on the same idea, Caruso suggests that emotional intelligence is the true form of intelligence, which, however, has not been scientifically measured until has begun research work.

Those who subscribe to a narrow vision on intelligence, arguing that IQ (intelligence quotient) is a genetic given that can not be changed by life experience and that our destiny is largely determined by the skill, in fact ignores the most challenging problem: what can we change?, what factors are involved, for example, when a person with a high IQ struggles hard, while another, with a low IQ, does surprisingly well? It is interesting that, despite equivalent degrees of value, some indulge in jobs below their level of training, while others make impressive leaps on their way to success. How do you explain that some children proved a lively intelligence and promised a lot, eventually failed in mediocrity, and some that are not distinguished by anything particularly are successful in life? Why are there couples who fight and then split, and couple who although experience tension they don't split and are really happy? The answer to all these

questions take into account the fact that we "decide and think about the influence of emotions"⁴. The true measure of intelligence is not IQ, but EQ, emotional quotient. "The great revolution of the 2000s is revenge of feelings over intelligence"⁵.

In conclusion, the person with high emotional intelligence would have an increased tolerance to frustration, ability to delay desires and getting rewards, ability to self fixing having a positive full of hope attitude. In other words, an increased level of emotional intelligence provides a very individual self (the emotions, moods and feelings, but also the thoughts and actions), a positive self image, self woven with contentment regardless of external variables, the ability coping with stress and adapt to change, empathy and ability to relate effectively with others, ability to establish realistic goals and motivation to fulfill them.

To return to the issue of higher military education, the previous paragraph can be a "template" of the ideal graduate of a military school. The question is what we can do to help education and training while still a student in order to develop his emotional intelligence.

3. The Military Quality in higher education: socio-emotional skills training - management perspective of emotional intelligence

Literature designs the recruitment and selection as key role activities for any type of organization. The importance of the two activities is greater in the military system, not only because they are associated with positive effects, but also with negative effects, as well, the possible errors of selection and recruitment bringing great harm to the military organization, and may even reach the suppression of life members organization.

In higher education, military recruitment and selection begin in high school. The quality of a military higher education institutions is determined by the quality of recruitment and selection processes and the quality of educational services.

Developments in recent years both nationally and internationally have highlighted the need to build a national system of management and quality assurance. In the education system, quality of education has become a national priority.

But quality is not produced and defined solely by the offer of educational institution but also the beneficiaries of educational services and education customers. They must be constantly consulted and their satisfaction is always reason for concern for educational institutions so as to generate a competitive system.

Achieving the above mentioned goals is provided by the teaching, educational activity and a variety of specific services in schools. The quality of education depends on the quality of the three components, executives, managerial competence is defining.

Professionalism is a central goal pursued in this area, and it represents the quality of training in military higher education. Among the main qualitative variables of the military professionalism we can mention: competence, curriculum, methods, human resource, design, recruitment, selection strategy.

⁴ Goleman, D., (2008): *Inteligența emoțională*, ediția a III-a, Editura Curtea Veche, București

⁵ Ibidem.

Among the motivational factors leading higher education institutions to be concerned about the quality problem we can include:

- orientation towards performance and increase the market competitiveness of university graduates in education and labor market resources;
- expansion of spending on educational processes, research, and development;
- european market recognition of qualifications (degrees and diplomas) by institutions in the country;
- developing an institutional culture of quality, total involvement of staff in achieving performance;
- increase accountability for the quality of university benefits.

For military higher education the last two factors are not only motivational, but they are also part of the culture of the institution. In intelligence education, students are recruited through public presentation of the educational offer, with the media and through visits to military personnel in high schools and the recommendations or the family tradition, where they have parents or relatives working or have worked in the military system.

The selection is supposed to follow certain steps, steps mentioned in the public offering: an interview, preliminary psychological testing, complex psychological testing which is part of the final average, test of knowledge in computer use, eliminatory tests – elimination heat, medical check-up, creativity, foreign language – written tests, depending on the specialization of their choice. In addition to these tests, the selection requires a prior verification of the candidates and their relatives.

The quality of the educational process depends not only on the status of the teacher in relation to learners, but especially for his ability to capitalize on this advantage for the benefit of students. It depends on the success of the teaching training activities. Although each teacher has their own personality, there are certain principles, rules, steps, if they are pursued, their teaching can positively benefit.

Regardless of the academic or a career that is addressed to civil society or for a career in the military, as well as benchmarks of quality in educational activity for a path to performance, we can mention as follows:

- *Do not miss any of the students' perspectives!* Are the tasks relevant, accurate and interesting? Do selected indications include perspectives and relevant research on different groups? The diversity of materials is not always valid in every way, but should be taken into consideration where possible.
- *Take into consideration optional study, as well!* For students who do not have the minimum proper knowledge of the course / seminar, are considered optional study design activities to develop their prerequisites.
- *Career counseling!* The task is to assist students to form a positive image of a professional. This is easily integrated into courses, especially those in the field, as a development of the students, view regarding the activity which will come after graduating teachers' lectures and other invited personalities are very valuable, which professional prestige enjoyed, ensure prudent advice.
- *Value your group of students!* One common technique to exploit a group of students includes the general point of view (students are asked what was confusing at the end of the course) and one conclusion (students are asked to summarize what they have learned).

These techniques to determine the progress of a group of students are good for the evaluation of the teacher, having only to win from it, improving the practice of teaching ⁶.

- *Encourage the individual training!* The first course / seminar and the first tasks are used to guide the student to an additional bibliography before starting a new course, allowing teachers to engage students more in the exercises, group activities and enhancing learning. There is a log of tasks, questionnaires, research questions that can motivate students to complete their study materials.

- *Provide objective evaluation!* Various examinations are used, with various items, objective, subjective and semiobjective ones, so that students demonstrate their knowledge in different ways and applications in specialized disciplines. The notes are important for students and all students should be given the opportunity to earn a note which reflects their knowledge. We believe it is useful to note that sometimes teachers "forget" the positive effects of some words of appreciation. All answers are interesting of whether it seems irrelevant. Students may find themselves in a very new situation, in which they are supposed to provide "mature ideas" for the first time.

- *Encourage learning and teamwork!* Teamwork should be encouraged, as well as debating and new information seeking. Participants understand concepts better when they are explained and discussed within the group. Furthermore, as students become aware of the fact that in the future, their performance as professionals will always depend on quality of the team's performance.

As for communication with the students, as benchmarks of quality we can identify as follows:

- The importance of examples giving!
- Encourage tuitions!
- Show confidence in your students!
- Avoid having a patronizing attitude!
- Express your expectations!
- Encourage participation to scientific events!

Some of these items are frequently found in the preparation and training activities of military staff / future officers. Students are new to "foreign" land, but making use of modern, varied methods, with a goals-based system aimed to learning and to providing individual support all these are interrelated in the academic environment, enriching the students' experience but also the one of the teachers', thus promoting a high quality system.

Assuming that high quality education requires continual improvement of performance and given the pace of social change, military institutions of higher education today continue to target human resource development and identify appropriate responses to students' needs. A military educational institution has special responsibilities in education and training plan. Let's not forget for a single moment that graduates of these institutions will eventually be responsible for the nation security.

The mission of any military institution is to educate, shape and inspire students so that each graduate turns into a man of character, a possible leader - committed to the values of honour, country, duty - and also ready for a career of excellence in the nation's service.

With regard to emotional intelligence, development of four skills are of utter importance in shaping the future officers:

⁶ Angelo, T.A., Cross, K.P. (1993). *Classroom Assessment Techniques: A Handbook for College Teachers*. San Francisco: Jossey-Boss

- organizing groups - implies the initiation and coordination of the group;
- negotiating solutions - skills as a mediator in conflict prevention or solving argumentation skill;
- relationships - facilitate community penetration, recognizing and properly responding to others' feelings and concerns, "the art of networking";
- social analysis - ability to detect and acknowledge the feelings, motivations and concerns of others.

Considered as a whole, these "tools" are the privilege of interpersonal success, the necessary ingredients of charm, social success, even the charisma according to Daniel Goleman. Those who know how to direct their emotions and always create a good impression acquire a halo of popularity and social success (Mark Snyder).

As far as management of emotional intelligence is concerned, we resort to Goleman's approach. This is a special kind of social intelligence, which involves the ability to control others personal emotions in order to understand these emotions. The ultimate goal is to use these informations in order to estimate others way of thinking and action.

For a correct management of emotional intelligence you have to know how to manage each of its components:

- *awareness of your own emotions*: to be able to recognize, label them and understand their causes.

In any relationship we express information, feelings, facts, and memories. Sometimes, however, it is hard to express clearly what we mean or feel. We are inconsistent, and sometimes it is hard to understand what we are told, what the intention behind words is. These are conflict generating situations. To avoid them it is important to be able to encode and decode messages, either verbal or nonverbal, so as to convey and understand the correct meaning of messages.

- *emotions directing*: to be able to master your anger and tolerate frustration, to naturally and properly express your anger, without being aggressive; to be able to handle stress, etc..

To manage our emotions is important to keep in mind: What do we express?; How do we express?; When do we express?; Where do we express?; To whom do we express?

- *personal motivation* (productive use of emotions): to be more reprehensible, to be able to concentrate on the task and to keep your attention on it, to be less impulsive and more self-controlled. It is important to keep in mind what we specifically want to do or to achieve: length of time - when we want to achieve our aim; participants - whom we need; strategy - what steps should be followed; resources - what we need.

- *empathy*: to be able to watch from the others' perspective, to learn to listen to others, to improve your responsiveness (sensitivity) to the feelings of others.

Empathy does not mean to live the emotions of other people, but to understand them from your own experiences.

- *interpersonal relations routing (driving)*: skill development to analyze and understand interpersonal relationships; ability to negotiate disagreements and resolve conflicts, interpersonal problems; opening (positive spirit) and easy going manner; to get involved with tact (gently, carefully, politely); to be harmoniously prosocial in groups; to be cooperative,

participative, helpful, reliable; to be democratic in official situations and in the way you treat others.

To add in those, what Reuven Bar-On (1992) adds is of utter importance: two specific components of emotional intelligence and stress management - including tolerance to stress (the ability to cope with stressful events and situations without being there to prevent or cope with stress actively and positively) and impulse control (the ability to resist to delay the manifestation of impulsivity and the temptation to chase lead you to action) having as sub-scale happiness (the ability to feel satisfied with your life, to have fun on your own and in the company of the others), and optimism (the ability to see the bright side of life and maintain a positive attitude regardless of the situations you are in)

Thus, we can create our own relationships using the elements mentioned before: we set our goals, we channel our energy and emotions depending on the purpose (using empathy as a tool), we express and identify emotions in a coherent way. We will be aware of our responsibility to others in interpersonal relationships. This will help reduce conflicts and communicate effectively.

The purpose of emotional intelligence is our reaching goals, with minimal inter and intra-personal conflicts.

A correct management of emotional intelligence allows us to emphasize our intellectual skills, creativity, etc. Thus, we are sure to be successful both on personal and professional level.

Each element has its unique contribution to the performance achieved in the workplace but at the same time, they mutually influence one another.

Emotional competence - which combines thinking with feeling - shows how much of that potential we use in our working skills. The five dimensions of emotional intelligence are matched with 25 emotional skills, but no one has them all. In order to achieve outstanding performance we need to be very good in only a few of these skills - about six - and that they should "scattered" in all five areas of emotional intelligence.

Being a good emotional intelligence supposes understanding that it is not and should not be viewed as a replacement or substitute for the skills, knowledge or skill acquired over time. Emotional intelligence increases the chances of success, but does not guarantee it if knowledge is absent.

Emotional intelligence affects relationships, daily life, more than IQ does. To be able to be empathic and be able to socialize means that one must learn to combine IQ (cognitive ability) with emotional intelligence (EI).

In the management of dyadic emotional intelligence - the quality of military higher education, we start from the idea that the degree of emotional intelligence and academic intelligence are not complementary, but simply separate skills. Emotional and intellectual acuity in each of us are mixed in different proportions. Despite the stereotypes, are very rare people who have a high IQ and low levels of IE or vice versa are very rare.

Currently, the problem is not how much you have or where it comes from, but what you can do with what you have. Emotional intelligence is similar. Emotional intelligence has limits, everyone who is ready and willing, can improve their level of emotional intelligence.

Dwelling on the idea that we live in a dynamic society where everything is changing, where scientists make new discoveries that lead to transformations of the different concepts and areas of activity, we can say that this phenomenon specific to particular psychology has influences that manifest themselves implicitly in the military. In this context, of military environment, in terms of staff training and particularly those entrusted with the responsibility of leading social structures or processes concerning specialized strict application, the concepts described above are a priority with great significance .

In the military institutions, vocational education as part of the educational project focuses on three aspects: military, academic and human.

4. Conclusions

There greater attention given to this concept, internationally and, more recently in Romania, it should raise an exclamation point on what is now considered to be an intelligent and on the support of emotional intelligence programs representing real emotional awareness raising instruments and their impact on daily life, and on the success in intelligence field. Assuming that quality education requires continual improvement of socio-emotional and intellectual performance and given the pace of social change, schools must aim to develop human resources and continue to find the right answers to the students` needs. A correct management of emotional intelligence can bring quality learning and performance as a predictor of professional activity.

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AGENTIA ROMANA
DE ASIGURARE A
CALITATII IN
INVATAMANTUL SUPERIOR

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EUROPEAN STUDIES BETWEEN THE DYNAMIC DEVELOPMENT AND THE NEW CHALLENGES

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Even though European Studies¹ had a relative dynamics until 1989², the true development was recorded after 1995-1996, when European Studies started to expand to Central and Eastern European countries. A genuine explosion took place particularly after 2000, when EU accessing countries began to be more and more active, when we witnessed a diversification of ideas on the European agenda and questions started to arise on the new higher education area.

The issue of **European Studies development**³ overcame the strictly academic area, thus responding to steady challenges of the process of European construction. Questions were introduced by the project initiated by the European Thematic Network in Political Science (EPSnet) developed by the Institut d'Etudes Politiques in Paris, the Jean Monnet Chair in Political Science at the University of Cologne, and the Trans-European Policy Studies Association (TEPSA)⁴. In 2008-2010, I was involved in the project of the European Studies Thematic Network, leading the research group on the European Studies curriculum development⁵. The object of our research was the European Studies courses provided on BA, MA and PhD levels at universities belonging to 12 European Union Member States (Belgium, Denmark, France, Spain, Germany, Italy, Lithuania, Poland, Portugal, Romania, Slovakia, and the United Kingdom). We sought to see if European Studies still belonged to traditional courses on comparative political government and courses on international affairs⁶ or "remain[ed] highly disjointed, seated in various disciplines and educational schemes"⁷.

¹ Ian Manners, "European Studies", *Journal of Contemporary Studies*, vol. 11, no. 1, 2003, pp. 67-83;

² European Community Studies Association (ECSA) has carried out a thorough report entitled „Place de l'intégration européenne dans les programmes universitaires. Rapports nationaux” presented in Brussels on 29-30 June 1989 at the ECSA Conference – Europe on European Vocational Subject Status on each of the European Community members, or, according to the title, the place of European integration in higher education curricula.

³ Parts of this survey belong to the chapter entitled Current Problems in the Development of the European and/or EU Studies Curriculum, in print. It is published in the paper entitled Teaching European Studies Curricula and Teaching Methods, edited by Stephania Baroncelli, Ioan Horga, Sophie Vanhoonakar, Springer Editions

⁴ www.uni-koeln.de/wiso-fak/powi/wessels/Core-Curriculum/index.htm

⁵ www.sent-net.uniroma2.it

⁶ E. Remacle, "Teaching European Politics, Politics and Polity in the New Century. Lessons from the experience of Intitute d'Etudes Europeenes, Universite Libre de Bruxelles, in Sobota K (eds), *Political Sciences and EU Related Studies*, Lodz, 2000, pp. 129-141

⁷ G. Umbach, B. Scholl, "Towards A Core Curriculum in EU Studies", in *European Political Sciences*, No 2.2 Spring 2003, pp. 71-83

Our investigation comprised several stages. First, we proceeded to primary data collection by non-professional operators based on a chart comprising the following information: local denomination of the university, English denomination of the institution, faculty, specialisation or study programme, course title in English, field of course, type of course (compulsory, elective, or free course), and number of hours. It is likely that certain courses were omitted during data collection, considering that the on-line investigation might have prevented from collecting further information on courses, thus diminishing the rigour of the investigation. Yet these omissions cannot be that important to question the quantity of collected information⁸. Assuming these inherent reserves of such a broad inquiry, we passed to the second stage of processing the information acquired – **dividing courses** in the EU Studies field charts used by the European Commission, Action Jean Monnet (EU Legal Studies, EU Political and Administrative Studies, EU Economic Studies, EU Historical Studies, EU Interdisciplinary Studies, EU Intercultural Dialogue Studies, EU Communication and Information Studies, EU and Comparative Regionalism Studies, and EU International Relations and Diplomacy Studies).

This initiative was difficult at least from two points of view, which would also raise a question on the accuracy of our research. First, the course title is not always relevant to consider it as belonging to the EU Studies curriculum (many undertones can be seized from this point of view on courses in EU Historical Studies, EU Interdisciplinary Studies, and EU Intercultural Dialogue Studies. Assuming the responsibility of keeping some courses referring to European History or the European Cultural History and including them into the category of EU Historical Studies, we intended to seize the EU Studies curriculum from a broad perspective, where even courses on Ancient, Mediaeval, or Modern History can be considered, provided they belong to course packs offered to students in humanities (History, Cultural Studies, Pedagogy, European Studies, etc.) and serve as a firm basis for the knowledge on European unity.

As far as the courses in EU Interdisciplinary Studies are concerned, there are even more undertones. On the one hand, here we can include courses whose titles are on the edge between EU Studies in general and other fields of knowledge (Sociology, Linguistics, Geography, etc.). We preferred a broad approach, when we had the opportunity to correlate the course titles with students' majors as beneficiaries of the courses. On the other hand, we included in this category courses that could be inserted to the EU Studies field, yet the title compels seeking an edge field between two other fields (e.g. EU Political Studies and Administrative Studies and EU and Comparative Regionalism Studies, or EU International Relations and Diplomacy Studies, EU Historical Studies and EU Intercultural Dialogue, EU Communication and Information Studies, etc.). At the second stage of our research, we included these courses into the field pertaining to EU Interdisciplinary Studies, to subfields such as Social Studies, Education Studies, Multilingualism, Religious Studies, Regional Studies, etc.).

If the first two fields mentioned above (Historical Studies and EU Interdisciplinary Studies) are somehow traditional fields in European practice, considering that together with EU Political Studies and Administrative Studies, EU Legal Studies, and EU Economic Studies it belongs to the five fields promoted by Jean Monnet structures (modules, permanent courses, chairs, and centres), the field of EU Intercultural Dialogue Studies is pretty new, as it has been promoted particularly as of 2007. Therefore, the lack of explicit topic courses corroborated with researcher's subjective temptation to bring this field to the foreground by including certain courses places us in incertitude. Thus, we have tried to include here only two categories of courses (referring to other European civilisations – the *Islam*, and to Europe's cultural diversity.

⁸ Collected data are available on www.iser.rdsor.ro

Course titles referring to the European civilisation (on religion and multilingualism) that could be included into this field were inserted in the EU Interdisciplinary Studies.

In fact, we assume this restrictive method of including courses in new EU Studies fields (EU Intercultural Dialogue Studies, EU Communication and Information Studies, EU and Comparative Regionalism Studies, EU International Relations and Diplomacy Studies) for two main reasons. On the one hand, as these are new fields, there are not many examples of good practice and content from either an institutional point of view (we consider the involvement of Action Jean Monnet in field diversification) or from a didactic practice viewpoint. On the other hand, we do not have sufficient data (we only have course title for our research and we do not have access to the content of the course) to rigorously frame a course to a certain category.

Secondly, more often than not course titles lie at the edge between two or more fields. Things are a little more obvious only regarding EU Legal Studies, as the words *law* or *right* are associated with *European/EU* or *community*, which prevents us from leaving aside such course, or including it to another field. Yet, if we analyse each of the other fields, some might be too representative, such as EU Political and Administrative Studies, EU Interdisciplinary Studies or EU Historical Studies either by including some courses that could not belong to EU Studies, or by including some courses that might facilitate their inclusion to a more adequate category depending on the content of the course. There are also other fields that might be underrepresented, such as EU Economic Studies, EU Intercultural Dialogue Studies, EU Communication and Information Studies, EU and Comparative Regionalism Studies, EU International Relations and Diplomacy Studies. This is mainly due to including some courses belonging to these categories – based on their titles – to more representative fields, or transferring them from one to another (EU Intercultural Dialogue Studies *versus* EU Communication and Information Studies; EU and Comparative Regionalism Studies *versus* EU International Relations and Diplomacy Studies).

In the field of EU Political and Administrative Studies there might be the greatest ambiguity in including a certain course, considering that it may be found in almost all other fields (except for EU Legal Studies and partly EU Historical Studies and EU Economic Studies). For instance, a course entitled *European Integration* can be associated with other titles (*Theory and History, Governance and Political Economy, Identity*, etc.) and belongs either to EU Historical Studies, considered from the point of view of integration process diachronically, or to EU Economic Studies, from the point of view of the synchrony of single market. It is the same situation for a generic course on the *European Union*, or associated with *History and Institutions* or *Economic Policy*, which involves choosing without a definite argument.

The degree of ambiguity is even higher when including courses whose titles belong to two fields, such as *European Economic Policy*⁹, *European Business Policy*¹⁰, etc. Including them to EU Economic Studies is tempting considering the titles, yet considering the fact that they define a type of European policy, we have decided to classify them as belonging to the field of EU Political and Administrative Studies. We have made such a decision envisaging the fact that we have been in a similar situation referring to other European policies. For example, social policy or education provides courses relating to EU Interdisciplinary Studies, external policy and security provide courses relating to EU International Relations and Diplomacy Studies, or

⁹ Friedrich-Alexander-Universität Erlangen-Nürnberg/ Europa-Universität Viadrina/
Westfälische Wilhelms-Universität Münster

¹⁰ Ruhr-Universität Bochum

European media policy provides courses relating to EU Communication and Information Studies, or multi-level governance in the EU provides courses relating to EU and Comparative Regionalism Studies.

In the field of EU Historical Studies there are courses we have included in *Historical Foundations of European Law*. They can be included to the field of EU Legal Studies. Likewise, there are courses we have included to the category of *European Cultural History* possibly concerning fields such as EU Interdisciplinary Studies, or EU Intercultural Studies. Courses belonging to the category *European Economic History* could be included to EU Economic Studies. Courses belonging to *European History of Public Communication* could be included to EU Communication and Information Studies.

As to fields that could have been subjectively favoured in our research, we have to mention that together with EU Political and Administrative Studies or EU Historical Studies, we can notice EU Interdisciplinary Studies, considering that this field itself includes everything that could not be included to other fields. Therefore, the degree of ambiguity is even higher than in the case of EU Political and Administrative Studies. There are many more examples. However, we will only state that we have chosen to include them to the field of EU Interdisciplinary Studies precisely to eliminate the incertitude of transferring them outside the field, which would favour the aforementioned field.

Categorising courses by EU Studies subfields was the last stage of our research. We drew up a working chart for each EU Studies field recapping course subfields and types as settled for each EU Studies field.

A. EU Legal Studies covers 29.7% out of the total number of chartered courses. Analysing the course titles, we noticed that they could be grouped into five subfields: *European Law*, *European Public Law*, *European Private Law*, *European Economic Law*, and *European Social Law*.

- a) *European Law* comprises the following (2) types: *European Law* (basic, general) and *Eastern European Law*.
- b) The following (5) types make up the *European Public Law*: *European Public Law*, *European Constitutional Law*, *European Administration Law*, *European Human Rights*, and *European Asylum Law*.
- c) *European Private Law* has (3) types: *European Private Law*, *European Criminal Law*, *European Civil Law*
- d) *European Economic Law* is made up of the following (14) types: *European Economic Law*, *European Company*, *European Business Law*, *European Cartel Law*, *European Energy Law*, *European Commercial Law*, *European Patent Law*, *European Contract Law*, *European Competition Law*, *European Consumer Law*, *European Bank Law*, *European Environmental Law*, *European Food Law*, *European Media Law*.
- e) The following (4) types are comprised in the *European Social Law*: *European Social Law*, *European Labour Law*, *European Family Law*, *European Public Health Law*

B) EU Political and Administrative Studies cover 28.5% out of the total number of chartered courses. This field has nine subfields in point of course type: *Generalities*, *European Integration*, *European Politics*, *EU as a Global Actor*, *Political Analysis of Central and Eastern European Countries*, *European Economic Policy*, *European Social Policy*, *European Education Policy*, *European Foreign and Security Policy*, *Multi-Level-Governance in the EU*

- a) We have grouped the courses in *Generalities* into (2) types: *Generalities in European Studies* and *European Reflections*

- b) The subfield *European Integration* has been divided into three types (3): *European Integration, The European Union, Theories of European Integration*.
- c) The subfield *Political System of EU* has (6) types as follows: *General Courses; Political System of EU; Parties, Groups of Interest, Lobby; EU Elections; Europeanisation and Democracy; European Institutions Activity*
- d) The subfield *EU as a Global Actor* is made up of the following (2) types: *Global Politics of the EU and Europe in the Global Society*
- e) The subfield *EU and Political Analysis of Central and Eastern European Countries* comprises courses belonging to the following (4) types: *Generalities; Political and Democratic System in CEEC; Eastern Enlargement; Transformation of CEEC*
- f) The subfield *The European Economic Policy* is made up of the following (4) types: *European Economic Policy- Generalities; European Economy Policy –Applications; European Environmental Politics; European Media Policy*
- g) We have grouped the courses in the subfield of *The European Social Policy* into the following (5) types: *European Social Policy; European Family Policy; Migration in Europe; From Exclusion to Inclusion; European Labour Market Policy*
- h) The following (2) types belong to the field of *The European Education Policy*: *European system of Education; Vocational Education in Europe*
- i) The subfield on *European Foreign and Security Policy* has been divided into the following (3) types: *European Foreign Policy; European Security Policy; The European Neighbourhood Policy*
- j) The subfield *Governance in the EU* has the following (2) types: *Systems of European Governance and Multi-Level-Governance in the EU*.

C) EU Economics Studies cover 10.2% out of the total number of chartered courses. Analysing the course and specialisation titles, we noticed that we could divide them into three subfields: *European Economy, European Management, and Europe and Global Economy*.

- a) We have grouped the courses in the subfield of *European Economy* into the following (3) types: *European Economy, European Labour Market, and European Monetary Policy*.
- b) The subfield in *European Management* is made up of the following (3) types: *European Management, European Business, and East European Management*.
- c) The subfield in *Europe and the Global Economy* has been divided into the following (2) types: *European Integration and Global Economy and European Marketing*.

D) EU Historical Studies cover 11.8% out of the total number of chartered courses. Analysing the course and specialisation titles, we have noticed that they can be divided into four subfields: *Memory and Europeanisation; History of European Integration; Types of European History; History of Europe*.

- a) The subfield *Memory and Europeanisation* has been divided into the following (2) types: *Historical Foundations of European Law and The Memory and Europeanisation*
- b) The subfield *History of European Integration* comprises courses belonging to the following (2) types: *History of European Integration/ History of European Unification and History of European Institutions*
- c) The subfield *Types of European History* is made up of the following (5) types: *European Cultural History, European Economic History, European Religious History, History of European Urban and Regional Development, and European History of Music*

- d) We have divided the subfield of *History of Europe* into the following (4) types: *Ideas of Europe in History*, *Image of Europe*, *European History*, and *Aspects of Contemporary History in East and South-East*.

E.) EU Interdisciplinary Studies cover 7.7% out of the total number of chartered courses. Analysing the course and specialisation titles, we noticed that we could divide them into four subfields: *European Social Studies*, *European Education Studies*, *European Ethnology*, and *Other Studies about Europe*.

- a) The subfield *European Social Studies* was divided into the following (4) types: *European Social Work*, *Social Structures in Europe*, *European Sociology*, and *European Demography*
- b) The subfield *European Education Studies* has the following (4) types: *Education Systems in Europe*, *Europe as a Topic in Schools*, *Sports in Europe*, and *Vocational Education in Europe*
- c) The subfield *European Ethnology Studies* comprises the following (2) types: *European Ethnology Studies* and *European Multilingualism*.
- d) The subfield *Other Studies about Europe* is made up of the following (2): *European Regional Studies* and *European Religious Studies*

F.) EU Communication and Information Studies cover 3.4% out of the total number of chartered courses. Analysing the course and specialisation titles, we divided them into only two types, considering that there are very few courses. The following types were settled: *European Media Systems* and *Other Forms of EU Communication and Information Studies*.

G.) EU and Comparative Regionalism Studies cover 5.1% out of the total number of chartered courses. Analysing the course and specialisation titles, we divided them into only two types, considering that there are few courses belonging to the field. The following types were settled: *European Regions* and *European Border Regions*.

H.) EU Intercultural Dialogue Studies cover 2.3% out of the total number of chartered courses. Analysing the course and specialisation titles, we divided them into three types only, considering that there are few courses belonging to this field. The following types have been settled: *Islam in Europe*, *Europeanisation and Cultural Diversity* and *European Dialogue with Other Geo-cultural Areas*.

I. EU International Relations and Diplomacy Studies cover 1.9% out of the total number of chartered courses. Analysing the course and specialisation titles, we divided them into two types, considering that there are few courses belonging to the field. This field comprises the following types: *The EU in International Relations* and *International Partners of EU*.

In conclusion, we can say that although the objectivity degree of our initiative seems to be doubted if we consider the relevance of certain courses as belonging to the EU Studies curriculum, or the fact that more often than not course titles are at the edge between two or several fields, we can make judgements showing the development of European Studies on the level of the twelve EU Member States.

On the one hand, we can notice the concern with a core curriculum envisaged as an item list considered essential for the knowledge in the field of European Studies as an objective, topic and teaching methods list. Achieving a core curriculum is needed to provide universities with an education tool for job opportunities at the level of local, regional, national, European, and international interactions.

On the other hand, we can notice that a core curriculum is not necessary, but a wide diversity framework for debate, theoretical reflection and new approaches for European development. If on BA level a joint curriculum on a European level might be possible, this is almost impossible when referring to MA level, considering the wide range of opportunities and challenges to which this level of studies must respond.





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LINKING EDUCATIONAL RESEARCH TO INSTITUTIONAL MEASURES OF QUALITY ENHANCEMENT: A PORTUGUESE PROJECT

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Abstract

At the University of Aveiro (UA), an institutional initiative is taking place for assessing and monitoring the quality of teaching and learning in Higher Education. The Quality Assurance System (QAS) of the teaching and learning process at the UA emerges as extremely important, not only to regulate the teaching and learning process, following the quality assurance orientations at a national and international level, but also to reflect and share teaching practices that enhance the whole academic experience, both from the students, the teachers, and researchers' perspective. The authors explore the design of the model and a research study that aims to integrate the perspectives of students and teachers, through the analysis of quantitative and qualitative data - gathered in the evaluation model, so that: (i) intervention strategies/activities can be conceptualised for coping with the identified problems; (ii) a set of guidelines can be designed for the improvement of the evaluation model and associated instruments, and (iii) the QAS model and its results can be discussed with academia in terms of strengths and weaknesses aiming

to engage them in the process of monitoring. This study is an effort to conciliate the educational research carried out by members of the Laboratory for the Evaluation of Educational Quality and the institutional framework for quality assurance.

Key words: quality assurance systems, evaluation and monitoring, teaching and learning.

1. Introduction

Scientific research in education brings a strong input for the enhancement of the increasingly complex and performance-driven education system [1]. In this case in particular, the authors believe that research-based evidence can foster the Quality Assurance System of Teaching and Learning (QAS-TL) by enriching the understanding of the data collection, the (re)design of the evaluation model, and the engagement/commitment of academia with the overall process. With this objective in mind, a 'partnership' was established between the Rectorate of the University of Aveiro in Portugal, more specifically with the Vice-Rector for Quality Assurance and a group of researchers from the Laboratory for the Evaluation of Educational Research. The main objective of the study is to analyse the qualitative and quantitative data gathered through the QAS, to foster the engagement of students and teachers in the process, and to create/disseminate knowledge that can be useful for the discussion of evaluation and monitoring processes in Higher Education, and the achievement of quality standards in teaching and learning. This paper is divided in five sections: (i) study purpose, (ii) setting the scene – the design of the QAS-TL, (iii) methodology, (iv) results, and (v) final considerations.

2. Study purpose

Since the signature of the Bologna Declaration in 1999, certain issues, such as the quality of teaching, learning, assessment and research are acquiring a bigger relevance at Higher Education (HE) settings in Europe in general, and in Portugal in particular. Quality assurance agencies across Europe are concerned with the process of monitoring and evaluation (M&E) in HE in what comes to performance indicators and accountability [2] and to the regulation of the overall process. The three major concerns of the systemic M&E process, as pointed out by Scheerens, Glas & Thomas [3] reflect the previous concerns: (i) to formally regulate desired levels of quality of educational outcomes and provisions; (ii) to hold educational service providers accountable, and (iii) to support on-going improvement in education. The QAS-TL designed and implemented at the University of Aveiro has in mind these three concerns that we assume as three interconnected dimensions, representing an effort to conciliate quality assurance with quality enhancement.

The study presented in this paper is going to focus its attention on the last dimension, the one associated with quality enhancement. We believe that the M&E process has the ultimate goal of improving the education provided and of engaging academia in such a way that interventions and changes can be proposed to enhance teaching and learning, thus solving the identified problems and, above all, improving the students' learning experience [4, 5].

The study hereby described follows the assumption that 'learning from evaluation is central in the concept of formative evaluation' [3, p.3] and that we can all learn with each other [6] in the process of (re)construction our teaching and learning experiences. The study ultimate goal is to promote the quality of teaching and learning at the University of Aveiro, by increasing the level of engagement/commitment of teachers and students and to contribute to the reflection on the efficiency of the QAS-TL. This paper presents the preliminary results regarding the analysis of qualitative data aiming to integrate the perspectives of students and teachers (through the

analysis of open reports) so we can understand if the identified problems and cases of good practice are correlated with the views of teachers and students, and if the improvement plans (developed by teachers) are in line with the identified problems.

These first outputs will be correlated (in a second phase of the study) with quantitative data from students' questionnaires so we can discuss the results with academia and proceed with (i) clarifying some aspects of the model (in terms of strengths and weaknesses), (ii) defining a set of guidelines for the improvement of the model and its associated instruments and (iii) conceptualising strategies/activities for coping with the identified problems. This process will occur over the next three years so that the stability and persistence of the identified aspects can be monitored, as for example the problematic situations pointed out by teachers and students throughout the time.

Quality Assurance Systems that do not follow these guidelines and mind-set can easily become obsolete, since they will just produce 'empty' judgments and values that will serve no other purpose than accountability. The outcomes of properly developed monitoring and evaluation systems are therefore essential for the development of an understanding of the educational system set in place, both from a bottom-up and from a top-down perspective.

3. Setting the scene

The University of Aveiro (UA) was founded in 1973 and became a Portuguese Public Foundation in 2009. Its structure includes fifteen departments, two autonomous sections and four polytechnic schools, each dedicated to different academic domains. The educational offer includes post-secondary, graduate and postgraduate programs. The UA is concerned with the labour market demands and focuses on teaching, learning and research. At the UA, nowadays, there are about 14.500 enrolled students, and 1.500 teachers and researchers.

Since 1997 that the UA managing structure includes a Vice-Rector responsible for the internal quality assurance and, in 1999, the Office of Quality, Evaluation and Procedures (GAQAP – 'Gabinete de Qualidade, Avaliação e Procedimentos') was created. The mission and specific objectives are to promote and assure quality, continuously evaluating and defining the standards of procedures and their practical implementation in accordance with the European and Portuguese guidelines for quality assurance.

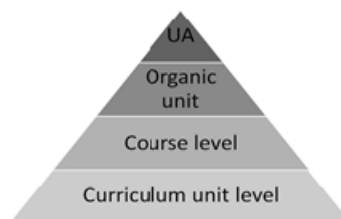


Figure 1. Quality Assurance System at different levels

The QAS is perceived in 4 levels (Figure 1) with a connection to the teachers' assessment model. The teachers' assessment exercise will take place in the next academic year. The QAS-TL, explored in this paper, refers to the bottom level – the curriculum unit level. An evaluation model is now being designed to evaluate the quality of the Courses – Course level. Since each of these dimensions cannot be individually understood, the ultimate goal is to articulate each dimension with the information collected from the teachers' assessment of teaching and

research quality system – a model that is being conceptualized by the Rectorate and ready for testing in the next academic year.

3.1. Design of the QAS-TL

The QAS-TL was designed in 2008 by a team of four teachers and three technical staff coordinated by the Vice-Rector, and applied for the first time, as a pilot study, in the same year. The experience of other Quality Assurance Systems was taken into account, namely the one from the Instituto Superior Técnico (IST - the School of Engineering of the Technical University of Lisbon, Portugal).

The QAS-TL involves four phases: (i) Diagnosis; (ii) Improvement; (iii) Quality Assurance, and (iv) Supervision. All the actors involved in the teaching and learning process should be heard: students, teachers, Course coordinators, and student representatives of each program.

The first phase – Diagnosis – begins with the evaluation of Curricular Units (CUs) and takes place in a period of 3 weeks. In order to develop a more complete diagnosis, the results take into account information gathered in three moments. Firstly, all students answer an online survey at the end of each semester.

Secondly, student representatives and program coordinators meet with the objective of discussing the weak and strong points, and identify good practice examples, in each program. Thereafter, if the group identifies 'problematic situations', they must write a report that obeys a pre-defined structured.

Finally, other statistical information available through the students' individual and institutional platform (PACO) is also taken into consideration (mainly performance indicators).

In the second phase – Improvement – all teachers involved in each CU are asked to write an online report, in which the fundamentals of their teaching and learning practice strategy are described. If they wish to do so, teachers can also write a self-evaluation report of their teaching practice. The whole 'Improvement' phase takes place in 4 weeks.

The coordinating teachers of the different CUs are then asked to write a summary report, based on the diagnosis phase and on the teachers' individual reports, aiming to produce a global analysis of the situation. In the cases identified as 'problematic situations', the coordinating teacher of the CU is requested to develop an Improvement Plan (IP). This plan needs to include corrective actions and to identify the necessary resources to put them in practice. Finally, this IP has to be analysed by the Program Commission that writes another report, in which adjustments to the final version of the IPs may be suggested.

The third phase – Quality Assurance – involves the analysis of all CUs reports in a given Department by a nominated Analysis Commission, which includes teachers and students. The Commission must produce a global report that should contain an executive summary, the general trends of the Department, based on the analysis of the reports produced by the coordinating teachers of the CUs. This phase runs in three weeks.

The same document should also consolidate the IPs addressing the 'problematic situations', the cases of teaching good practices, and the resources and adjustments needed to implement the 'Improvement Plan'. This report is then submitted to the Department Head for approval.

Finally, the fourth phase – Supervision – is carried out by the Pedagogical Commission, whose members should act as mediators in the process. Also, this Commission should analyse and disseminate the results. This process is transversal to the other three phases.

4. Methodology

The data presented in this paper is part of the major study described earlier, in the introductory sections and already discussed in the 'Fifth European Quality Assurance Forum' [7]. The objective is to analyse students' and coordinating teachers' reports (qualitative data gathered in phase one and two of the QAS-TL) aiming to answer the following research questions:

1. What are the weak and strong points referred by students and teachers regarding the teaching and learning process taking place in the curricular units?
2. Do teachers, in their reports, corroborate the main problems referred by students?
3. Are the improvement plans, proposed by teachers in phase two of the QAS-TL, addressing the weak points referred by students?
4. What are the convergence and divergence points?

For conducting this study a representative sample (random selection $n=320$) of the total number of Curricular Units (CUs) of the first and second cycle of the UA's post-Bologna programs was selected. This sample has a confidence level of 95% (5% maximum error).

The chosen CUs were clustered by fields of knowledge (engineering, natural and exact sciences, health sciences, social and human sciences, arts and humanities), by number of registered students (large, medium and small) and by failure rates (large, medium and small). These clusters will help to understand the data findings and frame the identified problematic situations.

The data analysis is being carried out using the NVivo 9 software for qualitative data analysis, and in this first stage the results will follow a descriptive analysis with crosstabs between teachers' and students' data coding.

5. Results

In this section, we present the first approach to the categories trees regarding the dimensions "weak points" and "strong points", as referred by the students and coordinating teachers' reports. This first version of the categories' trees was developed and validated by the four researcher engaged in the study as a result of the analysis of 78 reports (42 for the students and 36 for the teachers), out of a sample of 320. The analysis follows an open coding strategy, in which the categories emerge from the data itself. The categories and associated categories are continuous updated, refined and validated.

Figure 2 represents the dimension 'strong points'. This dimension is associated with the students' point of view in what regards the strong points of teaching and learning of a specific CU. The category to which more references are attributed is the 'teaching, learning & assessment' category. This category refers to the description of teaching, learning and assessment strategies that contribute to the improvement of the student learning process, ranging from the way in which contents are explained to the teachers' ability to motivate the students, the support materials made available or the relevance of the proposed activities. There is also a high number of 'no answers' to the dimension of the strong points (24 CUs in a total of

42) which means that half of the students' reports (one per Course and CUs) do not mention any strong points.

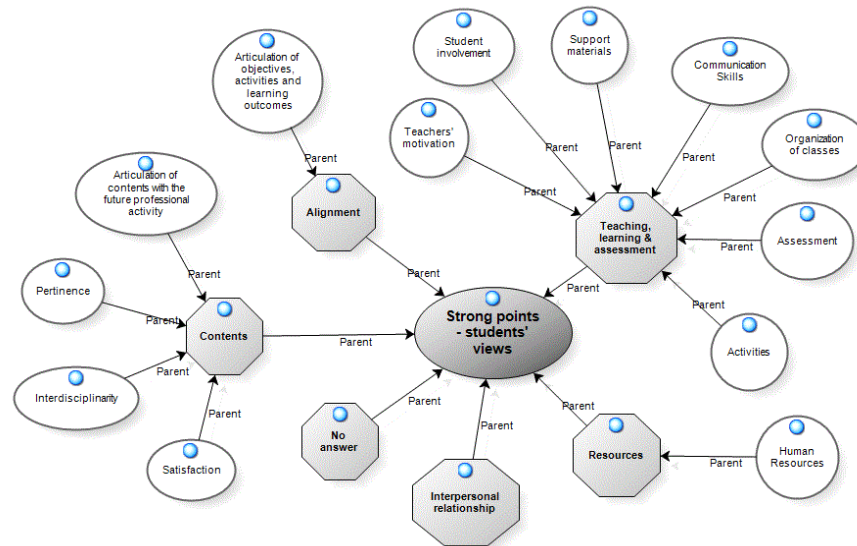


Figure 2. Tree for the categories and sub-categories of the dimension 'strong points' – student views.

From the coordinating teachers point of view (Figure 3) we can conclude that the strongest categories relates to the curriculum alignment and assessment. Teachers attribute the success in their UCs to factors associated to the teaching, learning and assessment, which is in line with the strongest category 'teaching, learning & assessment' referred by students.

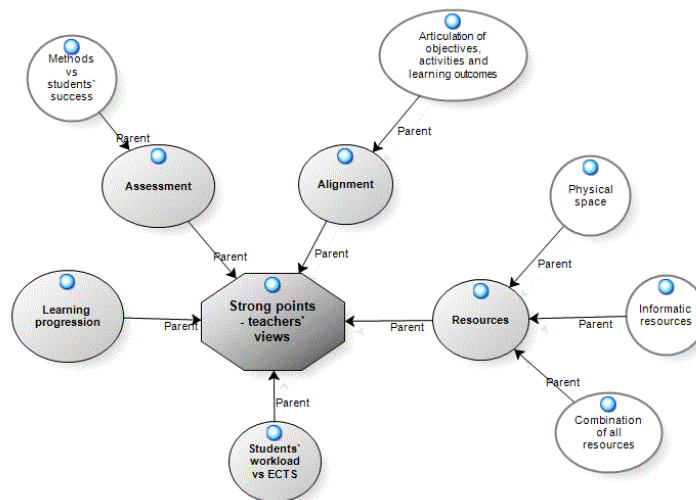


Figure 3. Tree for the categories and sub-categories of the dimension 'strong points' – coordinating teachers' views.

Figure 4 represents the categories and sub-categories that emerge from the weak points of the students' reports. This dimension is more complex than the previous one, because students point out more weaknesses and go deeper in their justifications. The strongest categories are

'alignment' and 'teaching, learning & assessment'. We briefly present these two categories descriptions:

- 'Alignment' refers to the description of misalignments between CUs objectives, assessment activities and T&L activities, and also between the different components of the course (T, TP and Labs).
- 'Teaching, learning & assessment' refers to the description of less adequate T&L and assessment strategies, including difficulties in the ability to communicate within the classroom context. The 'assessment' sub-category refers to the description of assessment schemes and activities viewed as inadequate by the students, ranging from constructive misalignment to the assessment criteria or the associated logistics.

In the alignment category, students refer some problems in the alignment of the curriculum ('constructive alignment'), articulation of contents in the classes, misalignment between the T and TP components, misalignment between proposed exercises and objectives, and misalignment between the exercises proposed within the classroom context and those used for assessment purposes.

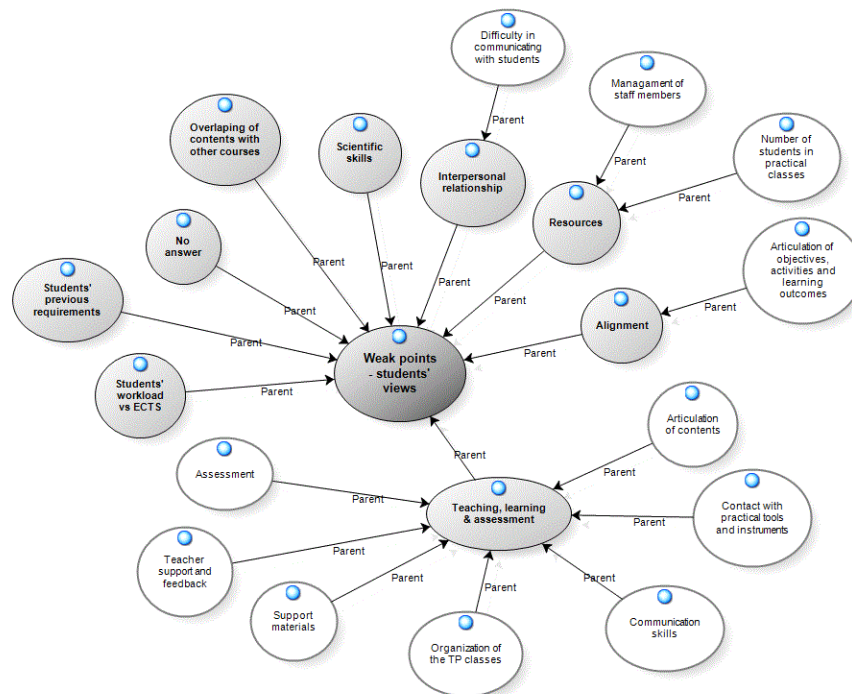


Figure 4. Tree for the categories and sub-categories of the dimension 'weak points' – student views.

For the 'teaching, learning & assessment' category students point out as problematic situations the assessment (criteria, exam structure, overlapping of assessment activities and type), the teacher support and feedback, the student-teacher communication, among others. The 'no answers' category was lower compared to the strong points: 11 entrances.

Figure 5 represent teachers' views of the weak points. The strongest categories are associated with the students and the resources. Teachers attribute the level of students' failure rates to their lack of interest, study habits, previous knowledge requirements and students' workload. The

number of students in class associated to the category 'resources' is often referred as a problematic issue.

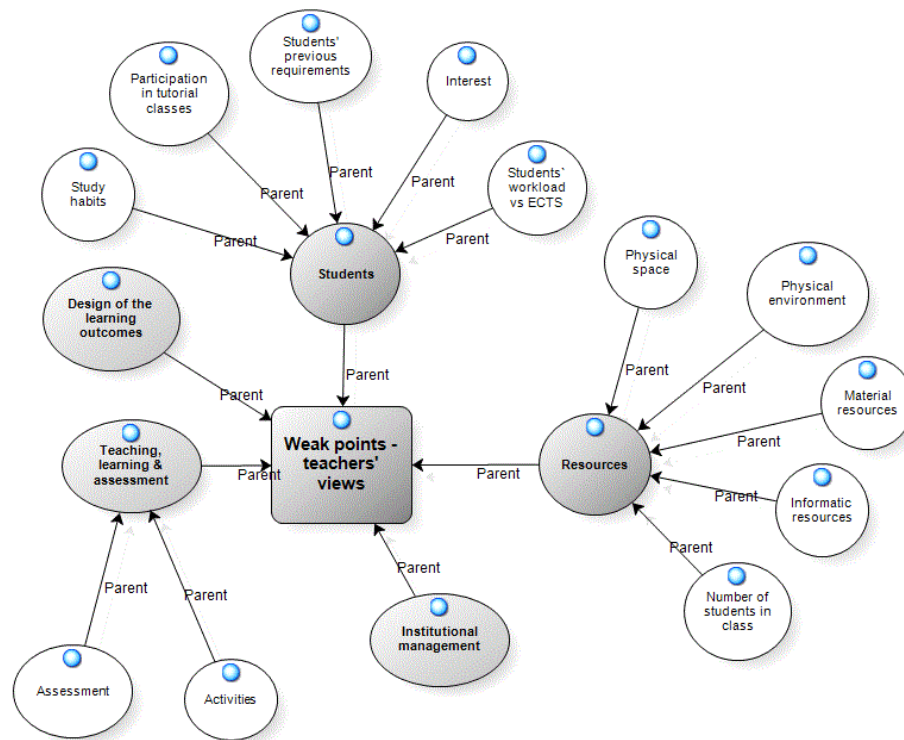


Figure 5. Tree for the categories and sub-categories of the dimension 'weak points' – coordinating teachers' views.

6. Final considerations

In a preliminary overview of the data analysis, students tend to concentrate on the weaknesses of the delivery they are exposed to, pointing out what they perceive as aspects which are in need of improvement. The fact that half of the students' reports do not mention strong points may need further investigation.

Coordinating teachers, on the other hand, tend to focus on the strong points of their delivery, pointing out their efforts to promote meaningful T&L and assessment activities. The relative coincidence of views between teachers and students as to what are the strong points of the deliveries is also worth mentioning. As for the weak points, teachers show a tendency to justify the less positive results in their CUs to the available resources and program organization, and to the overall students' attitude and lack of preparation, thus reflecting a somewhat expectable trend.

Exploring the common grounds in the two perspectives hereby discussed, as well as the contrasting aspects coming out of the analysis, will be the obvious focus of the forthcoming investigation, in an attempt to identify aspects in need of direct action and thus foster the improvement of the quality of the teaching and learning processes at the UA.

On the long run, over the next 3 years, this research project will also investigate the evolution (in terms of persistence) of the most significant factors, as identified by both teachers and students,

with the purpose of designing intervention strategies aimed at promoting the students' academic success. One of the intervention strategies to take place in October/September 2011 will be the organisation of seminars (i) to discuss some of the data findings, (ii) to explain to Course coordinators and students' representatives the concepts inherent to each question of the reports and, (iii) to discuss how the understanding of the questions and quality of the answers (e.g. detail, clarity in the explanation of the situations) are important for the data analyses. These two latter aspects are essential for creating a committed and engaged academic community in the evaluation process, helping the university to understand the needs, cases of good practice, and problematic situations. Also, the assessment exercise allows the identification of CUs that are considered cases of good practice and that can be used as examples to other CUs from different departments. This 'microscopic' analysis can work as case-studies allowing the institution to suggest top-down strategies/guidelines to improve the teaching and learning process and consequently the students' academic success.

When addressing the arguments presented in this study, one becomes aware of the fact that it is inevitable to evaluate the quality of teaching and learning and to proceed to well-structured and supported quality assurance systems, properly grounded on theory and practice:

Evaluation is no stranger to higher education. (...) it is an essential component in the advancement of scientific knowledge (...) is an integral part of the dynamic of higher education and its regulation. It is both summative and decision-oriented and formative and development-oriented [8, pp.291-292].

In a globalized world, in which mass HE has been replacing the former somewhat elitist systems, the need to guarantee the quality of the provided education and to continuously improve the institutional responses to the learning needs of the changing student population becomes central. Within the European context, the Bologna Process has been setting the scene for major developments regarding quality assurance and accreditation (in a dialectic relationship in which a proper balance is sometimes hard to find).

Hopefully, the project hereby presented will also serve as the basis for future collaborations with other Higher Education institutions, both from Portugal and elsewhere.

Acknowledgement

The authors wish to thank to the Research Centre CIDTFF for funding this research and to the Rectorate for giving the necessary support for the database construction, and to facilitate this research with the necessary software equipment.

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CRITERIA AND PROCEDURES FOR OBTAINING THE EURO-INF QUALITY LABEL

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Abstract

The Euro-Inf Framework is a set of Standards and Accreditation Criteria for Bachelors and Masters degree programmes in informatics, owned and administered by EQANIE, the European Quality Assurance Network for Informatics Education. The key principle of Euro-Inf accreditation is that all graduates of a Euro-Inf accredited degree are expected to have undertaken a defined set of learning activities and to have achieved a defined set of broadly designed learning outcomes. This paper describes the accreditation process operated by EQANIE, from an initial application by a Higher Education Institution through to the final decision. It gives examples of the assessment criteria and the expected learning outcomes for first cycle (bachelor) degree programmes. Finally it describes the current status of EQANIE activity.

Key words: Euro-Inf, informatics degrees, quality assurance, accreditation criteria.

1. The Euro-Inf Framework

The Euro-Inf Framework [1] is a set of Standards and Accreditation Criteria for Bachelors and Masters degree programmes in informatics. It was developed during the Euro-Inf Project (2006-2008). As a direct result of the project, the European Quality Assurance Network for Informatics Education (EQANIE) was founded in 2009. EQANIE is a non-profit association and holds full ownership of the Euro-Inf Framework Standards and Accreditation Criteria.

The Framework is intended to provide information on study programmes across Europe that will facilitate mutual transnational recognition of qualifications and enhance the quality and transparency of educational programmes in informatics by encouraging the spread of good practice. An additional aim is to increase the mobility of students by ensuring comparability of provision between their home institution and ones they might visit.

The Euro-Inf Framework represents a quality threshold; those degree programmes which have demonstrated compliance with its Standards and Criteria are awarded the Euro-Inf Bachelor / Euro-Inf Master Label. The key principle of Euro-Inf accreditation is that all graduates of a Euro-Inf accredited degree are expected to have undertaken a defined set of learning activities and to have achieved a defined set of broadly designed learning outcomes.

2. The Accreditation Procedure

The accreditation procedure is set out in full in the EQANIE Procedural Principles for the Accreditation of Degree Programmes document [2].

2.1. Making an Application

An Institution wishing to have one or more of its degrees accredited by EQANIE begins by submitting an informal application [3] to the EQANIE Secretariat containing relevant preliminary information. The Secretariat and members of the EQANIE Accreditation Committee evaluate the application to determine the number of auditors required. The Euro-Inf label applies to an individual degree programme but the accreditation procedure allows for a number of degrees to be considered together as a cluster. A cluster procedure may require more auditors than a single degree and may require a longer visit. A proposed time scale for the visit is prepared and sent to the Institution, together with a statement of the costs that will be involved. At the same time, the Institution is asked to provide a written acceptance of the proposal, which, when received by EQANIE, constitutes the formal application.

2.2. The Assessment Process

The assessment process involves two major components: the documentation provided by the Institution and a visit to the Institution by an audit team (Section 3). The main documents required by EQANIE are a self-assessment report compiled by the Institution in accordance with the Euro-Inf guidelines and a matrix showing how the modules that make up each degree programme being considered satisfy the expected Learning Outcomes requirements in the Euro-Inf Framework [4]. There will also be supporting documents including the module descriptors for the courses, short CV's of all the academic staff involved in teaching the degree(s), the Institution's degree regulations, etc.

The audit team, selected by the Secretariat in consultation with members of the Accreditation Committee, reads the documentation prior to the visit and identifies issues that will require clarification during the visit. For a single degree, the visit normally takes between 1½ and 2 days; a cluster visit may be longer. After the visit, the Secretariat prepares a report, in consultation with the audit team, and sends this to the Institution to be checked for factual accuracy.

2.3. The Decision Process

Once the Institution has returned the report to EQANIE, the auditors submit their final assessment and recommended decision to the Accreditation Committee. The Accreditation Committee makes its decision regarding the accreditation and the Institution is informed of this decision. The final version of the accreditation report is then sent to the Institution and, in the case of a positive decision, the degree programme is added to the list of accredited degrees maintained on the EQANIE website.

2.4. Possible Outcomes

There is a range of possible outcomes at the end of the accreditation process:

- (I) **Unconditional accreditation** for the full 5-year accreditation period
- (II) **Conditional accreditation** - if specific conditions are met by a set deadline (normally 3 months), full accreditation will be granted
- (III) **Suspension** - the procedure is suspended because major requirements are not being fulfilled but are likely to be so within a 6 - 18 month time frame.
- (IV) **Unconditional refusal** - major requirements are not being fulfilled and are unlikely to be so within the foreseeable future

3. The Audit Team

The audit team for a single accreditation usually comprises two or three academic faculty members and an industry representative. The team is accompanied on the visit by a member of the EQANIE secretariat.

The auditors are expected to have proven specialist expertise and, desirably, accreditation or evaluation experience together with international experience and experience of HE administration. In addition, prior participation in training opportunities on accreditation issues can be valuable.

Academic auditors are additionally expected to have proven activity in one of the disciplines of informatics (Computer Science, Computer Engineering, Information Systems, Information Technology, and Software Engineering, etc.), while the industrial auditors are expected to have experience of employing graduates of higher education informatics degree programmes in the workplace.

Naturally, to avoid conflicts of interest, audit team members must not have any dependency relationship or be involved in any joint activity with the Institution being audited.

4. Visit Schedule

Table 1. Typical accreditation 1½ day visit schedule

Day 1	
17.00	Preliminary meeting of the audit team
Day 2	
08.30	Opening meeting with programme coordinators and institution administrators
09.15	Break, internal discussion
09.30	Meeting with programme coordinators
11.00	Break, internal discussion
11.15	Meeting with students
12.15	Lunch, internal discussion

13.00	Perusal of exam papers, project work, final theses
13.45	Meeting with degree programme teaching staff
14.45	Tour of teaching facilities
15.45	Final internal discussions
16.30	Closing meeting with programme coordinators
17.00	Close

5. Assessment Criteria

5.1. Definition of objectives / prior and final qualifications

This criterion is concerned with the educational objectives of each degree programme in terms of the learning outcomes to be attained by students during their course of study. The assessment focusses on the implementation of the programme objectives as supported by the learning outcomes of the individual modules. Consideration is also given to any entry requirements at enrolment.

5.2. Inputs

This criterion is concerned with the resources invested by the Institution in order to implement the degree programme: academic and support staff, teaching and learning facilities, *etc.*

5.3. Outcome assessment / quality control

This criterion is concerned with the methods of assessment used in the degree programme and with the operation of effective feedback mechanisms within the Institution's internal quality assurance process together with their contribution to the ongoing improvement of the degree programme.

6. Expected Programme Outcomes

The expected programme outcomes identify quality standards for competences, skills and knowledge that graduates of an accredited degree should have achieved in order to practise as professionals or undertake further study. The Framework identifies four categories of outcomes:

- (I) Underlying Conceptual Basis for Informatics
- (II) Analysis, Design and Implementation
- (III) Technological and Methodological Skills
- (IV) Other Professional Competences

Programme outcomes will vary in extent and intensity between First and Second Cycle degrees. The next section gives examples of the outcomes expected in a First Cycle degree.

6.1. First Cycle Degree Outcomes

Shown below are some examples of the capabilities that graduates of a First Cycle degree are expected to have demonstrated. The full set, and the expected outcomes from Second Cycle degrees are given in [1].

Underlying Conceptual Basis for Informatics

- (I) knowledge and understanding of the key aspects and concepts of their informatics discipline, including some at the forefront
- (II) an awareness of the wider spectrum of informatics disciplines

Analysis, Design and Implementation

- (I) understanding the complexity of informatics problems and the feasibility of their solution
- (II) ability to apply their knowledge and understanding to the design of hardware and/or software which meets specified requirements
- (III) selection and usage of appropriate process models and programming environments for projects involving traditional applications as well as emerging application areas
- (IV) creation and thorough testing of software systems

Technological and Methodological Skills

- (I) an ability to undertake literature searches and to use data bases and other sources of information
- (II) recognition of the need for, and engagement in, life-long learning

Other Professional Competences

- (I) an ability to complete tasks from different application areas, taking into account technical, economic and social context
- (II) awareness of project management and business practices, e.g. risk and change management; understanding their limitations
- (III) an ability to function effectively as an individual and in a team
- (IV) an ability to communicate effectively

7. Current Status

EQANIE has begun a programme of visits to higher education institutions that have requested accreditation. Two visits have been completed and several more are at the planning stage. In addition, ASIIN has been accredited as an agent of EQANIE and has started to award the Euro-Inf Bachelor and Master Label to higher education institutions in the context of its national accreditation processes.

Acknowledgement

The Euro-Inf Framework represents the work of many people from several European countries. Apart from the members of the Euro-Inf project consortium, which drafted the first version of the Framework and was coordinated by the German Accreditation Agency ASIIN, the document is the result of the feedback from related networks and individuals representing them, among others the British Computer Society, the European Conference of Informatics Deans, "Informatics Europe", the German Conference of Informatics Deans at Universities and at Universities of Applied Sciences and the German Informatics Society as well as from 10 European partner HEIs where the Euro-Inf Framework was tested in 2007 and 2008.

References

The following documents can be accessed from the EQANIE website at www.eqanie.eu/pages/quality-label.php

- [1] Euro-Inf Framework Standards and Accreditation Criteria.
- [2] EQANIE Procedural Principles for the Accreditation of Degree Programmes.
- [3] Form for requesting the Euro-Inf Quality Label.
- [4] Model Euro-Inf Learning Outcomes Matrix.



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CORPORATE PLANNING SERVICES AT AN INSTITUTION OF HIGHER EDUCATION – HAAGA-HELIA UNIVERSITY OF APPLIED SCIENCES CASE-STUDY

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Abstract

HAAGA-HELIA University of Applied Sciences is a private institution (with 600 employees) authorized by the Finnish government. HAAGA-HELIA prepares professionals for business and services. It offers for students (approximately 10 000) a versatile choice of studies in Finnish, Swedish and English. Fields of education are business, hotel, restaurant and tourism management, information technology, journalism, management assistant training, sports management and vocational teacher education. The authorization by the Finnish government determines the educational mission, fields of education, student numbers and location. HAAGA-HELIA has autonomy in its internal affairs. The development plan for education and research, adopted by the government every four years, outlines education and research policy for the years to come. In addition to legislation, the Government Programme and the development plan, provision is governed by performance agreements. Corporate Planning Services is an internal service activity formed to support management. In practice this means analyses of information coming from three basic streams: information from The Finnish government and other authorities, implementation data from HAAGA-HELIA's own databases and external information. Based on expertise these information flows will be analyzed and simplified in focused form to help the decision makers in everyday management and strategic planning.

Key words: Corporate planning services, performance management, development discussions.

1. Corporate Planning Services at HAAGA-HELIA University of Applied Sciences

The Finnish higher education system is a dual model formed by two complementary sectors universities and universities of applied sciences. The mission of universities is to conduct scientific research and provide instruction and postgraduate education based on it. Universities of applied sciences train professionals in response to labour market needs and conduct

research and development which supports instruction and promotes regional development in particular.

HAAGA-HELIA University of Applied Sciences (UAS) is a private institution authorized by the Finnish government. Through education, research and development, HAAGA-HELIA UAS prepares professionals for business and services. It offers for students a versatile choice of studies in Finnish, Swedish and English. Approximately 10 000 students and 600 employees at HAAGA-HELIA UAS base their activities on highly advanced national and international expertise. Fields of education are business, hotel, restaurant and tourism management, information technology, journalism, management assistant training, sports management and vocational teacher education. The authorization by the Finnish government determines the educational mission, fields of education, student numbers and location. HAAGA-HELIA UAS has autonomy in its internal affairs. The development plan for education and research, adopted by the government every four years, outlines education and research policy for the years to come. In addition to legislation, the Government Programme and the development plan, provision for HAAGA-HELIA UAS is governed by performance agreement. Corporate Planning Services is an internal service activity formed to support management. It is also responsible for the negotiation process with the Ministry of Education and Culture when HAAGA-HELIA UAS and its maintaining organization conclude three-year agreement, in which we agree on targets results and their monitoring and on major national development projects. In practice, this means analyses of information coming from three basic streams: information from The Finnish government and other authorities, implementation data from HAAGA-HELIA's own databases and external information. Based on expertise these information flows will be analyzed and simplified in focused form to help the decision makers in everyday management and strategic planning.

1.1. From Strategy to Implementation Plan

HAAGA-HELIA's mission is to educate experts with customer service, strong sales and entrepreneurial skills. Our R&D&I activities focus on innovative products, services and business operations for the benefit of business and society. HAAGA-HELIA's vision is to be a leading, internationally growing, University of Applied Sciences. We offer superior quality services for the success of students, businesses and workplace communities. Our value foundation is "we work as a leading team for regeneration – promoting the success of responsible business" and our economic foundation is "our operations are sustainable and profitable".

HAAGA-HELIA's strategy is based on five sub strategies

- Pedagogical strategy (Learning together with working life)
- Research, development and innovation strategy (Creating innovative new business activities)
- Service, sales and entrepreneurship strategy (Reshaping services and sales)
- International strategy (Improving competitiveness with chosen partners)
- Competencies strategy (Building competencies to meet future needs).

HAAGA-HELIA has published its quality policy paper which tells the basic lines of how quality work is understood at HAAGA-HELIA. Description of quality assurance system tells how the quality work is organized in practice. Quality policy is based on the HAAGA HELIA's vision, mission and values. The instruments of the quality assurance system are presented in a separate process description named Assessment Systems. In addition, all the key instruments have their own process descriptions.

HAAGA-HELIA updates its strategy every third year. Corporate Planning Services take part in the analysis process by which we collect information out of our operational environment. We believe that we can learn a great deal about what may happen in the future by looking systematically at what is actually happening now. The key thing to watch is not events (sudden development or one-day occurrences) but trends (long-term ongoing shifts in such things as population, technology, and governmental systems). We focus on general trends having an influence in universities of applied sciences and education especially on our own educational fields. The other sector to be analyzed is Helsinki metropolis area and foresee changes there. Based on the results of the analysis process we form three or four scenarios and list their main influence on higher level education. After that we choose the scenario we mostly believe in, or a combination of those. Secondly, we analyze our competitors and try to forecast their profiles in chosen scenario. These competitors are checked from all our working sectors, education, R&D&I and in updating training.

Besides on looking forward we dissect our own performance against the Government Programme and the development plan, performance agreement and feedback from the Ministry of Education and Culture as well as against the strategy we have had for the expired three years.

The next step is to check what kind of changes should be made in our strategy to face challenges of incoming years. Each sub strategy has its own vision with named objectives. Actions and indicators for all the following three years are written for each objective. These long term actions are opened into task-level in annual plan of actions. The indicators are set at personal level in personal scorecards and the goals are set in development discussions held twice a year with the managers and once a year with other staff members.

VISION 2015	STRATEGY	CUSTOMER impact	ACTIONS AND PROCESSES performance and functioning	DEVELOPMENT regeneration	FINANCES resources management
HAAGA-HELIA is a leading and internationally growing university of applied sciences. We offer superior services for the success of students, businesses and workplace communities.	Pedagogical strategy Learning in cooperation with private and public sector organisations	Quality education Overall course evaluation (course feedback)	Counselling and graduation Course completion, %	Investigative and development-oriented learning: student orientation and focus on real-life needs as the prevailing practice RDI course credits (no. of credits) AHOT completion process included in course descriptions	
	Research, development and innovation strategy Business regeneration		Research and development activities Publications and articles (no.) RDI hours (otso)		
	Service, sales and entrepreneurship strategy Service and sales innovator			Fee-based services Acting as a trainer in continuing education (hours)	
	International strategy Improving competitiveness with selected partners		International activity Participation in teacher exchange/international projects		
	Competencies strategy Anticipating future competencies required in working life	Our competencies in serving businesses and other organisations are up-to-date Work period at a company or other organisation	Sharing competencies Publicly-documented courses 100%	International contacts in my own courses Qualitative estimate Taking language exam for teaching in English	

Figure 1. Example of a personal scorecard at HAAGA-HELIA, teacher

1.2. From Plan to Implementation and Follow-up

Performance management and follow-up work in HAAGA-HELIA are organized in a systematic way monitoring both long-term and short term achievements. Indicators/data come from several operational application software e.g. student administration system, financial administration applications and HR application. Different types of feedback systems collect qualitative information from our performances. According to teaching it means course feedback, from the whole degree programmes graduation feedback and according to long term impact of education it means feedback from the alumnus. In addition we collect regularly feedback from our internal and external stakeholders. Twice a year this quantitative and qualitative information are summarized for the managers and teachers.

Corporate Planning Services analyze the information and summarize it in proper form for different managerial purposes. Summaries are published in HAAGA-HELIA's intranet. The follow-up process at personal level lean on development discussions. The development discussion is a confidential one-to-one discussion between a staff member and her/his superior. During the discussion every staff member review her/his own job profile and personal development objectives, how to develop them, as well as general coping and wellbeing at the workplace. After discussions decisions are made how we develop competencies and promote cooperation. Before personal development discussions the superior can plan the future season and the objectives together with his/her group. In the planning session the group assess how well targets for the previous year were met. The previous year's scorecard, development plan and analyzes made by Corporate Planning Services are used as background material. Each staff member prepare a proposal for her/his own scorecard (based on scorecard templates) and plan the central objectives of her/his own work and personal development for the following year. The development discussions are also places to give feedback for the superior. The process is the same regardless of the place in organization. Managers in HAAGA-HELIA University of Applied Sciences will do this twice a year with our president, other staff members only once. The second run for the managers is a kick-off for policy and financial plan for the following year. Existing performance groups coordinate their responsibility areas and make decisions on HAAGA-HELIA level. Performance results and new plans are confirmed by HAAGA-HELIA Oy Ab board.

2. Conclusion

Although, this process for strategy creation with 3-year solution action plan reviews cost time and resources it really has a benefit which might be hard to be reached in any other way in a big organization like HAAGA-HELIA University of Applied Sciences. By these reviews and annual action plans which are demerged goals on balance score cards on personal level we confirm that each and everyone in the organization is familiar with the strategy and her/his own role in its implementation.

There are still some challenges to be met. One of those is how to keep the process descriptions on relevant and enough high level. People tend to go so deep that their descriptions are more work instructions than processes. Also, the number of process descriptions seems to be increasing very easily.

Another challenge is based on the fact that development discussions are confidential. Still, these discussions are the main tool to collect actions to implement our competence strategy. Each staff member makes her/his own suggestion for new competencies for herself/himself to be built in the following year. After negotiation these separate actions should be collected to

form an action plan for the competence strategy. With so many superiors we have at HAAGA-HELIA it seems to be difficult to find a way how to report and send the information of educational needs (containing target level) to our human resource department. The role put on human resource department is to act as a catalyst in forming possibilities to build competences.

Although, this kind of management system needs continuous development and open eyes to see improvement needs it really helps the organization to see the common target and to commit to it.





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EMPLOYABILITY: A HOMOGENOUS CONCEPT? INSIGHTS FROM TRACER STUDIES OF THE KAZAKHSTAN INSTITUTE OF MANAGEMENT, ECONOMICS AND STRATEGIC RESEARCH

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Abstract

With acceleration of globalization and the associated internationalization of higher education, the notion of transnational employability of university graduates is gaining the attention of the international scholarly community. Despite of the topicality of the relevant inquiry, the definition of 'employability' is still contested. In this article, the authors suggest refining research of employability by recognizing two dimensions of the term – 'entry-employability' and 'persistence-employability'. The introduction of sub-terms could simplify the definition by narrowing the focus of inquiry and highlighting the responsible agents. The utility of this proposal has been tested by two tracer studies conducted by the Kazakhstan Institute of Management, Economics and Strategic Research.

Key words: Bologna process, employability, alumni, employers, KIMEP.

1. Introduction

The internationalization of higher education, an important global trend in the recent decades, entered a new stage of maturity in 1999. That year, 29 Ministers of Education created the European Higher Education Area (EHEA) by signing the Bologna Declaration. By 2010, 47 countries had joined Bologna process, adhering to the principles of higher education standardization, unification, openness, mobility and international employability. This article will focus its attention on the principle of employability, looking into the ways for its further clarification and applicability to practice.

2. Employability in the global context

Recent decades were marked by a significant acceleration of economic, social and cultural globalization, which, in turn, necessitates the standardization of labor force abilities and skills [1, 2, 3]. Recognizing the major challenges in the international labor market, Bologna signatories identified employability in 2009 Leuven communiqué as one of the key higher education priorities till 2020 [4].

2.1. Employability: a homogenous concept?

Employability, or the ability for employment, is a contested term. Other authors have defined it as the individual capacity to work in a particular occupation [5], to realize potential and move within the labor market [6], or state that employability is the level of mastering of skills, knowledge and qualifications [7]. In 2004, at the official Bologna Seminar in Slovenia, the following definition was accepted: "Employability is a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy" [8]. Although the accepted Bologna definition tries to encompass all aspects of employability concept in one comprehensive statement, its practical application is challenged by its breadth.

In this article, it is suggested to split the term into two sub-terms: entry-employability and persistence-employability. The suggestion is based on the assumption that the reasons to hire a candidate might be different from the reasons to retain an employee. The separation of sub-terms would narrow the focus of inquiry and facilitate the identification of specific features of the two types of employability, highlighting the heterogeneous nature of employability.

2.2. Employability skills

In discussion of various capabilities that help university graduates gain and successfully maintain employment, scholars tend to differentiate between two sets of skills [3, 9, 13-15]:

- 'Hard skills' mainly relate to knowledge of specific facts and data, abilities to write, read, use computer programs. 'Hard skills' can be learnt in a classroom, from a peer or by self-study. They can be measured and objectively assessed.
- 'Soft skills' encompass effective communication, attitude to work, commitment, teamwork, empathy, reliability, willingness to learn. These skills are difficult to measure and gain momentum during networking activities. They can be developed in group projects, team assignments and collective tasks whether in work or study situations. 'Business skills', often regarded as a part of 'soft skills', cover leadership, initiative, decision-making and prioritization, as well as the ability to innovate and take risks. Actual work in a business environment is the most suitable way to develop and refine of these skills.

According to a number of international studies, employers generally tend to appreciate the 'soft' and 'business' skills, putting them among hiring prerequisites more frequently than the 'hard skills' [3, 9, 14]. One of the possible explanations of such a tendency is that employers, who routinely face many well-trained and academically strong job applicants, may regard 'hard skills' as a 'must have' and consider well-developed 'soft skills' as a valuable distinguishing feature, the competitive edge in job hunting.

2.3. Employability agents

As stated in Leuven communiqué, employability is generated by a “close cooperation between governments, higher education institutions, social partners and students” [4], as well as the ultimate beneficiaries – employers. Each of these employability agents plays important and unique role:

- *Governments* set legal frameworks, undertake control and offer support, as well as coordinate international cooperation.
- *Employers* determine the current meaning of employability, help employees to gain these skills, and actually provide employment.
- *Social partners* play a plethora of roles. Trade unions assist employers in re/defining employability. NGOs support those with limited employability chances through advocacy and trainings, as well as financial, technical and psychological aid.
- *Higher education institutions (HEI)* are responsible for the availability and quality of formal education. They foster socially required values, attitudes and communication standards.
- *Students* are the focal actors who acquire, apply and maintain employability skills.

As the article focuses on HEI, the next part will review instruments available on the HEI palette.

2.4. HEI and employability

In a knowledge-based society, HEI serve as the main providers of professional training: they promote ideas, skills and values; identify the cutting-edge directions of research; and eventually provide the labor market with a skilled cadre, and students - with employability. Despite the pivotal role that HEI play, the scope of measures available to them, although extensive, is still limited.

2.4.1. Instruments available to HEI independently

HEI can operate without active involvement of external partners in three main directions:

- *Curricula content* incorporates particular skills and knowledge ('hard skills'), methodology and chosen approaches. Historically, the content of curricula was defined by the internal structure and directions of existing knowledge, while currently the pressure is to streamline it with employers' demands [8-12].
- *Curricula delivery* refers to teaching methods, study requirements and program structure. The use of certain delivery instruments encourages students to develop particular 'soft skills'. For example, the use of team assignments during study promotes abilities to collaborate, mitigate and resolve conflicts and create professional ties [9, 13].
- *Administrative services* create opportunities for the further promotion of the desirable 'soft skills' through extracurricular student activities and include such instruments as the support of student organizations, career services and advising, along with on-campus-work-study arrangements, academic mobility services, and so on [3, 9, 13].

2.4.2. Instruments available to HEI in collaboration with employers and state

As HEI are not the sole agents of employability, close collaboration with employers and the state is highly important and mutually beneficial. Thus, employers' involvement is crucial for up-to-date curriculum development and course design; for the organization of internships, placements, work-integrated-learning opportunities and staff exchanges; as well as for the development of employer-tailored courses and various experimental education schemes that integrate hands-on working experience into the structure of the academic program [9-13]. Governmental support is

instrumental in providing flexible legal basis to allow for the development of innovative study programs and arrangements; the recognition of degrees and qualifications at national and international levels; the creation of incentives to intensify and deepen HEI-employers collaboration; as well as monitoring and the facilitation of quality assurance and standardization mechanisms [9, 13].

A review of employability enhancement instruments available to HEI brings us to the following conclusions. HEI are best placed to provide hard skills; have some opportunities to inculcate soft skills, although employers' collaboration is highly desirable here; while the opportunities to provide hands-on work experience are limited and fully rely on the availability of the state and employers' support and commitment.

3. Employability: insights from KIMEP tracer studies

3.1. KIMEP Tracer studies

The Kazakhstan Institute of Management, Economics and Strategic Research (KIMEP) was created in 1992 by the resolution of the President of Kazakhstan, who timely recognized the strong need for a highly-qualified modern cadre to support the country's developing market economy. KIMEP was the first academic institute in Kazakhstan to introduce business education; establish two-cycle programs; implement a credit-based system and undertake regular and comprehensive institutional research. Since 2005, the Institute carries out tracer studies of its alumni and their employers to learn valuable opinions about KIMEP's contribution to its graduates' professional competencies. The KIMEP Alumni Survey tracks employment patterns of alumni in a year after graduation, while the Employer Survey on KIMEP Alumni collects employers' feedback on alumni's job performance. The surveys are conducted on a voluntary basis over e-mail, through online survey or by phone interviews. Information from the resulting databases is further treated with Excel, SPSS and Access packages. The principle of weighed averages is used in analysis.

The studies allow for the continuous review of KIMEP graduates' employability patterns and contemporary labor market requirements. We will rely on the latest surveys' data [16, 17] to test the hypothesis described in the previous section. For this end, we will first observe employers' and graduates' opinions on skills required for entering employment (entry-employability) and then move on to examining the skills needed to perform successfully in the workplace (persistence-employability). The comparison of entry and persistence skills will allow us to see if there is a need for distinguishing between the two sub-terms. We will also review opportunities available to HEI in securing both types of employability for their graduates.

3.2. Entry-employability

The review and comparison of survey results revealed a discrepancy between the opinions of employers and graduates on the skills that are essential to enter employment. Thus, a year after graduation, alumni indicated that it is the 'hard skills' that were most important in finding a job (Figure 1): a KIMEP diploma and the area of specialization. The second most significant feature refers to the availability of previous work experience: internships, part-time jobs and previous full-time employment. The next set of factors deals with personal connections: family and friends.

As for employers, they name the 'soft skills' of communication and attitude as the number one important factor for getting hired (Table 1). Notably, they coincide with graduates in indicating that the availability of previous work experience and recommendations from previous and

current employers are the second and third most important factors to receive a job. 'Hard skills' finalize the list of competitive features, leading one to conclude that the skills are considered to be the minimal necessary prerequisite for entering a job.

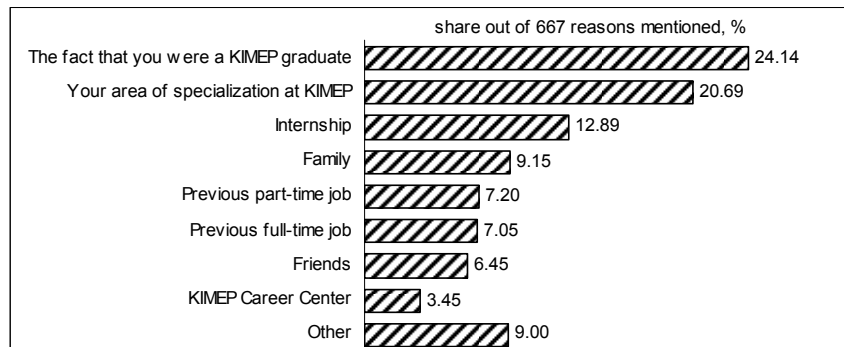


Figure 1. Factors graduates consider as helping to find job

Table 1. Skills employers consider a competitive edge when hiring an applicant

	Enterprise size, employees			Proprietary status			Total
	small, 1-99	medium, 100-249	large, >250	foreign	joint	local	
Communication/attitude	3.95	3.94	3.95	3.97	4.00	3.91	3.94
Previous work experience	3.76	3.84	3.76	3.72	3.87	3.86	3.78
Recommendation of previous employer	3.65	3.74	3.53	3.60	3.57	3.69	3.62
Field of study	3.61	3.47	3.44	3.56	3.54	3.50	3.53
Recommendation of current employer	3.59	3.47	3.38	3.56	3.38	3.56	3.50
Reputation of the University	3.57	3.22	3.38	3.46	3.40	3.43	3.45
Grades Point Average (GPA)	3.30	3.12	3.46	3.27	3.67	3.28	3.35
Internship experience	3.08	2.82	3.11	2.97	3.00	3.24	3.04
Professor recommendation	2.83	2.53	2.66	2.69	2.86	2.63	2.71

(table presents average perceived level of skill's importance: from maximum '4' to minimum '1')

3.3. Persistence-employability

As for skills important to succeed in the workplace, alumni's and employers' opinions tend to coincide more: both groups of respondents indicate 'soft skills' as the most needed traits to successfully perform in the job place (Figure 2, Table 2). 'Hard skills' are also appreciated by both groups of respondents. The opinions differ only in the level of significance attributed: while employers rank them lowest in the list (below 16th position out of 24, Table 2), graduates perceive them as second most important category after business communication and planning-related competencies (Figure 2). Neither employers nor graduates mention previous work experience as important characteristics in day-to-day work.

4. Conclusions

The analysis of the results of the surveys has shown some differences in the sets of skills needed to enter employment and to persist in it, which provides grounds for the proposed differentiation of the term of employability into two sub-terms: entry-employability and persistence-employability.

Entry-employability is characterized by the reliance on previous work experience and proofs thereof. 'Hard skills' are perceived as the required minimum, while 'soft skills' complement work

experience in forming the competitive advantage of a job candidate. At the moment, HEI are best positioned to inculcate 'hard skills' and least equipped to provide specific work experience. Due to this, HEI have limited abilities to guarantee the entry-employability of its graduates. That necessitates close employer-state-HEI collaboration: for example, through introducing regular internships and work placement in the frames of the academic process to deliberately stimulate 'soft (business) skills', as well as contribute to acquisition of initial work experience.

Persistence-employability is characterized by reliance on 'soft skills'. The 'hard skills' are also valued by both employers and alumni, but with different level of perceived importance. Previous job experience is not indicated at all. The data suggest that HEI are capable of equipping their graduates with persistence-employability irrespective of other agents' contribution.

Based on above discussion, it is reasonable to distinguish between two types of employability that illuminate different scales of HEI contribution:

- in the case of persistence-employability, HEI can act independently
- in the case of entry-employability, HEI play a limited role and need to involve other parties.

Thus, differentiation of the two sub-terms, proposed with the aim of refining the focus of scholarly inquiry, has wider practical utility. Application of these sub-terms allows clarifying the scope of opportunities available for HEI in:

- maximizing the quality of graduates' professional preparedness to promote the strong reputation of its own degree programs among employers (persistence-employability)
- building partnership ties with the state and business community in order to secure a high demand for its own graduates in the labor market (entry-employability).

Table 2. Personnel skills and qualities employers consider important in workplace

	Enterprise size, employees			Proprietary status			Total
	small, 1-99	medium, 100-249	large, >250	foreign	joint	local	
Quality of work	3.80	4.00	3.97	3.86	3.93	3.93	3.91
Professional attitude	3.83	4.00	3.92	3.89	3.93	3.87	3.90
Ability to solve problems	3.88	3.95	3.89	3.89	3.80	3.94	3.89
Ability to prioritize the goals	3.83	3.89	3.92	3.83	3.93	3.90	3.88
Ability to apply knowledge	3.78	3.94	3.95	3.83	3.93	3.90	3.88
Commitment to standards of business ethics	3.78	3.89	3.89	3.86	3.87	3.81	3.85
Verbal communication skills	3.80	3.84	3.89	3.83	3.80	3.87	3.84
Ability to work in team	3.78	3.94	3.81	3.85	3.87	3.71	3.82
Written communication skills	3.80	3.84	3.84	3.83	3.73	3.87	3.82
Ability to define problems	3.83	3.89	3.78	3.79	3.67	3.84	3.81
Ability/willingness to learn	3.78	3.71	3.86	3.74	3.87	3.87	3.80
Ability to work under pressure	3.63	3.95	3.86	3.74	3.80	3.77	3.79
Time management	3.71	3.71	3.84	3.80	3.80	3.77	3.76
Ability to adjust to new job demands	3.63	3.89	3.81	3.74	3.80	3.74	3.75
Ability to work independently	3.66	3.89	3.76	3.77	3.80	3.71	3.74
Computer skills	3.63	3.83	3.78	3.66	3.67	3.84	3.72
Russian language proficiency	3.78	3.68	3.68	3.72	3.67	3.71	3.72
English language proficiency	3.70	3.68	3.65	3.81	3.73	3.53	3.67
Ability to formulate and delegate tasks	3.60	3.61	3.53	3.53	3.67	3.48	3.58
Public speaking and presentation skills	3.59	3.53	3.47	3.61	3.40	3.60	3.53
Overall academic preparedness	3.41	3.58	3.63	3.50	3.71	3.60	3.53
Creativity	3.58	3.53	3.43	3.35	3.60	3.61	3.51
Research skills	3.40	3.06	3.39	3.43	3.57	3.32	3.33

	Enterprise size, employees			Proprietary status			Total
	small, 1-99	medium, 100-249	large, >250	foreign	joint	local	
Kazakh language proficiency	3.20	3.17	3.27	3.09	3.47	3.32	3.21

(table presents average perceived level of importance of skill/quality: from maximum '4' to minimum '1')

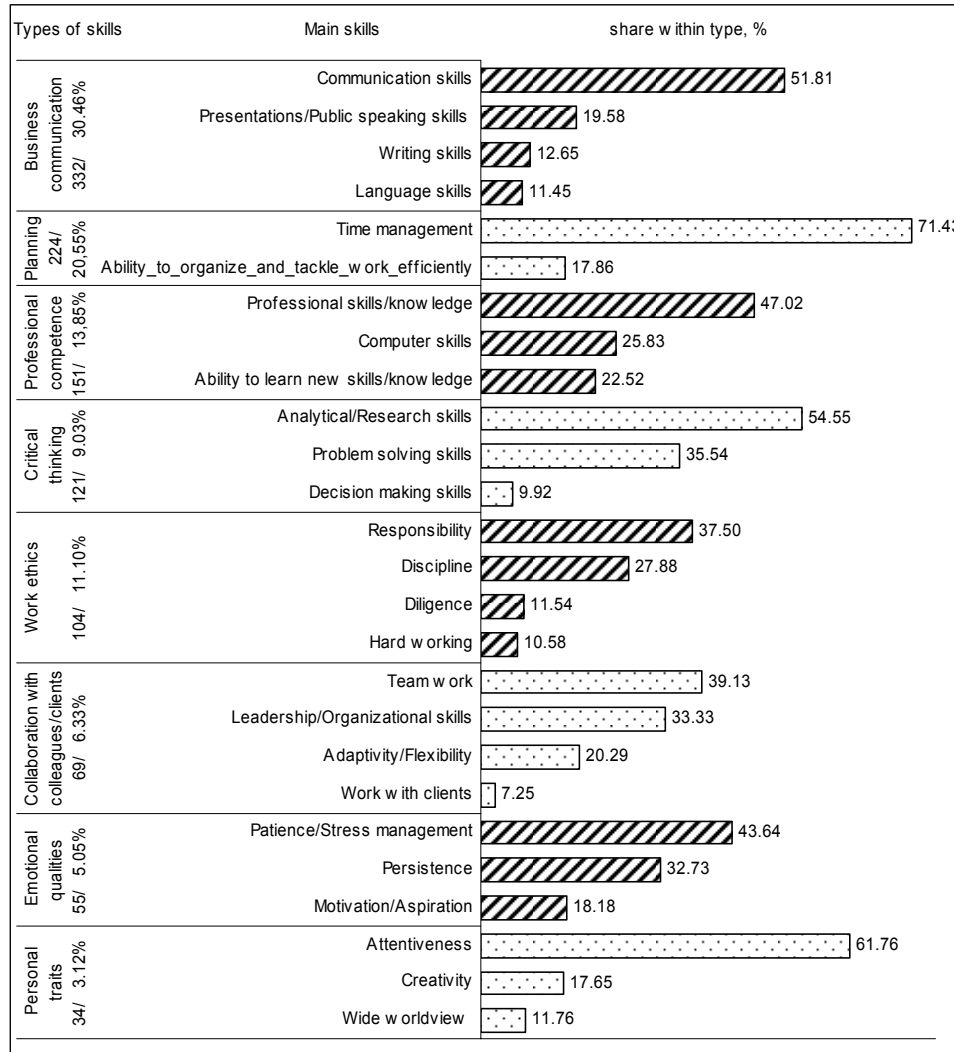


Figure 2. Skills graduates consider important in day-to-day work

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QUALITY MANAGEMENT TOOLS RELEVANT TO THE GRADUATE LABOUR MARKET*

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Abstract

Quality assurance of learning outcomes has become part of the “higher education business” as academic communities raised awareness of the fact that competitive study programmes offer qualifications which are matching the needs and expectations of the labour market. University management involves nowadays effective tools and procedures which allow for a quick and transparent evaluation of the quality of each study programme from the perspective given by the coverage of the respective qualification by the contents of the delivered courses and the way the progress of enrolled students is assessed during the study programme. The Conference paper is based on the experience of Romanian universities involved in two projects focusing on the interface between quality management of study programmes and graduates’ qualifications.

Key words: quality assurance, academic qualification, learning outcomes, competence descriptors

Introductory remarks

There are three issues that generate a proactive attitude of universities in their interaction with the various moral and physical persons active in the graduate labour market:

- In need of legitimacy, the quality assurance of learning outcomes has become a core part of the “higher education business”, a *pragmatic* term instead of its old *emphatic* connotation of academic excellence. As Michael Daxner put it: “Today we do no longer argue with *good quality for taxpayer’s money* or *best programs for best talents*. We seek

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- to create *reliable standards* for the planning of individual and collective decisions to choose an institution, a program, a certain path to degree". [1]
- The graduate labour market mismatches and the graduates' dissatisfaction have dramatically increased in the last years despite all the interest and goodwill put on display during the last decades at European Union and at Member States level. [2] There are more and more graduates unable to enter the labour market, to keep a job and/or to move in the market according to their respective education. [3]
 - In many Romanian academic communities, quality assurance and qualifications' framework requirements have been perceived for years as distinctive goals of the newer university management, more connected to all sorts of national agencies with their specific demand of standards and criteria. In fact, quality assurance and qualifications are in the very centre of university management as constitutive parts of the single process of making higher education more fit for labour market purposes.

1. Approaches of quality management in higher education in a historical perspective

There are various perspectives in approaching quality management in higher education:

- Some of us see quality as an intrinsic value of higher education that is guaranteed by the fame of the teachers and of their professional practice and/or of their research output. In the early history of university education the teachers' knowledge and recognition in the larger community was a strong reference in choosing where to study.
- In time, the fame of the teaching staff was transferred at institutions' level. Even today, the distinction among diploma holders is still referenced by the university where the graduate has accomplished his/her studies. These points of view are still to be considered in a few elite higher education institutions which offer postgraduate programmes that are obviously linked to advanced research projects.
- Even in the elite higher education, students have different individual learning performance. To preserve the positive image of the university as provider of competitive (updated) knowledge, around 1850 the external assessment of the learning outcomes was introduced. That separation of evaluation from teaching is, in fact, a first step towards the modern peer review aiming at increasing visibility and recognition of quality at program and institution level among peers.
- With the democratization of access to higher education, the number of providers increased and diversified. Also their capability to assure quality education was and still is diverse. Under these circumstances, in many countries accreditation agencies were set up in order to regulate the entry in the market (a very special market, as higher education conserves its character of a good of public interest). As known, accreditation criteria focus mainly on human, material and financial input factors and take less into consideration organizational and functional competence of the new provider. When evaluating quality of higher education programmes, accreditation criteria neglect expected learning outcomes and interface to the real (demonstrated) educational needs in the society. The absolute number and the share of graduates unable to enter the labour market are clear signs that the existing accreditation criteria do not help to much universities to fulfil their social function as long as accreditation of new providers remains a business of academia, ignoring the needs and expectations of the stakeholders in the society which are outside the academic community.
- The growing competition among new and old providers in the higher education sector led to the design of more sophisticated procedures and tools aiming to make visible (even popular) the interest and capability of a institutions to offer quality study programmes (standards for curriculum design and student evaluation, for syllabus content and recommended alternative learning sources, for student services, etc.). Procedures and

tools for internal evaluation of study programmes were designed and implemented. Quality Management departments were set up at university level in order to give methodological and logistical support for self-evaluation to the departments and faculties and to disseminate in the academic community the results of that evaluation. Gradually, students were also involved in the design and implementation of evaluation procedures, criteria and standards. All these steps of progress ended in a more transparent quality management of teaching and learning within the academic community. One has to recognize that implementing these tools and following these procedures academic communities were accountable to the ministry or to the financing agency for the resources they were given for the delivery of study programmes. But the accountability to the larger society was not envisaged at that initial stage and the use of internal evaluation procedures and tools had a poor impact on the outside world. Stakeholders like families of the students, employers or banks offering loans to students were not considered as potential reference vectors in the quality assurance and accountability exercise of most of the universities. The dialogue of universities with these stakeholders remained for many years marginal. It is only in the last decade that universities in their search for enhanced competitive advantage have developed specialized departments that support a systematic consultation with employers and professional associations, with unions of SME's, with multinational corporations present in the market and other interested institutions and organizations aiming at obtaining a structured information concerning the needs and expectations of the respective partners. Some of the universities have even initiated tracer studies but the lack of resources is a strong obstacle in a repetitive exercise that could help universities to review in depth the contents of their study programmes.

- At country level and later on at continental level quality assurance agencies and networks were set up. Their mission is, on one hand, to offer guidelines and assistance in the appropriate implementation of quality assurance policies at program and institution level and, on the other hand, to perform standard external evaluation and to inform interested institution and the public at large about the results of the external assessment. The European Network for Quality Assurance in Higher Education (ENQA) "through its members", in cooperation with EUA, EURASHE and ESIB, was invited by the Berlin Ministerial Conference of the Bologna Process signatory states (2003) to develop "an agreed set of standards, procedures and guidelines on quality assurance" and to "explore ways of ensuring an adequate peer review system for quality assurance and/or accreditation agencies or bodies". The response to this mandate was presented by ENQA in the next Ministerial Conference in Bergen in 2005 in form of a Report on *"Standards and Guidelines for Quality Assurance in the European Higher Education Area"*. As the graduate labour market registers significant changes in terms of professional and transversal competences, a new generation of standards and guidelines is expected to be enforced. It will probably focus on evaluation of contents and process as well as on quality of qualifications expressed in terms of learning outcomes.
- The obvious need to involve students and other stakeholders in the management and quality assurance in universities has long time been considered by some of the higher education institutions and by some of the national agencies or bodies responsible for quality assurance. It is in ENQA's *European Standards and Guidelines (ESG)* that this need gets a formal presentation as one of the objectives set by ESG is "to inform and raise the expectations of higher education institutions, students, employers and other stakeholders about the processes and outcomes of higher education." [4] We have to accept that in our universities we witness in the best case a formal participation of employers and of professional association in the quality assurance process at program level. The Romanian Agency for Quality Assurance in Higher Education has set up from

the very beginning a standing committee of students involved in the external evaluation. A special committee of employers involved in the external evaluation of universities has been set up in 2010 is now operational. It is to be expected that the involvement of external stakeholders will increase both in terms of frequency and of impact.

In the mid 1980's the share of unemployed graduates in some of the European countries raised for the first time the question if the content of the higher education programs fits with the needs of the labour market. The increasing share of unemployed graduates was one of the tangible elements that *shook the ivory tower* [5] but not the only one.

The knowledge based economy requires new or improved professional and transversal skills. Further education could respond to that need but most of the universities do not appear to be prepared to respond to that new business line. In the aftermath of the financial and economic crisis of 2008-2009 these aspects are becoming critical. Many of the graduates are confronted with difficulties in keeping their job or in entering for the first time the labour market. Latest research reveals the growing share of graduates which have to accept jobs and compensations that do not correspond to their expectations and generate increasing personal and professional dissatisfaction. On the other hand, employers do not understand the diversification of higher education diplomas and are not satisfied by the mix of professional and transversal competences of the new graduates. To the older complain of the employers referring to the lack of practical skills a new one is frequently present in the opinion polls: the high expectation of recent graduates when it comes to salaries and other benefits. [6]

All these elements had their contribution in launching an era of visible transformation in the lifestyle and management of universities. Transformation refers to many aspects of the institutional management: from enrolment policies, funding principles and student involvement in the university management to institutional differentiation of the mission, opening of academia towards the local or larger society and involvement of professional association and employers in curriculum design and learning output assessment.

2. Tools involved in the quality management of the higher education programmes

Standards and contents of higher education have been among the drivers of the Bologna Process from its very start in 1998 and the Lisbon Agenda 2000 enhanced significantly their role. [7] Higher education providers appear to be more and more aware of the fact that design and delivery of study programmes have to comply with requirements that would make it easier for graduates to find jobs later in their professional life or to be mobile in the labour market.

Quality of learning outcomes, qualifications framework and employability of graduates are among the key topics discussed in the European Higher Education Area. Most of the quality assurance agencies around Europe launched a review of their methodology concerning the educational efficiency chapter in the external evaluation. On their side, universities have started to experience the implementation of new tools in the quality management of the programs they offer in the context of a vivid competition for students and complementary resources.

2.1. Experience gained in the project on *Quality Education for Labour Market*

A first project concerning the improvement of the tools for quality management of study programmes was developed in 2008-2009 for the benefit of ARACIS – the Romanian Agency for Quality Assurance in Higher Education, a developed in 2008-2009. The research on „*Quality Education for Labour Market*” aimed at identification of content shifts between study

programmes and labour market expectations and improvement of the internal and external evaluation methodology of bachelor degree programmes. [8]

In a first stage the current evaluation methodology of ARACIS was applied in 20 bachelor degree programs in order to reveal strong and weak points of the *educational efficiency* chapter of that methodology. 52 university staff members were selected to participate in this exercise. This analyze helped the key experts involved in the project to observe criteria, standards, performance indicators applied by ARACIS and reference standards of universities in terms of learning outcomes and student achievement examination.

Another team of 12 sociologists and experts in gathering and researching public opinion has developed a complex research on the expectations and opinions of the main categories of actors which are active in the labour market of highly qualified persons. Both quantitative and qualitative methods were used in order to better understand what employers, professional associations and recruitment agencies were expecting to show and demonstrate the graduates in the attempt to get a job. On the other hand, graduates of the last 4-5 cohorts were also questioned concerning their insertion in the labour market and their personal and professional satisfaction after graduating a bachelor degree programme.

In order to make the to kind of outcomes comparable, the key experts of the project suggested researchers to use the *academic qualifications descriptors* which are currently implemented by universities in order to set up the National Register of Qualifications in the Romanian Higher Education – RNCIS.

The comparative analysis of the outcomes of the two field research exercises revealed:

- On one hand, the shift between universities and labour market actors in understanding the learning outcomes (different terminology, but also different focuses in the mix of knowledge, skills and other results of the learning process, lack of interest to promote and make understandable study outcomes for businesses etc.)
- On the other hand, higher education institutions appeared insufficiently prepared to listen to the expectations of the future employers of the their graduates, but also insufficiently interested in permanent revision of contents, in upgrading of theoretical knowledge and in complementing knowledge with appropriate skills to make use and to live as an active person in the society at large. In most of the universities, the evaluation and certification process of the knowledge and skills acquired by students has still to be improved as a complex an interactive process of learning, working and researching.

The general findings were translated by experts in form of lists of *content standards* which cover professional and transversal competences at the level of the four study fields for bachelor degree programs. These content standards complement the ARACIS methodology of evaluating the *educational efficiency* and induce at university level a more job oriented education of students. Quality management of the study programmes checks how the curriculum covers the knowledge and skills which defines the academic qualification promised to students. The idea was to sum up the competences which facilitate the quick insertion of graduates in the labour market at study field level, not at program level.

Quality Education for Labour Market was a pilot project which aimed to demonstrate that a proactive involvement of universities and of each member of the academic staff could effectively support graduates to get easier a job according to the knowledge an skills they have acquired during the years of study. This explains why, besides the content standards for each field of

study, academic experts of the project have proposed a *framework curriculum* which fully covers the promised qualification.

This way of approaching quality assurance stimulates providers to compete with other actors in the higher education sector but also to permanently adapt their offerings according to the dynamics of internal and external environment of each and every university.

2.2. Labour market relevant set of tools for the quality management of study programmes

Development of an operational system of qualifications in the Romanian higher education – DOCIS – is another project that touches the issue of quality management tools which are relevant to the graduate labour market. The main goals of the project are upgrading the system of higher education qualifications and making it compatible with the European Higher Education Area specific standards and with the labour market needs. Some 370 experts from virtually all the state and private Romanian universities are involved in the different phases of the project.

The basic principle of the project consists in consultation and consensus of all the stakeholders concerning the following main aspects:

- How to articulate higher education qualifications with pre-university qualifications in order to build up a comprehensive national framework of qualifications.
- How to harmonise higher education qualifications with requirements of the labour market (professional and transversal skills of a graduate seeking for a job according to the learning outcomes).
- How to match quality of study programs and requirements of the professional qualifications.
- How to review the curriculum of each study program based on the changing needs expressed by the representative employers of the graduates.

ACPART has implemented a series of tools that are useful for the quality management of study programs in order to make consultations fruitful and to ease the dialog between academia, students, employers, recruiters, professional associations, and other stakeholders:

1. The matrix of the higher education qualifications' network.
2. The description of a study programme outcomes by means of professional and transversal competences of a graduate – Grid 1 and, in some cases, Grid 1bis.
3. The coverage of competences presented in Grid 1 by content areas of the study programme, disciplines and credit points distributed according to their contribution to each professional and/or transversal competence – Grid 2.
4. A more detailed syllabus of each discipline which is part of the study program.

The Matrix of the Higher Education Qualifications' Network provides two perspectives for the analysis of all the higher education qualifications:

- The vertical perspective allows for an analysis of the acquired professional and transversal competences by means of the specific descriptors.
- The horizontal perspective allows observing the progress that might be achieved by continuing the initial bachelor degree education with a masters' degree program and, eventually with a doctoral degree program.

The quality management team at study program level can use this tool to better articulate the program to the other study levels.

Grid 1 offers a standardised description of a study program by means of professional and transversal competences of a graduate. It is the main outcome of the consultations among all

the providers of the same or of a similar study program with the active participation of students and representatives of employers, recruiters and professional associations.

The consensus reached at country level is materialised in up to six professional competences and three transversal competences. Each competence is detailed by the specific descriptors and by the minimum performance standard expressed as a tangible/measurable outcome of the teaching and learning process during the attendance of the given study program.

The quality management team at study program level might wish to add complementary competences to those agreed at national level. They have at their disposal **Grid 1bis**. The only requirement is to apply consistently the framework of concepts and definitions as used in Grid 1. As competition among higher education providers is becoming fiercer, a comparative analysis of the content of Grids 1bis could offer valuable ideas concerning the differentiation of the educational offer from what other providers have put on display.

On the other hand, Grid 1 eventually accompanied by Grid 1bis is a powerful marketing tool in presenting to all the interested stakeholders the learning outcomes of a study program in an easy understandable manner. It is easy understandable for employers and recruiters, it is easy understandable for (future) students and their parents or sponsors, as it is easy understandable for the professional association that was involved in the completion of the grid.

Grid 2 is a support for the identification of the links existing between the competences presented as learning outcomes in Grid 1 and the curriculum of the study program. It has to be stressed that Grid 2 is not limited to an enumeration of disciplines contributing to each professional or transversal competence. Grid 2 goes in a far deeper qualitative analysis as it specifies the content area (curricular field) that develops the respective competence as well as the fraction of the total number of ECTS of a discipline that is devoted to the development of the competence.

Grid 2 is a *basic instrument for the internal quality management of a study program* as it reveals the weak points of the distribution of student workload (via distribution of the total number of ECTS) when compared to the entire list of promised professional and transversal competences at graduation. A competence covered by less credit points is a poorly developed competence. There are two alternatives to bring in a correction: to improve the content of some of the disciplines contributing to the development of the respective competence and to increase the number of ECTS, or to give up the poorly developed competence and strengthen the development of other ones.

The project does not encourage standardisation of the delivery of a study programme, but it offers providers a strong tool for comparative analysis of similar programs. ARACIS has expressed a vivid interest to develop in its upgraded external evaluation methodology *a set of educational efficiency criteria and of qualitative standards* based on Grid 2.

A more **detailed syllabus** of each discipline should replace the currently used format. The discipline responsible and his/her associates should specify in the beginning of each semester and put on the web-page of the faculty/department the following aspects besides the traditional issues enumerated in a syllabus:

- Learning outcomes in terms of knowledge, skills and other attainment results (values, attitudes and aptitudes) by using the same concepts and definitions as in Grids 1 and 2;
- Contribution of the discipline to the development of one or more professional competences, without neglecting the transversal ones, by making use of the ECTS;
- Alternative resources for the development of knowledge and skills specific to the discipline;

- Complementary support/services offered to learners;
- Complex evaluation of the learning outcomes in terms of knowledge and skills.

For the *internal quality management*, the monitoring of the teaching and learning process is directly served by this more detailed syllabus. Peer reviews and student opinion polls benefit also from this management tool as it sets the content, the timing, the work load and the learning outcomes in a logical framework.

The syllabus should be considered as a document that shows the flexibility and adaptability of a study programme as the content of each discipline can be periodically reviewed in order to offer students the latest achievements of research in the field. It is also the best place to adapt contents of disciplines to the knowledge and skills expected in the labour market.

A working group of ARACIS and ACPART has developed standardized presentation forms for the syllabus and the curriculum. They will be integrated into the new guidelines developed by ARACIS for internal and external quality assessment.

A final remark: All these tools represent useful instruments for a more transparent conduct of universities in their relation to the external stakeholders and a more inclusive quality culture inside the Romanian universities.

Conclusions and recommendations

- Universities should consistently enlarge the participation of academia and students in the institutional development of the quality culture based on a *pragmatic* (i.e. labor market defined) learning outcomes.
- Universities have to be more transparent and to better communicate with the extra-academic world, to inform and educate people when it comes to the means and tools used to promote qualifications and the related process of quality assurance in higher education.
- Universities need to be responsive to the expectations of the ever changing external world.
- Universities need to be pro-active in promoting changes in their own provision of study programmes and to invite professional associations and employers in the decision making related to curriculum content and learning outputs.

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THE INVOLVEMENT OF STUDENTS IN IMPROVING SPECIFIC POLITICS AT HIGHER EDUCATION LEVEL

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Abstract

This article focuses on the implication of the students in the quality assurance process at the higher education level in different ways and presents a model of good practice concerning this issue. The example refers to the implication of a group of students in the process of evaluating the affirmative policy that assigns places to the Roma young people in universities, through the activities of the project "Education Smiles to Us All", project financed by the European Commission through the Youth in Action Programme. We will present youth policies and the importance of young people's involvement at national and European level, and also we will present the historic and conceptual perspective for the affirmative measures.

Key words: quality assurance at the higher education level, affirmative measures, youth policy, young people's involvement, "Education Smiles to Us All".

1. Introduction

The working hypothesis for this article is that, even if the official discourse admits the fact that students should involve more in the process of evaluating the higher education system's quality, the practice underlines that their involvement is not a real one and that the evaluations are not done differentiated, including all types of beneficiaries, especially the disadvantaged categories.

The methodology used for this article includes a theoretical research in the fields of quality assurance at the higher education level, the affirmative measures and the involvement of the young people, by consulting the existing literature and studies in this field. In order to sustain the hypothesis, it will be made a presentation of a project, a good practice example that emphasizes the importance of the students' implication in evaluating the quality of the higher education level.

Using the methodology mentioned above, in the article the focus is on the involvement of the young people in the society in general, and especially in solving problems that affects them, such as the policy that provides distinct places for the Roma minority in the universities, a measure which can be seen as a part of a quality assessment at the higher education level. In order to present how the young people can get involved and be active citizens, the European youth policies framework is presented and, also, the most important aspects regarding this kind of policies, specific to the Romanian society.

In the second part of the article, the project "Education Smiles to Us All" is used as a good practice example in order to emphasize just one of the possible ways for the young people to act and try to improve the way that certain affirmative measures - designed to help the disadvantaged groups - are applied. The projects' theme is the affirmative policy that provides distinct places in universities for the Roma young people; during a national seminar, young people from six university centres identified the problematic aspects of this policy and provided some solutions in order to improve the efficiency of the policy.

2. The Involvement of the Young People

The level of the young people's involvement at the civil society level in issues of interest for them has risen in the past years, this situation being influenced and influencing the development of a youth dimension for the existing policies, with an impact on youth. Having this situation as a starting point, in different organizations and structures from the international level, as well as at the national level, there have been created and implemented youth policies or strategies.

At the international level, the UN's actions are the starting point for the development and implementation of youth policies. Besides the UN Programme on Youth within the Economical and Social Affairs Department, the organization also implements other activities that focus on youth themes, the organization's agenda being based on the World Programme of Action for Youth that has started in 1995. The programme creates the framework for the development of some public policies at national level and it represents the base for different actions that have the goal to improve the young peoples' situation, in general. The Programme refers to the young people's rights and aspirations and facilitation of participation within the decision making process [1].

Because the Romanian citizens became citizens of the European Union, the youth policies' impact is currently stronger on the Romanian young people and, also, in the other member states. The European Union's attention for youth policies is not really a recent fact, nowadays at this level being developed a youth dimension of other policies and also a Strategy regarding this issue. Starting from the European level, the member states transfer the action models or follow the recommendations and tend to implement them at national level.

The Youth Policy was created officially in the European Union in 1993, through the Maastricht Treaty, this being mentioned in the article 142 and having as a starting point youth exchanges and socio-educational instructors exchanges. Until 2001, the European institutions focused on the implementation of programmes regarding youth problems, but in November 2001 the White Paper on Youth was adopted. The document is a proposal to increase the cooperation level between member state in four major youth areas: participation, informing, volunteer activities and a better understanding of the young people – in practice this means that youth dimensions will be created at other policies' level, as: education and training, employment and social inclusion, health and anti-discrimination. All this aspects take the form of the European Pact on Youth in November 2005 [2].

From this moment on, at the European level, the concern for the youth problems and for their possibilities to develop is central, this way being created the EU Youth Strategy. The European Commission's initiative and its communication from April 2009 "A EU Youth Strategy – Investment and Empowerment" are the background for the EU Youth Strategy that specifies some short and long term actions. The strategy refers to all the other policies that have an impact on the young people at European level and it is based on the Structured Dialog between member states. In order to better address the youth problems, in the adaptation process there were also involved and consulted national authorities, the European Youth Forum, youth organizations and other stakeholders [3]. The fact that at the EU level this strategy was adopted, as an eight years plan, suggests the concern for the welfare and the development of young people. The fact that the European population aging process is a reality is one of the factors that have determined the present situation and developments. Another important role in the evolution towards clear youth policies with precise results has the young people's involvement in the decision making process regarding the aspects that affects them and other issues that have an impact on their communities. Also, the young people realize more and more the fact that only if they get involved they can influence the results of the policies and they can address the issues of interest for them.

The EU Youth Strategy has two main objectives:

1. Increasing the number of opportunities and equal access for young people at education and work;
2. Promoting and encouraging the active citizenship, the solidarity and the social inclusion of young people.

Being based on the Structured Dialog between the member states, the Strategy has eight action directions, on the long and short term:

- Education and training – there are implemented actions that have the purpose to assure equal access for young people at education and training, the development of different non-formal education opportunities, easy transfer to work, an accent on the professor – student relationship, the implementation of new technologies in education, mobility opportunities, lifelong learning and recognized qualifications at European level;
- Employment and entrepreneurship – these aspects are addressed by other specific actions and strategies such as: The European Cooperation Framework (January 2010 – June 2011) and the EU 2020 Strategy. The specific objectives are: development of abilities that are required at that moment in the work field, development of carrier guidelines, counselling services and quality trainings;
- Social inclusion – a Eurostat analysis points out the fact that the young people are one of the most vulnerable groups in society, their main identified problems being: the employment level, poverty, difficult access to quality education and training for everyone. In this context, the year 2010 was declared the European Year against Poverty and Social Exclusion. In this period, there were implemented actions, programmes and projects with the purpose to increase the level of social inclusion for young people and for the disadvantaged groups. These objectives and the Youth in Action Programmes priorities were the starting point for the "Education Smiles to Us All" project, that will be presented in a following section of this article;

- Health and well-being – at this level, the Strategy encourages the participation of young people at the decision making process, the accent being on: physical, physiological and social well-being;
- Participation – the Strategy encourages the consultation of young people regarding issues and policies of interest for them at the European level, with accent on the participation of the disadvantaged categories, in order to assure also their representation;
- Voluntary activities – the volunteers and working youngsters mobility is encouraged;
- Social inclusion – in this field the accent is held on the inclusion of disadvantaged categories. This is another starting point for the project “Education Smiles to Us All”;
- Creativity and culture [4].

Based on the policies implemented at European level and on the EU Youth Strategy, it was created a specific programme that reaches all the mentioned objectives and that encourages the active involvement of young people in the process of solving the problems that affects them by writing and implementing projects, financed by the European Commission. At this moment, the programme is called Youth in Action Programme and it will be implemented - starting with 2007 - until 2013. This framework was preceded by the Youth Programme and continues its objectives.

The Youth in Action Programme sustains the non-formal learning activities for young people, being based on writing and implementing projects on different themes of interest for them. The main objectives of the programme are: promoting the active citizenship among young people, increasing the level of solidarity and tolerance, sustaining the mutual understanding between young people from different countries and promoting the European cooperation. These objectives are structured in five financing actions that favour the implementation of projects on themes of interest for youngsters [5].

Having as a starting point the priorities mentioned of the Youth in Action Programme and some annual (e.g. The year 2010 – The European Year Against Poverty and Social Exclusion) and national priorities, the programme contributes to the development of the young people and offers the proper framework in order to express their project ideas regarding issues that affect them, organizes trainings in order to help youngsters to learn how to write projects that can be financed, not only by the Youth in Action Programme, helps them learn more things about the European Union and the issues present on the public agenda and, also, creates the needed framework in order for the young people to take contact with different NGOs and other young people with similar interests.

In Romania, a central youth policy does not exist; it is the only EU state that did not develop a specific framework in this field, framework that would specify the status rights, responsibilities and roles of the young people in the society [6]. However, there are some governmental and non-governmental institutions that elaborate youth programmes and strategies, such as: The National Authority for Sports and Youth, The Romanian Youth Council, The Romanian Students Union, etc.

Despite this situation, the fact that Romania is a member of the European Union obliges it to implement the European stipulations in the youth field; also, Romania can use the funds

allocated through the Youth in Action Programme described above. This is also the case of the project that will be presented below as a good practice example regarding the students' involvement in the process of quality evaluation of the higher education system in Romania.

3. A good practice example – the “Education Smiles to Us All” project

What is the link between the involvement of young people and the quality assurance at the higher education level? This will be emphasized by presenting the “Education Smiles to Us All” project, financed by the European Commission through the Youth in Action Programme. The project has been written and implemented by the Academic Club of European Studies, being financed through the Youth in Action Programme, Action 5.1 “Meeting between the young people and the youth policies representatives”, at the 1st of April 2010 term. The project started from the idea that it is necessary to assure the integration of a greater number of young Roma people at the higher education level. Taking this into consideration, the projects' theme has been: “If a greater number of young Roma people graduate the courses of a higher education institution, the economical and social development of different communities will increase and this way the objectives of the European Cohesion Policy will be achieved”.

The general objective of the project has been the encouragement of the cooperation between the majority population and the Roma young people in order to propose solutions for improving the function of the system of places designated to the Roma minority in universities. By doing this it would be assured a greater participation level of the Roma young people with a bachelor degree in the process of achieving the specific objectives of the European Cohesion Policy [7]. The activities of the project took place between the 20th and the 24th of October 2010 and there were attended by public policies representatives at the national level, experts and representatives of some important NGOs that develop programmes in order to solve the problems of the students and the Roma minority students.

4.1. The evolution of the affirmative measures

The affirmative measures, also known as “positive discrimination”, are the base for the post-war system of protection for the national minorities, together with the principle of the fundamental rights and liberties applied to the persons that are part of a national minority, and also, with the non-discrimination principle that adds to the individual rights the explicit demand to exclude any kind of discrimination based on national, ethnical, racial and religious origin [8].

The “affirmative measures” term was used for the first time by the US president, John F. Kennedy, in 1961, when the *Committee on Equal Employment Opportunity* was created. This institution had the purpose to encourage the companies that were contracting federal funds to integrate in their projects persons regardless their race, faith, skin colour or national origin [9]. The positive discrimination / affirmative action refers to promoting and applying programmes that have the purpose to solve the effects of different discriminating actions from the past in the work, education field, etc. Also, it has the purpose to prevent repeating this type of actions. In time, the affirmative actions have been promoted especially within the work and education field. The difference between positive discrimination / affirmative action and anti-discrimination or the laws that promote the equal chances is that the first category proposes corrective positive measures focalized on the persons / groups that have been the target of discriminating actions in the past [10].

The affirmative measures are not based on quotation and do not favour weak candidates in the employment or other fields. Through this type of measures, the state can implement special measures like financing education institutions, creating special places in the administration or introducing some quotations for the public employees in order to create advantages for the disadvantaged groups. The necessity of adopting the measures above mentioned was clear when the need to complete the equality and the non-discrimination among people was obvious [11]. The policies that promote the affirmative measures are implemented in different ways in different countries. In some cases, this type of measures is stipulated in the Constitution (India, Malaysia) and is implemented by the local and central administration without being monitored too closely. In some other cases, like USA, even if the Constitution does not mention affirmative measures, there are developed programmes based on the legislation and the juridical intervention, combined with a complex monitoring and promoting affirmative measures system [12].

4.2. The Affirmative Policy in the Romanian Higher Education system for the Roma minority

Romania is the European country with the most inclusive legal system regarding the application and the promotion of affirmative measures. Besides the fact that there are places designated for the Roma people at all educational levels, the Romanian state guarantees for every minority places in the Representatives Chamber of the Parliament. Even so, the persons that are part of a national minority, especially the Roma minority, are often discriminated.

An affirmative measure applied in the Romanian higher education field is the one that designates certain places for the Roma people in the universities. This programme [13] has started in 1992, being the initiative of the Social Assistance Faculty from the Bucharest University. The programme allocated ten distinct places for the Roma candidates at the admission exams. After that, the programme was also implemented starting with 1993 in other universities from Cluj, Iasi and Timisoara. A few years later, on the 15th of April 1998, the National Education Ministry through the 3588 Order began the process of sustaining the access of young Roma people in the universities by creating 144 distinct places for them at this level. In the first year, 85% of the places were filled.

In 1998, based on the National Education Ministry Order no. 5083/11.26.1998, the Roma young people were encouraged to study in vocational schools, high schools and universities. This way, the candidates can apply at any level in order to obtain a designated place using the positive discrimination principle only by presenting a written recommendation given by the chairman of a Roma civic, cultural or political organization [14].

The activities of the project "Education Smiles to Us All" included the development of some researches done by students from six university centres: Bucharest, Cluj, Craiova, Oradea, Timisoara and Iasi - on topics regarding the implementation of the affirmative policy of the designated places for young Roma people in universities. The researches identified some problematic issues of the policy and some potential solutions in order to solve them. These studies were put together in a report that was presented to the decision makers and the representatives of different NGOs that were present at a conference part of the projects' activities.

As mentioned before, the project's finality was a report regarding the main identified problems of the policy and, moreover, some possible solutions to them. The report was structured as a public policy proposal and it was given to the public institutions with competences in the field and to different NGOs in order to be used as a starting point for their future activities. The obtained results during the national seminar were also presented in high schools from each university centre that participated at the project's activities, in order to increase the visibility of this policy.

The report [15] was structured in two analyzing areas, the institutional aspects and the impact on the direct beneficiaries. The institutional aspects mentioned in this report are: the lack of transparency and flexibility in the sense of reallocation of vacant places, the lack of monitoring the impact of the affirmative action on the students during the studies and the poor promotion of these places. Concerning the impact on the direct beneficiaries, the report presented aspects like poor marks determined, in the most cases, by the financial situation of the students' families, the lack of integration correlated with the fear of discrimination and the fact that Roma students do not assume their identity. The solutions proposed in the report referred to the implementation of programs for Roma students' integration, the evaluation and monitoring of public policies. These general solutions could be implemented through measures like: appointing mentors who monitor the educational life of Roma students and their integration or the creation of centralized and transparent data bases at the university level. The solutions for the direct beneficiaries' problems specified special programmes for personal and professional conciliation for the Roma students, especially for Roma women, and the representation of Roma students in general student boards or university boards.

5. Conclusions

Considering the aspects specified above, there are some conclusions concerning the subject that arise. First of all, although the evaluation of the higher education quality should include the students as direct beneficiaries, in Romania this is not an effective process. Also, the article emphasizes that there are important unsolved issues specific to the higher education system, for example the fact that the affirmative measure through which are allocated seats in universities for Roma People has not been evaluated since the beginning of its implementation in the '90s. The presentation of the good practice example, the "Education smiles at us all" project, shows that youth can involve themselves to resolve the problems that concern their activities if there is a background that encourages them to get involved. In the end, the analysis suggests that this project – "Education Smiles to Us All" - has also proved the existence of other problems with the implementation of the affirmative measure discussed, the project emphasized possible solutions for the problems, all those being possible with the implication of the young people.

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EMPLOYABILITY AND PROSPECTIVE OF PROFESSIONAL INSERTION FOR BACHELOR LEVEL STUDENTS IN PSYCHOLOGY AND EDUCATIONAL SCIENCES

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Abstract

Employability becomes more and more a main issue of the quality of the education offered by universities and a major concern for them. The coordinators of the study programs are directly interested to follow up the way the competences delivered by the study programs are fitted to the competence needs on the labour market, therefore it is important to implement ways of assessing the employability of their graduates. The present research is a preliminary one, destined to test and refine an instrument of measuring the insertion of the graduates on the labour market for two bachelor level study programs at Transilvania University: Psychology and Educational Sciences. The results identify the intentions of final year students to continue their studies and to gain work experience during the studies by having a part-time of full-time job if possible.

Key words: employability, professional insertion of graduates, bachelor level, quality insurance.

1. Introduction

The massification of the higher education rises two big questions (Bowers-Brown & Harvey, 2004, p. 243): "if the higher education really produces enough graduates to meet the needs of knowledge economy" and another, quite opposite, but equally possible "if there is an abundance of graduates who do not need degrees to do their job". This paper does not address this specific issue; however the idea that the graduates of a study program are not automatically employed only because of their diploma is a matter of concern for universities in both cases. The universities aim to increase the employability of their graduates for several reasons: universities act on a competitive educational market and are interested in promoting quality study programs; having a good reputation means a good probability to attract the best candidates for their study programs; the attractiveness of the study programs is influenced by the prospective of

employment and earnings after graduation; employability of the graduates becomes thus one indicator of the quality of the education provided.

Analyzing the increase of the employability policies in universities, Bowers-Brown & Harvey (2004) conclude that till 2003 employability moved from a peripheral concern to a central place in university strategies of quality insurance. In recent years, employment rates of the graduates become more and more indicative of institutional performance. In some countries, they also indicate the accountability of the use of public funds by education providers, but should be understood in the specific national context only (Little, 2001, p. 122).

Despite a quite rich literature on this topic, employability is still considered an insufficiently defined concept. Some older definitions link employability only to the extent of getting a job. Employability could also be defined as an individual variable consisting in possessing the desirable attributes employers are looking for, or meeting the requirement of a certain type of job. Harvey (1999) proposed a working definition: *"Employability of a graduate is the propensity of the graduate to exhibit attributes that employers anticipate will be necessary for the future effective functioning of their organisation"* (p. 4). Some larger definitions include in the scope of employability the capacity to gain a job, to maintain it and to progress in the workplace.

With the increase of mature students, already having a job and coming back to university, the indicators of employability may change their meanings by age and life cycle cohorts. For young graduates looking for the first job the traditional indicators such as time elapsed between graduation and the first job could be an indicator of their employability, but the case is different for older students, already having a career and a job. For these last ones, especially for those in the second cycle (master diploma), employability does not mean necessarily finding a job. As Morley (2001) asserts, *"Furthermore, little attention has been paid to the fact that these ways of seeing employability might not be appropriate to postgraduate education, where the majority of students are already in employment, often at quite senior levels. In this case, employability could better be understood as a concern with continuous professional development and flexibility than initial recruitment."* (p. 133)

Measuring employability is problematic as a consequence of the difficulties in defining the concept. Examples of indicators of the employability used in different researches are the percentage of graduates employed in the first year after graduation; the number of months elapsed between the moment of graduation and the first job; the percentage of graduates finding a job in the subject area etc. Other indicators often used are related to the degree of satisfaction of the graduates with their educational experience, the evaluation of the usefulness of the skills gained during the studies for finding a job, and the relevance of the acquired competences for the requirements of their present job.

Employability could be measured even using as an indicator the annual income earned as a result of having a diploma. The definitions mentioned above lead to the conclusion that the key issue in employability is the set of competences possessed by individual, but sometimes other aspects, such as the reputation of the graduating university are more important. Employability depends not only on the individual characteristics of the graduates, but also of socio-economic context factors, such as the supply and demand on the job market. A recent study on the issue of employability of graduates in Romania (Voicu, Tufiş, & Voicu, 2010) proves that there are differences in employability for each subject area.

The prospective of professional insertion is different at the end of the first cycle than in other stages of the career. In the paper mentioned above (Voicu et al., 2010), Romanian employers

declared to be less preoccupied by the level of diploma of the candidate, more than 70% of the employers and recruiters stated that the level (bachelor/ master) is not important (p. 38); however it is a fact a master diploma increases the odds of being employed. In some professions, such as psychology, independent practice is conditioned by the master degree by law. In education too, teaching in the upper secondary school requires a master degree, so it is expected that psychology and pedagogy students desire to attend the master cycle in order to increase their employability.

Professional insertion is different from a subject area to another. For example the potential employers of the psychology graduates are the educational system, the army, the prisons and other re-education facilities, private practitioners, but only under supervision for bachelor-level graduates. Only after gaining the right of independent practice (master diploma), psychologists can open their own business, or provide full psychological services, so this involves particular issues of their employability. As for the graduates of the pedagogy program, some of them are already working in the primary school and they also have a prospective of being employed in schools as counsellors (only with a master diploma) and as trainers by private professional training providers.

2. Method

The aim of the research is to gather data about the insertion of our graduates on the labour market and about the degree of their satisfaction concerning the competences acquired in two study programs: Psychology and Educational Sciences. We designed a survey encompassing present and former graduates. The research intends to analyse data from a pre-graduation version of the questionnaire and to design a post-graduation version to be sent in the next step to all graduates of the bachelor and master level study programs organized in the Bologna frame. The present paper deals with the second part of the program-end feedback questionnaire administered as a preliminary study for the above mentioned larger research.

The objectives of our research section are the following:

- To identify the intentions of the undergraduate students to continue their education at master level.
- To identify their relationship with the labour market during the studies.
- To assess the perceived prospective of being employed in the near future.
- To compare the two study programs in terms of employability.

2.1. Sample and instrument

The participants in the preliminary research are 62 students in the third year of bachelor studies in Psychology (42) and Educational Sciences (20), with an average age of 21,6. The questionnaire administered consisted of 30 items aiming to gather data on the following topics: demographics (11 items); relationship with the labour market and career plans for the next years (12 items); competences aimed by the respective study programs (1 complex item); satisfaction of the students with the quality of their education (6 items). The participants were asked to fill-in the answers and at the same time to give feedback on the comprehensiveness of the questionnaire for the topic and on the readability of the items, on an anonymous basis. We considered important to ask for their opinion in this phase of the research because they are already very familiar with questionnaires and could be considered "experts" that can help the refinement of the instrument.

3. Results

3.1. Returning to the university or entering the job market?

One starting point question in our research is to investigate if the future graduates have the intention to continue their studies at the master level or not. Even if the possible jobs do not require a master diploma, having it increases the employability (Voicu et al., 2010). The occupations opened to psychology and educational sciences graduates can be performed either with a bachelor level diploma as well as with a master's diploma. The present economic crisis affected both fields and, under these circumstances, staying in university for another 2 years could be a profitable use of time: it brings one more diploma and opens new opportunities (i.e. independent practice for psychology and educational counsellor for Educational sciences). The majority of the respondents declared that they have the intention to follow the master program (92,85% of Psychology and 95% of Pedagogy students). For the whole population of the research, the intentions of following a master program or not are presented in Table 1.

Table 1. The intention to continue the education at master's level

Do you intend to follow a master program? If yes, when?	Frequency	Percent
No intention	4	6,45
Starting with 2011	42	67,74
Starting with 2012	6	9,67
Yes, but I Do not know when	10	16,12
Total	62	100

Most of the undergraduate students (67,74%) want to continue their studies this year and only a minority will postpone the moment of returning to study (9,67%) while some are not sure about the moment (16,12%). The students that answered "yes" concerning the intention to continue their education are not all sure about the university they will choose for the next cycle: some want to go abroad (6,45%); some will go to other universities in Romania (8,06%), but the majority will probably continue their studies in our faculty, which has two master programs for each subject area.

3.2. Relationship with the labour market during the studies

Due to a relative flexibility concerning the attendance, students in Romanian universities usually work either part-time, or full time. This means that their efforts are divided between the studies and the workplace.

Table 2. Present employment status

Field	Working full-time	Working part-time	Working without a contract	Not working
Psychology	4,83% (3)	3,22% (2)	3,22% (2)	58,06% (36)
Educational sciences	4,83% (3)	0	1,61% (1)	24,19% (15)
Total	9,66% (6)	3,2% (2)	4,83% (3)	82,25% (51)

As one can see, the majority of our students do not work yet (82,25%) and only a small part is working full-time (9,66%); there are even some students working without a contract (4,83%) – see Table 2. Being employed during the studies can have same advantages, such as gaining general work experience (mostly required for employment after graduation); making a first step

towards a full-time employment in a job related to the subject area; and last, but not least, earning money. One of the issues not included in the present questionnaire is the motives of having an employment during the studies, but we intend to include a specific item on this.

For the students who work at the present time, the employer is rather a state-owned organization for those in Educational Sciences and a private company for the Psychology students. Looking back to the three years of study, some respondents declared that they worked all time (9,67%), some declared that they worked intermittently (17,74%) and the majority (72,58%) did not work at all (see Table 3).

Table 3. Status of employment during the studies

	Worked all the time	Worked intermittently	Not worked at all
Psychology	3,22% (2)	16,12% (10)	50% (31)
Educational sciences	6,45% (4)	1,61% (1)	22,58% (14)
Total	9,67% (6)	17,74% (11)	72,58% (45)

For those who did not work during the last three years, the reasons were different: about 6,45% looked for a job but did not find one and 62,9% did not search at all, dedicating their entire time to studies. Some of the motives for not having a job yet are as follows: *"The schedule in university was too tight and I was not able to attend the classes and work at the same time"; "I did some research, but I didn't find anything suitable for me"; "I was not able to be hired because nobody accepts people without experience"*. Having a job during the studies can be profitable from the point of view of money, experience, but is it satisfactory too? Being asked about satisfaction with the job, 9 out of 11 declared that they are satisfied with the present job.

3.3. Prospective of being employed in the near future

For the already working students, changing the job in the next 12 month includes either to use the bachelor diploma for getting a job in the field of specialization, either to continue working in the same job. For the students that did not work during the studies, graduating is the moment after which they will either start looking for a job, or continue their studies for another 2 years. It is surprising that most of the students that worked during the studies have the intention to continue at master level (and probably continue to work). For the two subject areas, the situation of the future intentions is presented in Table 4.

Table 4. Employment situation during the studies and intention to follow a master program

Employment situation during the studies		Intention to follow a master program in the future		
		Yes	No	Total
Psychology	Worked all the time	4,83% (3)	0	4,83% (3)
	Worked intermittently	11,29% (7)	1,61% (1)	12,90% (8)
	Not worked at all	46,77% (29)	2	50%(31)
Educational Sciences	Worked all the time	6,45% (4)	1,61% (1)	8,06% (5)
	Worked intermittently	1,61% (1)	0	1,61% (1)
	Not worked at all	22,58% (14)	0	22,58% (14)
Total		93,54% (58)	6,45% (4)	100% (62)

Concerning the employment in the field of specialization, the two programs open different perspectives. For the psychology students it was difficult to find a job in the field during the studies (such as assistant in a private psychology company), most of them working in other fields. After graduation, the bachelor diploma makes them employable for working under supervision in a job of psychologist for the next two years and allows them to continue their studies at master level. Of course, they have the option to work in other fields.

For the students in Educational Sciences things are easier, because most of those who worked had a job as a primary school teacher or kindergarten educator. For them, continuing to work in the same organization increases the chances to be promoted according to the diploma level and to seize the opportunity of a position as school counsellor, if available. Things are more complicated for those who did not work during the studies and will have some difficulties to find a job in the educational system in the present circumstances, when schools are in a process of downsizing. The development of the continuing education market could be an opportunity for them, but having a master diploma will be an advantage in all cases. Thus, the prospective of employment is postponed for the majority of the respondents after the graduation of the master program.

4. Discussion and conclusions

The respondents in our research are a particular population because the two subject areas have some specific requirements for the practice that involve master level studies. Therefore they intend to continue their studies, but some of them want to keep a relationship with the labour market by working in jobs not related to their specialisation. The population of the research being a convenience sample, the value of the data are limited for interpreting the tendencies at a larger scale, but will be very useful for restructuring the curricula of the two programs. The students of the two programs intend to continue their education, not to enter the labour market after graduation unless they worked during the studies, or continue to work and study. The instrument we constructed for the research of the employability of the students in the two programs is being tested and some of the items will be rephrased. A version for the graduates will be constructed and used in a survey at 1 year and 3 years after graduation. The part of the questionnaire referring to the curriculum will be used to adjust the curricula to the needs of the two fields of practice.

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EUROPEAN GUIDEMARKS IN QUALITY ASSURANCE OF THE HIGHER EDUCATION

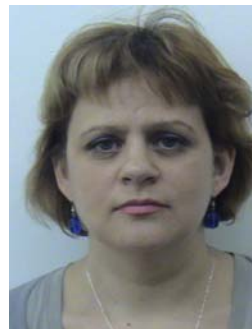
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Abstract

The development of quality standards determined some the European states to implement in the higher education field one new system whose main objective is represented by the increasing quality of the educational act which win provide the student more chances in their career opportunities. This article presents some European initiatives on this subject (Evaluation Agency for Research and Higher Education - France and Quality Assurance Agency for Higher Education from United Kingdom) and it makes some considerations on the accreditation system of the higher education services suppliers.

Key words: accreditation, higher education, quality standards.

1. Introduction

Quality assurance in higher education institutions is one of the main demands made by the Bologna process and a priority for all higher education systems in the European Union. A first step in achieving this goal was the establishment of a European authorities to coordinate and certify the quality assurance activities nationwide.

Agreeing to all responsible factors required a longer period of time, but now that authority exists and plays a decisive role in national efforts to ensure a framework for training that is consistent with the new challenges of European economic environment.

2. The European Association for Quality Assurance in Higher Education

At the beginning of the 1990s, in the European countries, the quality in higher education was very different. In some countries such as Denmark, France, the Netherlands and the United Kingdom there are agencies for quality assurance. Other countries (Sweden and Spain) were

contemplating the establishment of agencies and finely others (Norway and Finland) were conducting pilot projects as a preparation for a future agency [6].

Under the Dutch presidency (1991) the decision to conduct the European Pilot Projects in the field of quality assurance was formally taken by the European Council of Ministers and the starting point was the document Recommendation of the Council (98/561/EC of 24 September 1998) on European co-operation in quality assurance in higher education.

The principals directions of this project was [6]:

1. Enhance awareness of the need for evaluation in higher education in Europe.
2. Enrich existing national evaluation procedures.
3. Further the transfer of experience.
4. Impart a European dimension to evaluation.

A management group was established to assist the Commission in the practical management of the projects, including the preparation of the evaluation approach (table 1)

Table 1 . The composition of the management group [6]

Name	Country
Jim Donaldson	UK
Karl O.Jordell	Norway
Dorte Kristoffersen	Denmark
Christian Thune	Denmark
Marie-Odile Ottenwaelter	France
Andre Staropoli	France
Klaus Schnitzer	Germany
Antonio Simoes Lopes	Portugal
Ton Vroeijenstijn	Netherlands

The management group delegated the operational responsibility for the projects to a Secretariat 2 shared between the Danish Centre for Evaluation of Higher Education and the French Comité National d'Evaluation. In each member state, National Committees were set up to assume the responsibility for the projects at the national level, such as selecting those higher education institutions which would participate, and reflecting and reporting on the outcomes of the projects. Last, but not least, a European Committee was established comprising the chairpersons and secretaries of the national committees. The projects included a total of 46 institutions from 17 countries (the 15 member states at the time, and Norway and Iceland).

The project approach rested on the principles that were common to the four countries (Denmark, France, the Netherlands and the UK) with established quality assurance systems at the time. The fourth principles were [6]:

- Autonomy and independence both from government and from higher education institutions in terms of procedures and methods concerning quality evaluation;
- Self assessment
- External assessment by a peer review group and site visits
- Publication of an evaluation report.

The projects were concluded at a conference held in December 1995 in the Canary Islands during the Spanish Presidency, where the participants (institutions, national authorities and national experts) recommended creating a network for quality assurance at the European level

for continuous exchange of information and transfer of experience and methodological developments for quality assurance in Higher Education. The concluding section of the *European Report* (p. 40) lists the following mechanisms through which it was anticipated that these goals could be achieved [1]:

“An exchange of professionals in the evaluation field who would be invited to spend a length of time in another country’s evaluation

- *A reciprocal use of European experts that would be facilitated by the development of national databases that would include areas of expertise and language skills*
- *An exchange of information at the European level which could include databases of national evaluations, catalogues of European evaluation programmes, the organization of conferences and seminars, a newsletter or bulletin.*
- *The Network could also initiate experimental projects at the European level.”*

To promote European co-operation in the field of quality assurance, in 2000 was established The European Network for Quality Assurance in Higher Education who, four years later (November 2004), was transformed into the European Association for Quality Assurance in Higher Education (ENQA).

Since the founding of the association, the ministerial conferences of Prague (2001), Berlin (2003), Bergen (2005), London (2007), Leuven/ Louvain-la-Neuve (2009) and Budapest and Vienna (2010) can be characterized as major milestones determining the direction of ENQA’s development until the current days.

For example, in 2003 ENQA, together with EUA, EURASHE and ESIB (now ESU) were mandated to develop an agreed set of standards, procedures and guidelines for quality assurance (this group are commonly named „The E4 Group”).

After two years, in the ministerial conference of 2005, „The E4 Group”, presented the *Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)*. The main purpose of these standards and guidelines was to guarantee professionally conducted quality assurance procedures on a high quality level [2].

Today there are 39 full member agencies in ENQA (table 2):

Table 2 The full member agencies of ENQA and their methods used for quality assurance in higher education [7]

Agency	Methods
Austria Austrian Accreditation Council, Vienna	Peer review, on-site visits, written reports and final hearings
Austrian Agency for Quality Assurance, Vienna	Peer review, monitoring, stocktaking
Fachhochschulrat, Vienna	
Belgium Council of Flemish Institutions of Higher Education, Brussels	
Flemish Interuniversity Council Quality Assurance Unit, Brussels	Discipline orientated quality assessment based on self-assessment and peer review. Evaluation of programmes in development co-operation
Bulgaria	Evaluation, accreditation and control of the quality of

National Evaluation and Accreditation Agency, Sofia	education and research activities
The Czech Republic Accreditation Commission Czech Republic, Prague	
Denmark Danish Evaluation Institute, Copenhagen	Appointment of expert panels. Self-evaluation. Site visit. Surveys of users. Reporting by external examiners. Conference. Final public report
The Accreditation Institution, Copenhagen	Self-evaluation by the programmers, appointment and training of expert panels, site visit and reporting by external reviewers, production of public assessment report by the agency, followed by decision of approval/conditional approval/disapproval by the Accreditation Council
Finland Finnish Higher Education Evaluation Council, Helsinki	Audits of quality assurance systems of HEIs and evaluations for the accreditation of new polytechnics; Programmers and thematic evaluations; Evaluations of quality units in education and adult education in the university sector, and quality units in education and centers of excellence in regional impact in the polytechnic sector; Accreditation of professional courses offered by HEIs
France Evaluation Agency for Research and Higher Education, Paris	Analysis of quantitative data and use of indicators. Peer review system (experts) for qualitative evaluation.
Commission des Titres d'Ingénieur, Neuilly-sur-Seine	
Germany Accreditation, Certification and Quality Assurance Institute, Bayreuth	Accreditation.
Accreditation Agency for Study Programmed in Health and Social Sciences, Freiburg	The accreditation procedures of AHPGS include a self-assessment report by the programmed under evaluation; systematic analysis of the report by the review committee; a site-visit by the committee; the production of the final report by the committee; and a final accreditation decision by the AHPGS Commission based on the aforementioned reports
Agentur für Qualitätssicherung durch Akkreditierung von Studiengängen, Bonn	
Accreditation Agency Specialized in Accrediting Degree Programmers in Engineering, Informatics, the Natural Sciences and Mathematics, Duesseldorf	Assessment of degree programmers, peer review, analysis of data, on-site visit
Stiftung Evaluationsagentur Baden-Wuerttemberg, Mannheim	Evaluation (based on peer review and empirical data), audit procedures (based on peer review), accreditation (based on peer review), peer review procedures for research proposals, consultancy
Foundation for International Business Administration Accreditation, Bonn	Programmer Accreditation, Audit, Evaluation, Process Accreditation, Institutional Audit, PhD programmer, Support and consulting services.
German Accreditation Council, Bonn	External quality assessment, peer review
Central Evaluation and Accreditation Agency Hannover	Evaluation: self-assessment, external evaluation, audit teams. Accreditation: Peer review, quantitative and qualitative data analysis, site visits, assessment at the institutional and programmer level, re-accreditation.

Hungary Hungarian Accreditation Committee, Budapest	Self-evaluation, peer review visits, published reports
Ireland Higher Education and Training Awards Council, Dublin	Institutional review. Programmatic review. New course evaluation. National Quality review. Appointment of expert panels. Self-evaluation. Site visit. Surveys of users. Reporting by external examiners. Conference. Final public report
Irish Universities Quality Board, Dublin	Internal and External reviews of academic and administrative departments, written reports, reviews, and follow-up measures
The Netherlands Accreditation Organization of the Netherlands and Flanders, The Hague	
Norway Norwegian Agency for Quality Assurance in Education, Oslo	Evaluate the institutional systems for quality assurance (audits), accreditation of institutions and programs, revision of accredited institutions and programs and carry out other evaluations
Poland The State Accreditation Committee, Warsaw	Self evaluation, site visits, written reports, published quality rating, and a follow up procedure
Romania Agency for Quality Assurance in Higher Education, Bucharest	Evaluation (on an ongoing basis and upon request), review, audit, and accreditation
Russia National Accreditation Agency of the Russian Federation, Yoshkar-Ola	Methodological recommendations, research, training of experts.
Spain Quality Assurance Agency for the University System in Castilla y León, Valladolid	
Agency for Quality Assurance in the Galician University System, Santiago de Compostela	
Agency for Quality Assurance in Higher Education and Research of Andalusia, Córdoba	Peer review, experts review
National Agency for Quality Assessment and Accreditation of Spain, Madrid	
Catalan University Quality Assurance Agency, Barcelona	External assessments based on self-evaluation
Sweden National Agency for Higher Education, Stockholm	Multi-method approach
Switzerland Swiss Center of Accreditation and Quality Assurance in Higher Education, Bern	
United Kingdom Quality Assurance Agency for Higher Education, Gloucester	Institutional audit; programmers review; special scrutinizes (eg in relation to applications for degree awarding powers).

As shown in Table 2 shows that agencies which operate in quality assurance used to achieve the same goal, different methods.

3. The National Agencies for Quality Assurance in Higher Education: France and United Kingdom

3.1. Evaluation Agency for Research and Higher Education (AERES) – France [8]

This agency is reconfirmed such as full membership in 2 September 2010 was born in 1985 and first name was National Council of Quality (from 2007 – AERES).

It shall also be entered in EQAR (European Quality Assurance Register for Higher Education). The role of this agency is to evaluation the higher education institutions and research bodies, research activities of research units, education and degrees of higher education institutions. Review and evaluation of quality of the main "missions of public service" of higher education institutions and research bodies and of the strategies they developed to carry out their teaching/research tasks and results. In the 2011 assessment period ended zonal quality higher education institutes (the corresponding C L'Ile de France, Alsace-Lorraine) And the results were published in "Regional Analyses conducted during 2007-2010. For undergraduate higher education recommendations for assuring quality have focused on five areas:

1. Adequacy of academic preparation requirements and economic environment.
2. Determination of professional competence of graduates.
3. Implementation of a system to track student progress.
4. Student participation in self-evaluation.
5. Self-education plans.

Currently published on the website of the institution, the necessary documents and standards to be met for the fourth campaign of quality assessment for phase 2013-2017. Introducing the new campaign was conducted at four meetings held in Nancy (24 March), Corte (31 March), Strasbourg (April 4) and Avignon (April 6), and the deadline for submission of applications is scheduled for October 15, 2011. International experience began in December 2008 when the institution was required to carry out the Saint-Joseph University in Beirut (Lebanon). The principal documents under which the activity AERES call:

1. Quality Policy Statement (October 2009)
2. Charter quality assessment (December 2007)
3. Staff Expert (June 2009)
4. Staff scientist (June 2009)
5. Standards and Guidelines for Quality Assurance in the European Higher Education Area - *ENQA* (2006)
6. Quality Policy Statement (October 2009)

3.2. Quality Assurance Agency for Higher Education, Gloucester- United Kingdom

Quality Assurance Agency for Higher Education is an independent organization founding in 1997. Board comprises representatives of institutions, representatives of government funding agencies, and independent members. QAA is fully confirmed as a member of the European Association for Quality Assurance in Higher Education (reconfirmed at 19 November 2008) and has 125 members of staff and uses over 550 reviewers.

QAA meets its responsibilities by [4]:

- a. conducting reviews of universities and colleges

- b. publishing reports on the confidence that can be placed in an institution's management of standards and quality
- c. providing guidance to universities and colleges on maintaining academic standards and improving quality, in line with the Academic Infrastructure.
- d. investigating causes for concern about academic standards and quality
- e. advising governments on applications for degree awarding powers and university title
- f. engaging with European and wider international developments.

The UK Academic Infrastructure is key to the process of assuring quality and standards across UK higher education. It comprises a collection of integrated concepts and documentation that have been developed by QAA and universities and provides a self-regulating national framework within which autonomous universities can describe and manage their academic standards and quality. Although it is, by its nature, a single set of external reference points, the Academic Infrastructure allows for diversity and innovation within courses offered by individual universities. All universities subscribe to the Academic Infrastructure and QAA judges the extent to which they make use of it in managing the standards and quality of their courses. This set of UK-wide agreed guidelines and reference points is key to setting and maintaining quality and standards across UK higher education. It includes the following four components - three are mainly concerned with setting standards and one is concerned with the management of quality [4]:

- a. **Frameworks for Higher Education Qualifications** in England, Wales and Northern Ireland, and in Scotland;
- b. **Benchmark Statements**;
- c. **Specifications**.
- d. **The Code of Practice** for the assurance of academic quality and standards in higher education;

Frameworks for Higher Education Qualifications - describe the main attributes of the major higher education qualifications –the levels of achievement they represent. The frameworks are designed to ensure that universities use the titles of qualifications consistently and as a tool to ensure that they assign the appropriate level to new qualifications that they are developing. They therefore provide a crucial set of points of reference for setting and assessing the standards of their courses. In this way they also assist external examiners and QAA reviewers.

Benchmark Statements - Universities are responsible for determining their own curricula and there is no national curriculum in higher education. As part of the Academic Infrastructure, however, Benchmark Statements set out expectations about standards of degrees in each subject area such as history or engineering. The benchmark statement describes what gives a discipline its coherence and identity, and defines what can be expected of a graduate in terms of the abilities and skills needed to develop understanding or competence in that subject.

Specifications - In addition to these external reference points, all universities are expected to produce Program Specifications, which provide information about each program of learning leading to a qualification that they offer.

The Code of Practice for the Assurance of Academic Quality and Standards [5] is essentially a set of guidelines on good practice in universities. Its ten themed sections range from admissions to course design, assessment and careers advice and provide a framework within which individual universities can consider the effectiveness of their approaches to learning and teaching related activity. The Code is designed so that every institution, regardless of its size, subject base, physical environment, population mix, traditions etc, will find it relevant. It is made up of 10 sections and was originally prepared by QAA between 1998 and 2001.

The Code assumes that, taking into account principles and practices agreed UK-wide, each institution has its own systems for independent verification both of its quality and standards and of the effectiveness of its quality assurance systems [5].

Section 1 (Postgraduate research program – last version 2004) is designed to guide institutions on the development of institutional codes of practice in the area of postgraduate research program.

Section 2 (Collaborative provision and flexible and distributed learning - including e-learning – 2010) is divided into two parts. First part is concerned with the responsibilities of a UK higher education institution in respect of collaborative arrangements that lead to its academic awards.. Second part is concerned with particular aspects specific to the academic management of the delivery, support and assessment of FDL program, whether or not these involve a collaborative partner.

Section 3 (Disabled students – 2010) The starting point for this section is the recognition that disabled students are an integral part of the academic community. As such, they have a general entitlement to the provision of education in a manner that meets their individual requirements.

Section 4 (External examining – 2004) links the external examining process to subject benchmarking, the national qualifications frameworks and institutional program specifications, all of which are part of the publicly available information that supports judgments on academic standards and quality assurance procedures

Section 5 (Academic appeals and student complaints on academic matters - 2007) sets out principles for addressing complaints on academic matters (complaints) and appeals on academic matters (appeals) by students in higher education institutions.

Section 6 (Assessment of students - 2006) assumes that the above statements about the nature and purpose of assessment are broadly accepted.

Section 7 (Program design, approval, monitoring and review - 2006) provides a set of precepts, with accompanying explanation, on the arrangements for program design, approval, monitoring and review that institutions should consider when developing and reviewing their procedures.

Section 8 (Career education, information, advice and guidance - 2010) stresses the importance of integration, coherence and internal collaboration as part of an institution-wide commitment to preparing students for their future career

Section 9 (Work-based and placement learning - 2007) is intended to provide guidance on these specific aspects of a higher education award and to support such arrangements where they are a pre-determined and integral part of the award, and where their learning outcomes clearly contribute to its overall aims.

The last section (Admissions to higher education - 2006) is intended to help institutions to assure themselves and others that the policies and procedures they use to attract, recruit, select, admit and enroll students are clear, fair, explicit and consistently applied.

Conclusions

At present, Europe is an institution that coordinates all the national quality assurance agencies in higher education. Set of standards issued under the coordination of ENQA adapted and implemented at the national level, provide the necessary framework to ensure flexibility in preparing students face an increasingly dynamic business environment. This flexibility is highlighted in *Europe 2020* program launched by the European Commission on 27 April 2010 and specifically mentions the obligation of Member States to focus on improving quality and international attractiveness of European higher education system by promoting mobility of students and young professionals.

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CONSIDERATIONS ON THE ROMANIAN UNIVERSITY EDUCATION IN THE 21st CENTURY — BETWEEN CHALLENGES AND OPPORTUNITIES

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Abstract

The beginning of the 21st century represents a period during which the Romanian university education finds itself in a new environment and enters a process of change that proves to be quite difficult. This is due to the integration of Romania into the European Union, to the world globalization process, as well as to the major changes in the Romanian economy and in the labor market. Thus, there have appeared a series of challenges and opportunities for the Romanian university education and some of these will be the subject of the present paper.

Key words: integration process, world globalization, challenges for the Romanian university education, opportunities for the Romanian university education.

1. Introduction

The university education is one of the components of formal education. This includes all the actions that have an educational purpose, organized and conducted in a planned, systematic manner in schools and universities, through the education system structured in a hierarchical way on school levels and years of study [1]. In Romania, there exist both public and private higher education institutions. “These include universities, academies and colleges organized in specialized departments. “In accordance with its objectives, university education comprises: short university education offered by university colleges (3 years), long university education (4 to 6 years) and postgraduate university education (1 to 2 years). Public higher education institutions are coordinated by the Ministry of Education and Research”. [2] The Romanian higher education institutions are subject to an accreditation process.

We can not analyze the Romanian university education in the 21st century without carefully studying the evolution of the Romanian society and education in the 20th century. Following the Second World War and the establishment of the communist regime in Romania, the Romanian university education had to function in a relatively isolated society. Due to the fact that the totalitarian regime approved only the relations with the other Communist states of Central and Eastern Europe, both the Romanian society and the education were hindered in their development by the imposition of clear directions by the ruling regime. Moreover, they were directed towards the internal needs and did not have to face the free foreign competition. The Romanian university education had to confront the same realities. This situation was maintained until the events of December 1989, which resulted in an increasingly evident openness to the west. This openness influenced the Romanian society as well as the Romanian education. In the next part of our study, we will make an analysis of the Romanian university education in the first decade of the 21st century, and then we will examine the prospects of the following decades, focusing on the challenges and the opportunities of the higher education in Romania.

2. Results and discussions

2.1. The evolution of the Romanian university education in the 21st century

According to statistics “in 2004, some 4.4 million of the population were enrolled in school. Out of these, 650,000 in kindergarten, 3.11 million (14% of population) in primary and secondary level, and 650,000 (3% of population) in tertiary level (universities). [3] In the same year, the adult literacy rate was 97.3% (45th worldwide), while the combined gross enrollment ratio for primary, secondary and tertiary schools was 75% (52nd worldwide).[4],[5].

Since the last decade of the twentieth century, the Romanian university education has been confronted with a new situation. Thus, due to the economic crisis that appeared in the early 1990s, many of the state economic societies were faced with serious problems and the situation of the labor market in Romania underwent major changes. A very short period elapsed from the appearance of the first unemployed to the large number of jobless persons that appeared later.

The economic crisis and the labor market crisis did not pass without consequences for the Romanian university education. Thus, the graduation from a university did no longer mean a certain job that corresponded to the level of preparation of the graduates. The labor market could not absorb all the university graduates. This fact was most evident among the graduates with technical training. The Romanian industry, which was in free fall, was no longer able to retain the existing workforce and there were fewer vacancies. It was a period during which the system of values underwent serious changes; Lucrativeness, not quality, was now considered valuable.

If during the last decade of the twentieth century, the economic crisis was the biggest impediment for the Romanian university education, the beginning of the 21st century generated a new situation. On the one hand, due to the beginning of the economic recovery process, the demand for university graduates began to increase. Once Romania started the process of accession to the European Union, the number of foreign investments in Romania increased dramatically. These Romanian companies with foreign capital preferred and still prefer, in most cases to hire university graduates without significant professional experience, but who, in addition to theoretical professional knowledge, have good computer skills, master one or more foreign languages and are highly motivated to improve themselves professionally.

Next, we will present the challenges the Romanian higher education faces during the 21st century.

2.2. Challenges for the Romanian university education in the 21st century

Due to the change of the regime, and as a result of the opening of Romania, the Romanian university education is facing a new situation. Thus, there have emerged a number of challenges, which the higher education will have to deal with in the period ahead.

A first challenge is the changing of the labor market needs owing to the numerous foreign investments, which usually use the latest technologies. Thus, the education must adapt to these requirements and provide training in line with what is required on the labor market. The Romanian education used to be an elitist one. This trend has still not been eliminated completely. For a very long time it was aimed only at developing the capacities and the skills of the bright students, the others who could not keep up with the pace of teaching left the school prepared only to a little extent to face the harsh realities of the labor market. The Romanian learners today still have to accumulate large quantities of theoretical information, they have to study for more subjects than their European counterparts, doing less practical work than them. One of the possible justifications for this situation would be the lack of funds for equipment and other materials that has plagued the Romanian schools and universities. Nowadays, due to the efforts of the teachers and professors that have applied for research grants, many Romanian universities have begun to endow their labs with state of the art apparatuses, the “Nicolae Balcescu” Land Forces Academy of Sibiu being an eloquent example in this respect. According to the website of the academy (<http://www.armyacademy.ro/>), the institution is involved in numerous research projects and this has given it the chance to offer its students a higher quality education.

Due to the possibility for the high school graduates in Romania to study abroad, an opportunity that is increasingly used by the Romanian students, the Romanian university education is facing a new and unprecedented situation. The Romanian higher education must keep, by means of its attractiveness, a large number of Romanian students in the country, as it is known that some of the Romanian students who study abroad prefer not to return to Romania.

On the other hand, due to the opening of Romania and to the large number of foreign investments, Romania is becoming more attractive to the foreign labor force. Thus, Romanian graduates can be found, especially in leading positions, in multinational companies in Romania, but, even in the case of Romanian companies, they are in competition with foreign graduates and specialists. In order for the Romanian university graduates to be able to cope with this situation, the Romanian university education must rise above the level of the competition.

Frequently, the Romanian university graduates have a theoretical knowledge that exceeds that of the graduates of foreign universities, but are inferior when it comes to practical experience and capacity to solve problems arising from practical work. For these reasons it is essential that the Romanian students should do, during their academic training, some internships at home and abroad to supplement their extensive theoretical training with the practical experience they need at the start of their professional activity.

The Romanian higher education should focus on “market relevance, internal competition for state resources, support for entrepreneurial efforts and a focus on student issues (including equity concerns)”. [6] The business companies must inform the universities on a regular basis of their needs in terms of the qualifications of the prospective employees. Having had the

opportunity of studying in Germany, we propose the adoption of the solution encountered there, that is to say, the representatives of the business firms should meet with those of the universities at yearly conferences where they will discuss the labor market characteristics and necessities. The higher education in Romania should collaborate strongly with the business environment and both of them should have a say as far as the contents of the curricula and of the syllabi are concerned. Steps have been taken in this respect and here we would like to mention the example of the "Hermann Oberth" Faculty of Engineering of the "Lucian Blaga" University that has established a partnership with "Continental", a German firm that employs many of the graduates of this faculty. According to the dean of the faculty, Ioan Bondrea, "last year 74% of the graduates of the Faculty of Engineering of Sibiu were hired by the companies of Sibiu." [7]. This example is not a singular case and it is evidence of the progress made in terms of the cooperation of the business environment with the universities and of the adaptation of the higher education to the needs of the labor market.

Basically, the demands of the business environment represent a shift from a relatively strongly theoretized education to one that lays a much greater emphasis on practical knowledge and skills. Furthermore, the business environment in Romania should indicate the specializations that will be required by the business environment in the medium and long run, so that the universities could meet these future needs by training students in the required fields and endowing them with the necessary skills. Through this measure, the needs of the business companies will be better satisfied by the graduates of the Romanian higher education and the majority of available positions will be filled by local labor force.

"The latest data from the Population Reference Bureau shows that there are twenty countries in the world with negative or zero natural population growth." Romania is one of these countries with -0.2%; natural decrease annually and -29% total population decrease by 2050. [8] As a consequence of the negative population growth, the Romanian university education, through the educational offer, will have not only to keep the vast majority of those willing and able to study in the country, but it will also have to attract foreign students to cover the shortage of higher education graduates. This will become a major impediment in the development of the economies of the old continent and, in the 21st century, Romania will not be protected from this reality either. For this reason, the Romanian universities will need to come up with a more attractive offer in order to attract both Romanian and foreign students.

The budget allotted for the Romanian education is little. This is true for the Romanian higher education too. Therefore, the universities should provide, alongside a very good organization and conduct of the educational process, some of the financial resources necessary for the training of the students. By accessing funds, by carrying out research projects for the private sector and with financial support from the central and local authorities, the university management can exceed the current underfunding of the Romanian universities.

2.3. Opportunities for the Romanian University Education in the 21st Century

The political and economic evolution of Romania during the last two decades has also brought numerous opportunities for the Romanian university education.

Most of the opportunities of the Romanian university education have appeared as a result of the accession to and later of the integration of Romania into the European Union. Thus, there have appeared funds for the modernization of the university infrastructure, teacher training programs, programs for student exchanges, research programs financed by means European funds, etc. A

competitive university management is able to take advantage of these opportunities by making eligible projects financed from non-reimbursable European grants.

The collaboration between universities and the business environment is another opportunity for the Romanian university education, which will have to be better capitalized on by the Romanian universities. This collaboration represents one of the determining factors for the favorable development of the Romanian university education. By maintaining a permanent connection with the business companies and by carefully following its development trends, the management of Romanian universities will be able to adapt the educational offer and the skills of the graduates so as to meet the business requirements.

The signing by Romania, along with other 28 states, on 19 June 1999, the "Bologna Declaration" is another opportunity for the Romanian higher education. In this respect, Professor Constantin Oprean, Ph.D. writes: "On this occasion, the European higher education institutions, for their part, have accepted the challenge of playing an important role in building the European Higher Education Area, and in applying the principles of the Bologna Magna Charta Universitatum of 1988. This fact is of great importance because the independence and autonomy of universities ensure the continuous adaptation of the higher education and of the research systems to the needs for change, to the requirements of the society and to the scientific progress." [8]

3. Conclusions

The beginning of the 21st century is a very important period for the Romanian university education. The political and economic changes have brought significant changes in the labor market. These changes have resulted in the emergence of challenges, but also of opportunities for the Romanian higher education. If the challenges are addressed and the opportunities are skillfully taken advantage of, the Romanian university education will have a positive evolution and will be one of the most important factors in the development of the Romanian economy and society. "The Romanian higher education is expected to play a fundamental role in fostering a society of knowledge and learning. The evidence is abundant in proving that today's advanced societies, and particularly those of tomorrow, are more and more societies of knowledge and learning. The production, transmission, and use of knowledge in any field of activity are instances that ensure the increase of productivity and efficiency, the development of the entrepreneurial and competitive spirit. (...)By vocation and function, the higher education institutions are best qualified to contribute to the construction and assertion of a society of knowledge and learning. The future of higher education and of the society it functions in depend on the efficient accomplishment of this mission." [9]

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THE EVALUATION OF THE WEBSITES' QUALITY – APPLICATION FOR THE WEBSITES OF UNIVERSITIES

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Abstract

This paper describes the quality evaluation of websites own by some representative universities from Romania, using the Web Quality Evaluation Method (WebQEM) developed between 1998-2000 by a group of researchers from the National University of La Pampa (Argentina) led by Luis Olsina. The evaluation process was done using the Online QualityEvaluation tool (www.evaluable-calitatii.ro), an online evaluation application which was created in 2010 by Lucian Militaru in order to provide a world wide accessible and flexible framework for quality evaluation to developers and evaluators. In the first part of this paper, WebQEM method is presented. In the second part, a case study of using the WebQEM and Online QualityEvaluation tool to evaluate websites own by some representative universities from Romania is presented. The final conclusion of the experiment was that all the analysed websites have a satisfactory quality, all the scores being higher than 60 on a scale from 0 to 100.

Key words: WebQEM, ISO9126, ISO14598, LSP, computer assisted.

1. Introduction

Due to the rise of the informational volume available on the Internet through the websites, more and more users choose to get informed and even communicate by using these virtual methods. In order to facilitate their use, the developers are trying to make available as much useful information as possible in a very attractive form. Also, the users' communication needs have not been forgotten, they being offered forums and feedback possibilities. Like for any other product, the necessity to evaluate the websites appears and also that to select those which satisfy the demands of the users. The specific literature is rich in presentations and analysis of evaluation methods for this category of software products. One of the most representative methods in the field is the Website Quality Evaluation (WebQEM) method, created during 1998-2000 by a group

of researchers from the La Palma National University (Argentina), led by prof. Luis Olsina, method which was used in this research.

The study has been carried up on three national websites dedicated to the presentation of some of the most representative universities from Romania.

2. The general presentation of the method

The WebQEM method to evaluate the websites' quality has as basis the international standards referring to the software quality:

- the software quality model defined into the ISO 9126 standard;
- the model of the quality evaluation process defined into the ISO 14598 standard.

The WebQEM method includes four steps:

- 1) the definition and specification of the demands referring to quality;
- 2) the primary evaluation – the evaluation of the measurable features;
- 3) the global evaluation – the aggregation of the primary evaluation results;
- 4) the analysis of the results, the formulation and gathering documentary evidence for conclusions.

2.1. Defining and specifying the demands referring to quality

In order to be able to define the quality demands, the users' needs must be established. Thus, certain things must be defined:

- the field which includes the websites;
- the perspective of the evaluation; the user can be, for example: the visitor of the site (common or expert), the creator of the site, the administrator of the site etc., the quality necessities being obviously different for each category.

Based on this information, the characteristics of quality and of measurable features are mentioned. The quality tree is built having as a starting point the quality model defined in the ISO 9126 standard, selecting the quality characteristics and establishing the importance level for every characteristic.

2.2. The primary evaluation

This stage includes two main activities: *the evaluation projection* and *the evaluation implementation*.

In the projection of elementary evaluation stage the testing environment (operating system, browser, browser plugins, additional software i.e. flash player, JRE, etc.), the metrics and the measurement methodology of the measurable features (set up in the anterior step) are established. For each measurable feature identified as A_i a variable X_i is associated, whose numerical value is obtained by applying some direct or indirect metrics [1]. In view of evaluating the quality level, a preference criterion is defined. A preference criterion can be the $E: [0, X_i^{\max}] \rightarrow [0, 1]$ function, which generates a $EQ_i = E(X_i)$ preference (or quality indicator) which represents the measure in which the A_i attribute satisfies the demands associated to him. The 0 value indicates the fact that X_i does not satisfy the demands and the 1 value - which it carries out perfectly. The quality preference can also be interpreted as a percent to satisfy a demand for a certain attribute.

For example, a metrics for the "Invalid links" (A_i) quality feature is the number of invalid links. Because it is desirable that a website does not contain invalid links, the 0 value obtained by applying this metrics indicates a maximum quality. The next step is to determine the number of invalid links (X_i^{\max}) indicating a lower quality, a zero one. Then the preference criterion function will be defined, with an example in the following table:

Table 1. Example of $E(X_i)$ function

The value of the X_i variable	The value of the EQ_i preference elementary criteria
$X_i > X_{\max}$	$EQ_i = 0$
$0 \leq X_i \leq X_{\max}$	$EQ_i = X_i / X_{\max}$

Obviously, to improve the "Invalid links" (A_i) feature quality, as many as possible of these invalid links will have to be eliminated.

The measurement methodology establishes how the measurements are done and the order of the measurements. Returning to the previous example, as a way of measuring the invalid links, one can choose between: accessing all the links and randomly accessing a predetermined number of links. Also, the training documentation for evaluators is made.

The implementation of the elementary evaluation represents a series of actions to measure the website features in conformity with the measurement methodology defined inside the projecting stage. Based on the measured real values ($X_i, i=1, n$), elementary quality preferences ($EQ_i, i=1, n$) are calculated [3]. Thus the partial quality of the website is obtained.

2.3. Global evaluation

During this step, the Q quality index (or the total quality) is obtained by aggregation in conformity with the defined quality model. The aggregation method used in WebQEM is LSP (Logic Scoring of Preferences) [3].

This stage includes two main activities: the projection of the global evaluation and the implementation of the global evaluation.

Projecting the global evaluation consists of selecting one or more criteria of aggregating the quality indicators (preferences) of lower levels in order to obtain the quality indicators (preferences) for the upper levels characteristics, as well as selecting a marking model [2]. The aggregation is done 'from down to up', in several steps, in the tree-like structure of characteristics. The projection final result is a global plan which allows the calculation of the quality indicators for all the characteristics and also the total quality indicator. This last global preference represents the general satisfaction level referring to fulfilling the requirements concerning quality.

The E aggregated preference of some E_i preferences from a subsequent inferior level is the following function: $E(r) = (w_1 E_1^r + w_2 E_2^r + \dots + w_k E_k^r)^{1/r}$, where $-\infty \leq r \leq \infty$, $0 \leq E_i \leq 1$, $0 \leq W_i \leq 1$, $w_1 + w_2 + \dots + w_k = 1$, $E(-\infty) = \min(E_1, E_2, \dots, E_k)$ and $E(\infty) = \max(E_1, E_2, \dots, E_k)$. The r parameter is given by the simultaneity level of preferences which are to be aggregated. Small values of r lead to small values of the $E(r)$ function, which inside CPL (Continuous Preference Logic) means conjunction while high values of r lead to high values of the $E(r)$, the equivalent of disjunction. So, low values of r are chosen when they wish to punish the lack of simultaneity of the preferences which are aggregated while high values appear in opposite cases.

The implementation of the global evaluation consists of the application of the chosen aggregation criteria, the final result being to obtain the quality of the website being valued [4].

2.4. The analysis of the results, formulating and gathering documentary evidence for conclusions

This step includes the analysis of results, the formulation of conclusions and, eventually, of some recommendations concerning the improvement of quality. All these are registered as documents to be presented to those who demanded the evaluation.

3. The evaluation of the websites of universities

The evaluation process has been applied to a number of three operational websites of some known universities in Romania, mentioned above.

Table 2. The addresses of the evaluated websites

The name of the university	The website address
The Polytechnic University of Bucharest	www.upb.ro
The Economic Study Academy of Bucharest	www.ase.ro
The University of Bucharest	www.unibuc.ro

In order to carry out the experiment, the research team has developed a series of preliminary activities: the analysis of the expectations of the targeted user type and also the study of the specialty papers referring to the evaluation of the websites quality and to the technologies used for the creation of these software products. All these made possible the setting up of the targeted quality characteristics as well as their weights in the final quality.

It was decided to use the “*Online Quality Evaluation*” tool (www.evaluarea-calitatii.ro), a web quality testing framework created by Lucian Militaru compatible ISO 9126 and ISO 14598, international standards which define the software quality and the evaluation process of such products. This tool also allows the definition of a LSP compatible quality model and can be used in evaluations realized with the WebQEM method.

3.1. The definition and specification of the criteria referring to quality

The experiment aims to compare the quality of some websites belonging to some representative universities in our country. The evaluation has been carried out from the perspective of the possible candidate for the admission exam. This type of visitor is considered an experimented one, with a high cultural level and intelligence.

A variant adapted to the model used in experiments by the author of the WebQEM method, Luis Olsina has been used:

1. USABILITY

1.1 Global site presentation

1.1.1 Global organization scheme

1.1.1.1 Site map

1.1.1.2 Global indexes

1.1.2. Labeling system (text or icon)

1.2. Contact, feedback and help

- 1.2.1. Help features
 - 1.2.1.1. Explanatory help
 - 1.2.1.2. Help for search
- 1.2.2. Last website update indicator
 - 1.2.2.1. Global
 - 1.2.2.2. Local (for component or page)
- 1.2.3. Addresses list
 - 1.2.3.1. Post mail
 - 1.2.3.2. E-mail
 - 1.2.3.3. Phone
 - 1.2.3.4. Fax
- 1.2.4. F.A.Q. feature
- 1.2.5. Questionnaire feature
- 1.2.6. Newsletter feature
- 1.2.7. Forum Feature

1.3. Interface and aesthetic features

- 1.3.1. Cohesiveness by grouping main control objects
- 1.3.2. Presentation permanence and stability of main controls
- 1.3.3. Uniformity of style
- 1.3.4. Visibility of the content
- 1.3.5. Aesthetic of components

1.4. Various aspects

- 1.4.1. Support for foreign languages
- 1.4.2. Download feature
- 1.4.3. Print feature

2. FUNCTIONALITY

2.1. Search facilities

- 2.1.1. Website search mechanisms
 - 2.1.1.1. Global search
 - 2.1.1.2. Scoped search (collection)

2.2. Navigation possibilities (browsing)

- 2.2.1. Navigation
 - 2.2.1.1. Isolated links
 - 2.2.1.2. Orientation
 - 2.2.1.2.1. Path indicator
 - 2.2.1.2.2. Position indicator
 - 2.2.1.3. Permanence of contextual controls
- 2.2.2. Navigational prediction
 - 2.2.2.1. Link title (link with explanatory help)
 - 2.2.2.2. Quality of link phrase

2.3. Domain specific functionality

- 2.3.1. Relevance of content
- 2.3.2. Building location plan
- 2.3.3. Information about admission to degree course - 2009
 - 2.3.3.1. Admission calendar
 - 2.3.3.2. Faculties presentation
 - 2.3.3.2.1. Maximum number of students
 - 2.3.3.2.2. Duty
 - 2.3.3.2.3. History of faculties
 - 2.3.3.2.4. Skills owned at the end of studies

- 2.3.3.2.5. Post-graduate studies
- 2.3.3.2.6. Contributions in the field of prominent alumni
- 2.3.3.2.7. Contributions in the field of prominent teachers
- 2.3.3.2.8. Professional work of teachers
- 2.3.3.2.9. Teaching material base
- 2.3.3.2.10. Courses
- 2.3.3.2.11. Public transport to courses locations
- 2.3.3.3. Methodology of the entrance examination
 - 2.3.3.3.1. Conditions of entrance
 - 2.3.3.3.2. Special cases
 - 2.3.3.3.3. Attributions of admissions committees, supervision and corrections staff
 - 2.3.3.3.4. Carrying auditions
 - 2.3.3.3.5. Correcting tests
 - 2.3.3.3.6. Filing appeals
- 2.3.3.4. Competition disciplines and their programs
- 2.3.3.5. Admission scores from previous years
- 2.3.3.6. Exam topics from previous years
- 2.3.3.7. Preparation for admission tests
- 2.3.4. Image features
 - 2.3.4.1. Alternative text for image
 - 2.3.4.2. Zoom for image

3. RELIABILITY

3.1. Non-technical (context) errors

- 3.1.1 Link errors
 - 3.1.1.1. Invalid links
 - 3.1.1.2. Links pointing to inappropriate webpages
- 3.1.2. Links pointing to under construction pages
- 3.1.3. Deficiencies of the site or unexpected results, independent of the browser

3.2. Technical errors

- 3.2.1. Uptime
- 3.2.2. Page loading timeout

4. EFFICIENCY

4.1. Information accessibility

- 4.1.1. Mobile browser support
- 4.1.2. WAP browser support

4.2 Similarity of the information from the website with the real one

4.3. Disturbances of attention

- 4.3.1. Aggressive images
- 4.3.2. Aggressive sounds
- 4.3.3. The possibility to stop sound

5. PORTABILITY

- 5.1. Deficiencies or absent features due to different browsers

3.2. The primary evaluation

The registration of the data is realized using the electronic questionnaire provided by the Online Quality Evaluation tool (www.evaluarea-calitatii.ro). The completed questionnaires will be used

to generate reports also using the Online Quality Evaluation tool. A report is presenting the final scores, the scores for each characteristic and, optionally, the details about personnel involved into report and the completed questionnaires. Also the report highlights the questionnaires that have generated total quality values which are not inside the trust interval of the mean and gives a detailed description about the causes which have generated this by presenting the fault answers, the size and the propagation of the deviation inside the tree (indicated by the red nodes).

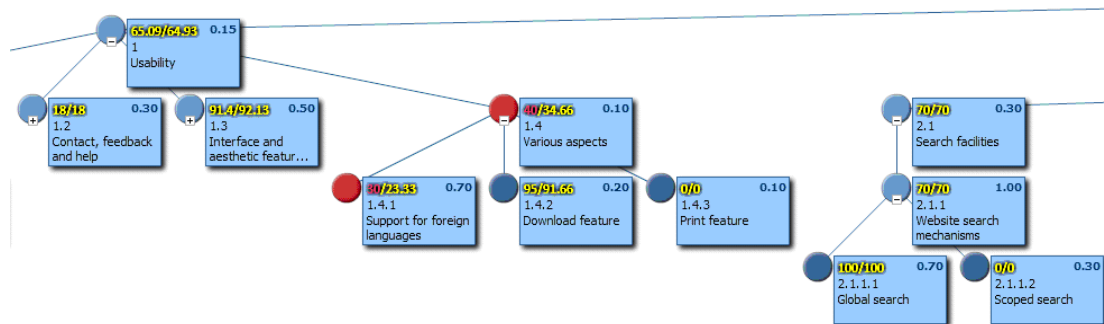


Figure 1 The propagation of deviation

Before starting the evaluation, the personnel involved in these activities has been trained by presenting the content of the questionnaire, the modalities expected to appreciate the questions by the evaluators, the investigation ways supposed to be used by evaluators, the specification of the data collecting method. Also they have been trained to use the “Online Quality Evaluation” online application (www.evaluarea-calitatii.ro).

The collection of the data will be done both manually and automatically. Most of the tests have been created manually as there is no other modality to do this thing. The automatic testing has been used to determine the number of invalid links. The evaluators will use the XENU (freeware) software instrument which can be loaded from <http://home.snafu.de/tilman/xenulink.html>

The experiment has involved three evaluators. These have been asked to answer to all the questions in the questionnaire. Each evaluator has analyzed the websites evaluated independently of the other evaluators and completed the questionnaire in conformity to his opinion. Due to the reduced number of evaluators, it was decided that all the answers should be considered valid no matter what differences may be between them.

3.3. Global evaluation

The final scores are:

Table 3. The final scores

	www.upb.ro	www.ase.ro	www.unibuc.ro
USABILITY	64.93	61.09	58.03
	www.upb.ro	www.ase.ro	www.unibuc.ro
FUNCTIONALITY	78.53	80.47	67.8
RELIABILITY	99.1	98.35	83.18
EFFICIENCY	90	83.73	89.67
TOTAL	85.19	82.44	78.16

3.4. The analysis of the results, formulating and gathering documentary evidence for conclusions

One can notice a greater attention of the creators of such an application for efficiency and reliability. www.unibuc.ro has a lower score for reliability due to the uptime problems. Surprisingly, the scores received for the other characteristics are relatively low. The *Usability* characteristic has the lowest score, the analyzed websites being deficitary in the site map (only www.unibuc.ro), help (except www.ase.ro), indicator for the last actualization, F.A.Q., questionnaire, newsletter, forum, support for foreign languages (except www.ase.ro) and printing facilities (except www.unibuc.ro) chapters. The score of the *Functionality* characteristic is low due to the deficiencies in presenting the faculties (history, prominent graduates and teachers contribution in domain), not presenting the duty of admission exam, methodology of the admission exam (only for www.upb.ro), the admission exam scores from anterior years (except www.ase.ro) and the lack of subjects in anterior years or some tests for the preparation of the admission exam (except www.ase.ro), the student skills at the end of undergraduate, the courses which will be attended and public transport to courses locations (only for www.unibuc.ro).

Obviously, the way to improve the (final) score or total quality indicator of any particular website is to improve the scores of all the elementary characteristics. The personnel who is dealing with improvement should focus on the characteristics with lower scores and bigger weights.

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THE QUALITY OF MANAGEMENT. APPLICATION OF RISK MANAGEMENT PROCEDURE

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Abstract

Achievement of management objectives is conditioned by risks management. Identification and analysis of the risk constitutes a way that management must go through by establishing stages included in the methodologies / procedures. Establishment of risk was achieved at Ștefan cel Mare University of Suceava using a procedure which takes into account their eight goals. The stages of the procedure are based on the principles of risk management and are developed starting from an analysis of internal and external environment. Establishing the analysis goals takes into account a number of criteria for risk assessment. The stages of implementation take into account a monitoring phase of risk activities in order to generate immediate activities when events occur.

Key words: risk, management, evaluation, objective, criteria.

1. Introduction

The creative and innovative development of the university is considering the creation and assumption of a formative educational and research mission. The mission represents the result of social and economic experience acquired by the university leadership over the years. University management establishes its commitment of development by measures grouped into strategic and operational programs and plans. The creation of these managerial components is required by the establishment of a perspective for stakeholders in the university area of influence and includes the socio-economic integration of the university in the influence zone, engaging the academic leadership to provide a long term vision in which to find common interests, covered in sustainable development.

University prepares specialists who will contribute by their creativity to the modernization of society and at discovery of new methods and techniques necessary for the society. This will ensure the assumption of a socially responsible role reflecting the professionalism of those who highlight the social values. The premises of sustainable social development of the region can be

considered as directions that university management must develop and fulfil. Orientation and forecast of the management must consider factors that may affect the academic development and implicit regional or even international development.

The ways assumed by the mission of teaching and research can be developed only if the university management takes into account the risks that may affect processes and involve the management system. Due to the impact that the university has in the socio-economic life, it is imposing a responsible behaviour for management. Risk assessment becomes a challenge to ensure that management assures, starting with the planning phase, correctness in setting the options for the objectives of development [1, 2]. Reducing negative effects of adverse manifestations of some phenomenon had envisaged that these risks are properly identified and evaluated. Determination of the potential impact of threats (event determined by the weaknesses that are recognized) has the advantage of prevention actions.

2. Theoretical aspects

Implementation of strategic management requires measures through that the risk becomes a factor that can be controlled if is identified and evaluated. Multiple conditionalities at which organization is subject, imposed to the organization management to approach the management as a system [3]. The evaluation of uncertainties that arise in the environment of the organization is a way to obtain performance. The approach of process assessment of the risk allows to establish proactive activities that correspond to environment dynamics of ongoing events [4, 5]. The preventive proactive measures are diminishing the activities for eliminating the consequences. Investing in prevention activities decreases the effect of undesired consequences.

The risks are assessed through different methods. Choosing a method depends on the organizational culture and the management style adopted [1, 6, 7]. A manager with proactive attitude will apply the risk treatment as a preventive action and will invest in prevention. For the manager, it will be much easier to determine changes in the allocation of resources and creating strategies, with goals of avoiding or diminishing the disturbances effects [8].

In an organization, manifestation of the risk is different depending on the characteristics of organizational entities. The typology of processes and the structure determine risk areas with different probability of appearance and impact. For this reason, each process and the organizational entity must have a designated responsible [3]. The identification and documentation of risk require the organization management to develop analysis and risk coverage plans. The existence of a document including records of the risks became a necessity and represents an instrument used by management [1]. The organization management is working with an amount of uncertainties that must be managed. Achieving management objectives involves some transformations which require resources. The risk manifested by the lack or misuse of resources can cause process failure [4]. For this reason, an evaluation of all available and necessary resources can be included in an analysis of the inputs that cause risks. Adapting to the environment in which the organization is acting is a challenge for the management. The dynamic of external events can't be managed by managers of organizations and for this reason the impact on the organization must be estimated with great precision. Risk assessments coming from the external environment have in regard the estimates done by specialists and the adaptation of these estimates must take into account the weaknesses of the organization [7].

The risks manifestation may affect the internal collaboration and communication with different interactive partners [5]. The risks can be transferred in both directions to and from partners and

their management provides immunization that may lead to valuable collaborations. Transparency of risk management becomes necessary to show that the effect of the risk induction to partners be low to nil. Risks are symptoms that must be identified at all levels of management. Interactions between risks can increase their negative effect if during analysis is not observed their level of connection [4].

3. Risks assessment

The quality of management system can be assessed on how the predictive processes are applied by managers. Improvements in managerial process from the perspective of the risks led to adaptation of certain policies which provide eight-way action perspective. These trends have been the basis of scanning the external of social, economic, technical, environmental and political environment. As a consequence of this scan factors that cause risks for academic development environment were established.

The stages which formed the planning of risk assessment were the following:

- design a procedure to establish guidelines concerning the identification of significant risks in order to keep these risks to an acceptable level;
- assessment of the context by scanning the external environment and internal conditions;
- risk identification;
- risk recording;
- risk assessment;
- establishing measures to treat risk;
- establishing measures to monitor the residual risks.

The management of university has set goals and targets, for organizational structures that exist in the form of faculties and departments, which must be met. The risk assessment took into account the specific risk goals:

- strategic - relating to the mission;
- operational - concerning the effectiveness of the activities, "results that must be achieved" or "expected results";
- reporting - concerning communication within the university;
- compliance - relating to how to comply with applicable laws and regulations;
- asset protection - relating to preventing the loss of assets through theft, waste, inefficiency or an incorrect decision.

Implementing the procedures for risk assessment is necessary since the definition phase of the studies program. The responsible of the studies program analyzing initial risks which could cause a failure in introduction of the program in the offers portfolio of the faculty's. For the studies program already applicable is analyzing the impact that has on external stakeholders and on the opportunities for management improvement. Analysis must be conducted at the department and the faculty levels. Formation of team involved in the analysis takes into account the necessary skills of the members in agreement with the objectives set. The team is comprised from education program manager, members of the academic community and external stakeholders.

Implementing the procedures for risk management was based on the calendar and defines an appropriate strategy for its deploying in the organizational framework. In this respect, threats and weaknesses were identified using the technique of scanning internal and external environment. Also, it was considered: social, cultural, political, legal, regulatory, financial, technological, economic, natural and competitive environment, set from local level, regional, national or

international; critical factors and trends with an impact on goals; as well as relations with external stakeholders, their perceptions and values.

The assessment of internal environment took into consideration the management, organizational structure, roles and responsibilities of employees; policies, goals and strategies implemented to their fulfilment; capabilities, understood in terms of resources and knowledge; relationships with internal stakeholders, their perceptions and values; the existence of the system of values and practices used; information systems, information flows and decision-making processes (formal, informal); regulations and procedures adopted; form and extent cooperation relations. The identification of the elements which represent risks took place at the university level, and the results are presented in Table 1.

Table 1. Objectives and risk generating factors

Objective		Risk factors	
Cod	Name	Cod	Name
O1	Development of the area	O1.A1.	Demographic deficit
		O1.A2.	Increasing the school dropout
		O1.A3.	Increasing population migration
		O1.A4.	Changing economic profile of the region
		O1.A5.	Resize demand for professionals
		O1.A6.	Decrease preoccupation for academic professional development
		O1.A7.	Lack of predictability in economic development
O2	Legislative and regulatory framework	O2.A1.	The permissiveness of regulations application
		O2.A2.	Contradictions in the regulatory framework
		O2.A3.	Covering with own regulations (regulations, procedures and norms) for the implementation of the regulatory framework governing activities
		O2.A4.	Financial demotivation imposed by legislation regarding a academic career development
O3	Adaptation to market demands	O3.A1.	Lack of the visibility of institution
		O3.A2.	Lack of the visibility of study programs offer
		O3.A3.	Poor support for efforts to create identity
		O3.A4.	Coverage of training needs required by the labour market through the offer of study programs
		O3.A5.	Lack or decrease of motivation to participate in programs Bachelor, Master's and Doctoral studies
		O3.A6.	Increasing international competition offer for educational programs
O4	Creation of learning environment	O4.A1.	Difficulties to identify the needs for modernization and investment
		O4.A2.	Difficulties to establish priorities for modernization and investment
		O4.A3.	Ensuring endowment study spaces
		O4.A4.	Development of social services is not in according with the demand
		O4.A5.	Lack of learning resource allocation
		O4.A6.	Increasing drop academic
O5	Creation of research environment	O5.A1.	Results of research are not communicated to non academic audiences
		O5.A2.	Difficulties to identify research directions
		O5.A3.	Non-participation in fundamental and applied research projects
		O5.A4.	Involvement of new resources for funding research

Objective		Risk factors	
Cod	Name	Cod	Name
		O5.A5.	Lack of assessment of research results
		O5.A6.	Lack of information to access to national research programs
O6	Co-operation	O6.A1.	Identifying partners to conduct joint research is not adequate
		O6.A2.	Identifying partners to carry out practical activities for students is not adequate
		O6.A3.	Difficulties to establish partnerships with external partners
		O6.A4.	Lack of mutual recognition of study programs
O7	Resource allocation	O7.A1.	Lack of attraction of teachers on the teaching positions
		O7.A2.	Availability of staff for additional tasks
		O7.A3.	Motivation of staff for additional tasks
		O7.A4.	Reduction of public budgets
		O7.A5.	Attracting additional financial resources is difficult
		O7.A6.	Purchases of education and research equipment
		O7.A7.	Decrease the access to electronic resources for educational information
		O7.A8.	Decrease the access to communication means
		O7.A9.	Lack of experience exchange
		O7.A10.	Professional training
O8	Managerial process	O8.A1.	Setting wrong goals
		O8.A2.	Develop process plans that do not meet the objectives
		O8.A3.	Forecast required number of teaching positions on non-realistic presumes
		O8.A4.	Providing access to resources is difficult
		O8.A5.	Lack of support from staff
		O8.A6.	Inappropriate means of motivation
		O8.A7.	Impossibilities of monitoring some of activities
		O8.A8.	Difficulties in analysis and assessment of the activities carried out
		O8.A9.	Control mission is inadequate
		O8.A10.	Difficulties in effective intervention in emergency / crisis

The next stage was to establish criteria that can be taken into account in analysis of risks in order to cluster them:

- the causes and sources of risk;
- their positive and negative consequences;
- plausibility that these consequences may occur;
- frequency of occurrence;
- the time horizon for expected appearance;
- the coverage area;
- the existing means of control, efficiency and their effectiveness;
- interdependence between risks and sources;
- the level of trust for the level of risk;
- uncertainty, availability, quality, quantity and relevance of information.

Depending on the specific of each organizational entity, an assessment of probability and impact (consequences) of the risks materialization on goals is carried out. The assessment takes into account a scale of application with three levels of assessment for both the probability and impact as well.

Monitoring the risks takes into account assessments made in real time to allow a dynamic response to the changed conditions under which the activity develops and also further assessment of events in order to take improved actions: corrective and preventive. By implementing the monitoring process aims:

- a) ensuring that the control means are effective and efficient;
- b) obtaining additional information to improve risk assessment;
- c) analysis and assimilation of lessons learned from events (including missed successes), changes, trends, successes and failures;
- d) detection of changes which occurred in the internal and external context, including the changes brought to the risk criteria and including the risk himself that require reviewing the modality of risk treatment and the priorities;
- e) identification of emerging risks.

Assigned responsibilities for risk management become an objective necessary that must be found in the groups of tasks that are established by the procedure. The risks at the level of each organizational structure, from university, were analyzed using a procedure and a plan launched by the management of the structure entity. As a result of the evaluation were retained only those risks that can be considered that have a significant impact on the objectives set by management. The risks identified were recorded in a Registry of risks. For each risk with high-impact has been drawn prevention plan having regarded the strategy adopted for risk (risk treatment actions). The next step was planning to assess the effectiveness of actions taken.

4. Conclusions

Risk assessment at the institutional level is necessary and recognized as an important management process. Applying the risks management policy improves the decision-making ability and gives a clear perspective of performance that must be achieved. Implementation of the policy has determined the formation of an organizational culture which considers the attitude towards risk, following the existing system of values and used practices. The objectives are achieved if solutions are found when a risk occurs. Implementing the procedures for risk management provided an opportunity to plan activities through which can be improve the quality of managerial actions at the academic and administrative management levels.

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IS THE POLICY OF MERGING IN HIGHER EDUCATION ONE DIMENSION OF QUALITY ASSURANCE?

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Abstract

The fundamental ground for the merger is the academic benefit that can be achieved by the integration and development of the present activities of each institution. Mergers in the higher education systems may be the solution to increased efficiency in education. In general, there is opposition against the idea. Merger processes should be politically supported but the position of governments seems to be against this process. Governments are trying to get universities to agree to mergers themselves. In terms of quality assurance there are some challenges in integrating the quality assurance systems during the pre-, interim and post-merger phases in a merged university. But the question arises if more competition that would lead to universities concentrating on money-making subjects, could damage the sector's reputation for academic quality?

Key words: merger, quality assurance, effects.

1. Introduction

The challenges and issues that merging higher education institutions have to face appear from their activities being distinct and often highly complementary. In addition to full mergers, there are different forms of enhanced cooperation in the Higher Education (HE) system. There are strategic alliances between universities. The purpose of all these changes is to pool resources, strengthen the research capacity of universities and adjust them to the demographic change.

The present challenges facing the international operational environment of higher education system impose improving the national competitiveness, quality in HE system, productivity and strengthen social cohesion. In a recent paper Musselin noted that "... The second ambitious objective of the Bologna process is the generalized implementation of compatible quality

assurance system guaranteeing the respect of minimal standard of equivalent quality among all training programmes” (Musselin, 2009:181).

Related to quality assurance, the stated goal of merged university is to improve educational quality, but until now in the literature the information on impact of mergers on educational quality is very little. Moreover it is the case of Central and Eastern Europe where this process is only a theoretical statement. Quality assurance remains the main topic on the merger agenda, as Dr. Mala Singh affirms (Higher Education Quality Committee, SA) “...increased quality should be evident in higher education institutions, otherwise mergers were in vain”.

Merged higher education institutions put up challenges in terms of the development of quality assurance structures due to different approaches of QA systems which can raise confusion in academia. There is the real situation to exist differences in ethos for and quality systems and this can create tensions among the academic staff need to adapt to the new culture of quality.

The changes in Central and Eastern Europe caused by upheavals at the beginning of the 1990s have had great impact on the formation and implementation of educational policies. Virtually all countries within the South East Europe region share a major concern: how to improve the quality of education (UNDP 2002). One of the most radical common shifts in the educational policies was in the orientation of teaching and learning processes to quality assurance. The quality evaluation process (specially) focuses on students, respectively on the information they receive about and through study programmes and on the competences recognised on the labour market.

2. Merger process

Most of the changes in higher education system are connected to the financial restrictions imposed on universities. There is a gap between the public funding of state-owned universities and private universities. During the last years, the support for the public sector was decreasing and it is becoming closer to the level of private sector. This raises major issues for almost all higher education institutions about its survival. At the same time, the universities are facing to shortage of students enrolled which may be an important factor leading to intensifying the business side of academia, to greater institutional cooperation, partnership and merger and, in the most extreme cases, the failure and closure of institutions.

The stated goal of the merger processes is to improve the quality of university training, to define a new university's profile and to increase possibilities to integrate into both the European educational system and the research strategic areas.

During the last decade, these structural changes have taken place in many higher education systems in Europe (Kyvik 2004; Liefner, Schätzl & Schröder 2004; Musselin 2007; Teichler 2006). As Bleiklie and Kogan (2007) point out “the notion of the university as a republic of scholars” is shifting “towards the idea of the university as a stakeholder organization”. This is what Mohrman and colleagues (2008) call “an emerging global model of the research university”. A merger “is dependent on the interaction of governmental macro-politics and institutional micro-politics” (Sehoole 2005), which thus create a specific merger context. Therefore, it is important to recognize that “each merger is organizationally, culturally and territorially unique”.

But the merge is not the only solution to these challenges. Other possible ways for universities are to form alliances or to enhance their cooperation. This merger process is considered, a

priori, as meeting the demands arisen from internationalization and knowledge society (see for example Butera 2000; Bleiklie & Kogan 2007). Critical reviews were rare in the documents.

3. Examples

Often, quality assurance is perceived as a policy instrument of governments, and as a management tool with higher education institutions. However, in higher education systems with their professional 'production technology' (both when it comes to teaching and to research) quality and excellence are actually 'made' by the 'professionals' on the work floor, i.e. the academic staff members (Westerheijden, Hulpiau & Waeytens, 2007). Academics' cooperation in quality improvement to address for excellence is the key issue. The governmental, managerial and collegial features of quality assurance must co-exist. Governmental and managerial features act for purpose and accountability whereas collegial is concerned with quality enhancement. Excellence is more likely a feature of collegial quality assurance while the managerial approach accents rationalisation and consistency of activities. (see Lomas & Ursin, 2009).

The exponent in this approach is Finnish HE system. In the university sector the Finnish Ministry of Education and Culture has funded several merger projects. As the guidelines for the structural development highlight the purpose of the mergers is to reduce the number of higher education institutions to 33 (15 universities, 18 polytechnics) by the year 2020 and to make these institutions bigger in terms of student numbers. The target is at least 3000 full-time students in each university and for polytechnics the corresponding figure is 2500 (Opetusministeriö 2008). There have been several reforms over the last few years in Finland the most important ones being adoption of Bologna measures, merges of universities and the introduction of new Universities Act at the beginning of 2010. This new Universities Act made universities independent legal personalities namely although state remains the main financier of universities they are separated from the nation state and the state budget. Consequently, universities are no longer developed as part of the state administration. From the perspective of employees, employment relationships became contractual employment relationships. Hence, the new law changed the working conditions and social practices of academic staff.

In case of Finnish HE system the mergers were expected to build an educational system that allows the most competent and knowledgeable teachers and flexible study programs. Some concerns appear related to synergies between merging institutions and to redundancies between them. An example is University Consortium of Turku for which "the two unifying universities are very different in terms of size. Hence, there are relatively few overlapping activities as well. The diverse and internationally successful academic foundation of the University of Turku will now be linked to the business expertise of Turku School of Economics by creating such study programmes and interdisciplinary teams and projects for research and instruction that genuinely respond to modern challenges." (Virtanen 2008).

Also, other European countries intended to consolidate their higher education system and, therefore, they develop mergers within national higher education systems (see Kyvik, 2004; Liefner, Schätzl & Schröder, 2004; Musselin, 2007; Teichler, 2006).

Many studies on university mergers show that the consolidation of organizational and institutional cultures (Kezar & Eckel, 2002) and management styles (Locke, 2007) of the merging universities plays a crucial role. Furthermore, a merger is dependent on the geographical distance (Dahl Norgård & Skodvin, 2002), which may impose specific conditions of the merger process. The most important phase of the entire merger process is the planning phase.

For academic staff a merger can have both positive and negative effects. A positive effect is to reinforce professional identity by providing better academic career prospects. On the other hand, the reallocation process of academic positions during the merger process may create tensions between staff members. (Becker et al., 2004.) Most studies show that mergers and increased cooperation between higher education institutions do not abolish competition. On the contrary, in the future universities are expected to contend for the best researchers and teachers harder than ever before.

Denmark, under the coordination of Danish University and Property Agency started reforming its university system in 2003. As result of the reforms, the universities were become independent and self-governing entities. Some universities were combined with research and development institutions in order to improve efficiency and quality. As a result of the merger process, Denmark now has eight universities (initial were 12) and only four government research institutions, down from 13. However, the idea of university mergers can be applied only to public universities.

During the 1990s, universities in Iceland and Ireland have developed extensively with the stated purpose to promote regional development and absorb more students. Although initially Iceland had only two universities during the 1990s it sustained seven higher education institutions - four public universities, the three private - to serve a population of just 320,000. In Ireland, another country severely affected by the economical decrease, experts are also recommending university mergers. Iceland discusses the implementation of the merger process so as to remain only four public universities.

The expected results are:

- Large and strong universities could offer more fields and faculties. As a result the staff deficit can be surmounted.
- Close cooperation and partnerships will bring added value to education and research and open new opportunities of students.
- Quality enhancement through internal restructuring of education and research.
- Clearer profiles and clearer institutional mission and universities will better define universities as distinctly profiled entities.
- The quality of graduates ultimately reflects on the quality of universities.
- Merging increased autonomy and made universities more robust in facing the financial crisis.
- Many students cannot survive in the workforce after graduating. After merge the labour needs will be reviewed.

4. Romanian's context. Resources for education

In this section we intend to present the current situation on governance issue. It is necessary to present governance environment and its effect on the changing academic profession in Romania. During the last two years, Romanian academia experimented large academic reform consisting in political, structural and financial changing. The transformations that are performed to a new structure rise conflicts in academia. In terms of governance and management the conflicts include: changes in administration and management from bottom-up to top-down; reduced basic financial provision for academic staff and universities; extension research activities to teaching detriment; a rising of alienation in the academic staff; reinforcement of external evaluation.

In 1990 Romania began the educational reform. The main objective of Higher Education system was increasing university autonomy and the accountability of education through a system of public responsibility for efficiency. Moreover higher education reform has included academic evaluation, accreditation, and new financing systems. To reach these goals, new government institutions were created. These included the Department of Reform, Management, and Human Resources (under the Ministry of Education); the National Council for Educational Reform; and the National Council for Evaluation and Accreditation [1].

At present, Romania's education system is at a cross-road. All important reforms run in the last ten years need to continue in order to improve education outcomes. According to the information posted on the website of the Romanian Agency for Quality Assurance in Higher Education www.aracis.ro, there are 57 accredited public universities, 28 accredited private universities, and 21 institutions enjoying temporary accreditation. In spite of this great number of public universities and as a general rule, in Romania, the GNP (gross national product) devoted to public education has been less than 5% during the last ten years. Moreover, this low level of public support is not compensated through private support.

An exception occurred during the 2007 and 2008. In 2008, the Romanian education benefited from 26, 41 billion lei (6% of the GDP), with 24, 3% more than it had benefited from in 2007 when 21, 25 billion lei were allotted (5, 5% of the GDP). The year 2008 was the first year when the education sector received 6 % of GDP. This is considered a proof of the fact that education is important in the Romanian long term government strategy. A 40 % of these budgetary resources are funding the higher education institutions (Ministry of Education, 2007) [2].

The financial strains in higher education are obvious in the academic year 2010 deep budget cuts, leaving positions vacant and salary reductions. It is difficult to predict the longer range consequences of this austerity, especially if some universities will have to alter fundamentally their instructional production functions.

The Romanian Education Law adopted in 1995 established a Higher Education Funding Council charged with the task of advising the Minister of Education on "the annual allocation of budgetary funds to higher education institutions" (CNFIS, 1995, para 1.2b). The adopted principle was that in allocating core funding: "resources should follow students" (CNFIS, 1995, para. 2.1).

The Romanian higher education has become part of the European Higher Education System through the adoption of the Law 87/2006 which approved the Emergency Government Ordinance no. 75/2005 on quality assurance in education. This law has a trans-sector approach of quality assurance by covering all the providers of educational services in Romania. The Law on quality assurance in education includes:

- The methodology for quality assurance in education;
- Quality assurance at institutional level;
- External assessment of quality education;
- Institutional arrangements involved in quality assurance.

The Law also provides the establishment of the Romanian Agency for Quality Assurance in Higher Education RAQAHE is an independent public institution with competencies in accreditation, academic evaluation and quality assurance.

According to the Romanian quality assurance policy, universities are encouraged to set up their own internal quality assurance mechanisms to provide a sound basis for external evaluation.

The aim is to combine effectively institutional autonomy and accountability within the national quality regulations framework. Each university has the right to independent decision-making and therefore is responsible for devising its own quality assurance system for assessing the educational, administrative, and research functions, although general provisions are provided by the quality assurance policy. Furthermore, teaching staff, administration personnel, and students are viewed as the main participants and contributors to this process. According to this policy, a single National Agency, namely RAQAHE, is responsible for the quality assurance processes in Romanian Higher Education landscape.

However, until now, in Romania there are no merged universities. This process is inherently and probably will occur in the coming years. Because of the financial crisis and, especially, due to the application of a new education law (Law of Education no 1/2011), mergers in the HE system began by merging departments and creating new inter or multidisciplinary departments. For this merging process to be successful we must be conscious of QA matters at faculty and institutional levels, and deans must take on the roles of quality managers in their faculties.

The main purpose of the merger should be to create a Higher Education Institution defined by innovative research-led, a university institution recognised locally, nationally and internationally for the high quality of its research, teaching and course provision and of the environment which supports its students and staff. This new merged institution need to promote the quality assurance procedures that would lead to quality enhancement across the work of the institution. It aims to achieve the highest quality in all activities of the institution and to enhance the quality of both teaching and learning.

The future transformation of the higher education landscape in Romania will include a number of mergers of existing higher education institutions. Probably, some of these mergers will establish new kinds of universities, namely comprehensive universities. Comprehensive institutions are superficially defined as institutions that offer a wide range of programmes from vocational, career-focused and professional to formative general.

5. Conclusions

The fundamental ground for the merger is the mutual academic benefit that can be realised by the integration and development of the present activities of each institution.

Mergers in the higher education systems may be the solution to increased efficiency in education. A crucial role in merger process is played by the consolidation of organizational and institutional cultures and management styles of the merging universities. The merger process is inevitable as new competitors are entering the higher education market and the competition is carrying on in the most liberalised markets. The World Bank (2002) shows a high increase in corporate universities [World Bank recorded a number of 1600 in 2002 and 400 corporate universities ten years earlier]. In many countries outside Europe, these corporate universities have been officially accredited and enjoy the authority to grant formal degrees (World Bank, 2002, p. 34).

Välimaa (2009) noticed that a successful merger process needs to take into account the cultural and historical environment of the organisation and the context where the merger is going to happen. The main factors that determine the institutional responses are the motives and the rationale for acting in a certain way. As conclusion, the strategic decision for merger is focused on stability and legitimacy and assumes that organisations may be interest driven, though interests tend to be socially or institutionally defined.

In Romanian context the merger is discussed only as a possible and necessary process, but there is still not any pilot merger process. So, in the near future, we need to think and find out answers to the following research questions:

1. As a comprehensive approach - *Does Quality Assurance address to all the institutional units and activities?*
2. Effectiveness – *Does the Quality Assurance produce relevant information? Does this information lead to effective improvement measure?*
3. Transparency – *How is the information related to the Quality Assurance system and to the quality available to staff and students? How do the universities deliver this information to its external stakeholders?*

And the most challenged questions are: *Are the Romanian universities ready to face the inevitable process of merger? Is the political class ready to assume the political decision of merger process of universities? Is the academic staff prepared to accept and then to be actively involved in the merger process?*

The universities must form alliance in order to enhance their cooperation and rationalize their activities. At the early stages of merger process it is better not to have too many large and challenging goals (like the elimination of overlapping study programmes) in order to maintain academics' motivation and interest to merger. This analyse illustrated the complexity of the adoption of higher education policies and the implementation of policy related to quality (quality assurance and mergers).

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QUALITY MANAGEMENT SYSTEM OF THE POLYTECHNIC INSTITUTE OF PORTALEGRE

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Abstract

The Polytechnic Institute of Portalegre(IPP) was the first public higher education institution to be awarded the certificate of compliance by the Portuguese Association for Certification (APCER) in its wholeness. IPP tried to be a pioneer by crossing the Balanced Scorecard methodology with the Quality Management System (QMS). This system is based on a strategic formulation as atop guidance, and covers the entire activity of IPP, taking as a reference the standard NP EN ISO 9001:2008. The scope of the system includes the training offer awarding a degree, the teaching activity, research and development and cooperation and external relations, as well as all support services. To make the system operational two types of working groups were defined: Progress Circle, and Continuous Improvement Groups. The QMS is supported by information systems that ensure open and continuous accessibility of the academic community of the Institute. As main achievements of the QMS we may mention the aggregation of the community towards the set goals, the participatory management, the strengthening of partnerships with the surrounding community, the technological progress that makes our relationship with the student and the community easier, the monitoring of activity and its analysis in order to define new actions, the implementation of good practice that ensures continuous improvement and the open and systematic communication.

Key words: quality, strategic management, higher education institution.

1. Introduction

The Polytechnic Institute of Portalegre, has been implementing for some years now, information systems that simplify and standardize procedures, increasing both the degree of reliability of the information produced and made available. Examples include the academic, administrative and financial areas. We would say that the cycle of "informatics" has reached maturity, and gave

place to the cycle of "information". This meant the introduction of the available information in decision-making. It was with this objective that the Institute, since 2006, started implementing an integrated management system (IMS), culminating in 2008 with certification under the EN ISO 9001:2008 standard and in 2011 with the renewal of this certificate and the extension of the system to Ethics and Social Responsibility by NP 4469.1:2008 standard.

This presentation aims at presenting the Balanced Scorecard and Quality Management System of the IPP. First it presents the integrated model, with the strategic plan of the Institute, followed by the characterization of the Quality Management System. Finally we present some good practices introduced and improvements that resulted from the system.

2. Objectives and Methodology

The work followed the classic approach of organization and methods through these steps: Select, Observe, Reflect, Decide and Implement.

In the last six years, the Polytechnic Institute of Portalegre, grew and responded with the introduction of an Integrated Management System. In 2005 it realized that it had modern mechanisms for data processing and that, nevertheless, it lacked, in a systematic way, the relevant information in time for decision making. In a reflection meeting, attended by all leaders and representatives of the Institute staff and students, it was decided to implement a system that may ensure the on-going assessment of services, aimed at maximum quality.

A small group of leaders of the Institute did the job of diagnosis and evaluation of instruments available that could better serve the interests of the organization. Thirdly, the proposed integrated management system to the Polytechnic Institute of Portalegre was presented to the general community, having received significant contributions, and then to the organisms of the Institute for decision.

Implementation has been phased in, being supported at certain moments by external experts. A key and transversal feature to all stages of the process was the involvement and active participation of the entire community.

The focus on implementation of the Balanced Scorecard and orientation of the System to ISO 9001:2008 norm was a challenge for the institution as it would be the first in Portugal to make this decision, which involved interpreting the norm and adapting it to a higher education institution.

3. Results and Discussion

The Integrated Management System (IMG) adopted by the IPP results from the integration of the Balanced Scorecard with the Quality Management System. Let us consider each of these components knowing that "the whole is greater than the sum of its parts".

3.1. Strategic formulation and Balanced Scorecard

Before you consider any management system it is important, above all, to set the strategic framework of the organization so it can properly oriented to real needs. It does little good to know "how to walk" without knowing "where to". The strategic approach is necessary for evaluating the effectiveness of performance in organizations. The strategic framework of the Institute resulted from an internal reflection extended to all employees. The mission, the vision and the values

were defined, as well as the strategic priorities that should guide the activities of the institution in the next four years.

In building the Balanced Scorecard methodology the original Kaplan and Norton's model was followed, composed of the four perspectives - financial, customer, internal processes and learning and growth. Four perspectives linked by cause and effect relations around the central axis that is the strategy. Briefly, about the perspectives, we can state the following:

- 1 – Clients/Students/Community perspective: how we are seen by our clients/students/community;
- 2 – Internal processes perspective: where we have to reach excellence;
- 3 – Learning and Growth perspective: how we can keep improving and creating value;
- 4 – Financial perspective: how to manage well our resources.

Organizational design, the cause-effect relationships and the detail of each indicator were drawn up. A strategic map was also built that provides fundamental information about the strategic perspectives mentioned before, which was then examined by the General Council of the Institute. Cognos software, from IBM, houses the complete monitoring system and the BSC, including the strategy map and indicators for each process. At this time, and because the Balanced Scorecard itself is evolving, efforts are being made towards the automation of the indicators calculation, establishing links between existing databases in IPP.

3.2. Quality Management System

IPP decided to implement a quality management system for certification, having as reference the NP EN ISO 9001:2000 standard. In April 7, 2008 IPP received the APCER certificate of conformity, making it the first higher education public institution to be awarded this distinction in its entirety. The scope of the system includes all activities, from the training awarding a degree offered, research, laboratories, and other support services. There are 15 processes that make up the Quality Management System.

The purpose of this methodology is to detail the key activities that transform inputs into outputs and to provide a better understanding of its completion. The performance evaluation is done through indicators. Its identification and performance are done at set intervals in order to quantify and therefore allow to continuously improving their efficiency and effectiveness.

3.2.1. Processes

The processes described in accordance with this method were grouped into three classes:

- I. Operational/ nuclear Processes - Processes directly related to the implementation of product / service.
- II. Support Process - Processes that indirectly support the operational processes.
- III. Transversal Process - The process which in general serves and crosses over the whole system.

The process mapping reveals the interdependencies among them and the relationship to its surroundings.

3.2.1.1. Operational/ nuclear Processes

- Training offer: following the main activities required to create, approve, plan new courses and submit them to competent authorities for approval. Standardisation of internal documents is a priority.

- Activity Curriculum: establishing and monitoring the activities that are triggered from the start of a new course and / or school year until students finish their course.
- Research and development: defining and monitoring the activities required to manage and control projects where the IPP may be involved. The proper management of available resources at the IPP will allow maximizing the outcome of this process. Its ultimate purpose is to transform it and turn knowledge into value for society.
- External relations and cooperation: coordinating activities related to international relations and external cooperation.

3.2.1.2. Support Processes

- Communication: defining and monitoring the activities of the IPP in the disclosure of its offer, as well as other initiatives, coordinating available resources between the Units (Schools).
- Computer Systems: defining and tracking what activities are undertaken by different IT sectors of the Units to ensure the availability of systems. The guidelines aim at the standardization of work through the use of the same computer applications in the whole IPP.
- Academic Services: defining the activities undertaken by academic services in all Units. The combination of all these activities around a single process deals with the existence of a single area of student attention, called STUDENT STORE. Although some services are allocated to schools as described in the matrix of this process, the centralization of critical information to the students process begins at the Student Store.

The first contact the applicant / student with the institution is made at the Student Store, with an application to Higher Education.

The SIGES - Integrated Management System of Higher Education - computer application - assumes a dominant role in the performance of this process. Connected to this system there is an online registry, or netp@, with the provision of various services online.

- Financial sector: defining and tracking the main activities undertaken by the whole financial sector which include purchases of goods and services and property. It is worth noting the evaluation of suppliers and the centralization of the common acquisitions negotiation at IPP.
- Student support social services: the process involves the provision of various services to the IPP student, including: grants, food and cafeterias and accommodation.
- Human resources: defining and monitoring the activities that are performed by the of Human Resources Sector.
- Maintenance, safety and risk prevention: defining and monitoring the activities of IPP property maintenance and the safety of goods and people.
- File and Documentation: the purpose of this process is to ensure fast and efficient access to documentation on all Units, as well as provide the evaluation, selection and conservation of the entire collection of documents. The guidelines are defined by

standardization / harmonization of working methods as well as the application used to release the documentation.

- Libraries: the purpose of this process is to define and monitor key activities that are performed to ensure that services provided by libraries will meet the needs of the academic community in the continuing evolution of research and knowledge. The target priority is on the integration of information systems for each library to rationalize all the existing resources and increase the availability of offer.
- Laboratory Services: the purpose of this process is to define and monitor activities in the laboratory services provision in the local community where IPP is inserted. In parallel with all this work, determination procedures have been standardized. Inventory lists of equipment, reagents, laboratory equipment and documentation were also defined.

3.2.1.3. Transversal Process

- Social Responsibility: the purpose of this process is to design, implement and maintain the social responsibility management system, based on the definition of the system of values and principles and the definition of the SR policy, as a way to define SR objectives and programs that meet the IPP mission and strategy, the applicable legislation norms and the involvement of stakeholders. This process applies to all Units, the Social Care Services and the Central Office and to all entities and persons who are active on behalf of IPP.

3.2.2. Progress Circle

The Progress Circle has the task of managing the Quality Management System by systematically analysing the available information, suggesting interventions and communicating their plan to the management. The Circle seeks to ensure a continued monitoring of performance across processes, suggesting, when it deems appropriate and interesting, improvements to the system.

The Progress Circle is a small working group with representatives from the different Units that had volunteered to join the group.

In organizational terms the Progress Circle is coordinated by the IPP Vice President, in principle with an unlimited length, it may include invited guests and is related to the Continuous Improvement Groups and to the Management structures of the Institute. Next to the Progress Circle a permanent and operational structure was established (GOA) with the main goal of the creating the Academic Observatory.

In terms of their activities:

- a) It focuses on problems encountered within the system and working groups, whatever their nature.
Phase of expression (identifying problems)
- b) Chooses the topics and analyses problems to solve; to do that it uses working methods and tools upon which team members are trained in advance.
Phase analysis
- c) Researches and proposes the hierarchy solutions to the problems analysed, who should decide regarding the implementation of solutions.
Phase of the study and solution of problem solving

- d) Uses a management panel (Balanced Scorecard) to monitor implementation of the measures and the level of achievement.
Follow up and supervision

The Progress Circle, on a permanent monitoring mission ensures the operation of the whole system, linking it to the Top Management.

3.2.3. Continuous Improvement Groups

The Continuous Improvement Groups, created during the implementation of the Management System, is a key element in the pursuit of Best Practice "the art of well-doing", which allows us to maximize all our resources. The created working groups lead each of the fifteen QMS processes. These groups are formed by an element of each constituent Unit of the Institute and aim at the continuous improvement of their working areas. Each team has a coordinator (process manager), meets regularly and is responsible for the management of its process. It is responsible for the performance of the matrix, examines the reports of the Balanced Scorecard, with the indicators that concern it and proposes the management solutions to improve its services. Moreover, the process manager has the mission of summoning and of ensuring, in terms of logistics, the operation of the group as well as transmitting or receiving information to/from the Progress Circle. These working groups are the guarantee of permanent improvement in a balanced way, in all Units of the Institute, generating very significant efficiency gains.

3.2.4. Good practice and improvements

The Quality Management System, as described here, has caused an improvement dynamics at different levels of the IPP activity.

The Progress Circle has identified the following improvement suggestions and implementations:

Table 1 - Improvements

Process	Improvements suggested	Improvements Implemented
Curricular Activity	1	0
Research and Development	0	0
Training Offer	0	0
External Relations and Cooperation	0	0
File and Documentation	9	3
Libraries	1	1
Communication	3	3
Financial Sector	7	4
Maintenance, safety and risk prevention	8	4
Human Resources	0	0
Academic Services	12	9
Laboratories Services	7	5
Student Support Social Services	0	0
Computer Systems	2	3
Social Responsibility	0	0
TOTAL	50	32 (64%)

On the other hand, as a way of promoting the involvement of its internal staff and stimulate their preoccupation for quality management, IPP has been launching a Good Practices competition since 2007. The competition is divided in 4 areas (Services to Citizens, Human Capital, Process Improvement, and Financial Management). In spite of the symbolic prize value, the competition has attracted increased interest, as can be seen by the application of 33 projects, thus divided:

Table 2 – Good Practices Competition

Category	TOTAL
Services to Citizens	7
Human Capital	4
Process Improvement	20
Financial Management	2
TOTAL	33

The applicant projects refer to a variety of measures and initiatives, from which we can emphasise the following:

- On-line academic registry system
- Recycling and sale of white paper and press paper
- Office for the Production of Pedagogic Materials
- Recovery of Military Barracks for the Agrarian Studies School
- On line filing, search and coding of documents
- Information Management System to support Curriculum Files
- Internships and Job Opportunities Office
- Point System – System for Canteen Management
- Use of e-letters in all Units

4. Conclusions

With the implementation of the Integrated Management System we find numerous improvements in the institution which are reflected, inter alia, in the following:

- Existence of an effective system of management control.
- The control itself requires proper planning.
- Modernization of the procedures and circuits.
- Integration of information systems.
- Participated Management.
- Strengthening partnerships to better serve the surrounding community.
- Technological advances that facilitate our relationship with the student and the community.
- Qualification to better train, investigate and experiment.

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AGENTIA ROMANA
DE ASIGURARE A
CALITATII IN
INVATAMANTUL SUPERIOR

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“AUREL VLAICU” UNIVERSITY OF ARAD AN ENTREPRENEURIAL UNIVERSITY RELATED TO THE REGIONAL ECONOMIC STRATEGY

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Abstract

From the beginning of its existence the university has constituted an active presence in the collectivity life, fundamental benchmark. The formation of the university is naturally overlapping with the growth of the cities and later on with the development of the metropolis. Initially, the university had as mission just the teaching - an admirable vocation remained as such till present. However, this mission, as much as important might be, it cannot elude another function obtained by the university, namely the knowledge development, which awards a fundamental degree – the scientific research. Recently, the university has assumed a third mission, the one to directly contribute to the social and economical development, to become mentor of the regional development. In a progressive and constant way, the “Aurel Vlaicu” University of Arad has created its own institutional culture, destined to confer personality and prestige to the university. The performance of the university represents nowadays the biggest challenge at the international level, challenge to which the entire Romanian higher education has to cope.

Key words: entrepreneurship, research, development, transfer of knowledge.

1. Introduction

Accomplishment of the teaching and research missions of the universities without the establishment and nurture of new business possibilities that are based on the results of the teaching and research leaves unexploited resources that could be the used for the regional economic development.

Based on this statement, reasons for not promoting the entrepreneurship have no solid supports, even the members of the academic community consider that their research results could not be considered products for commercialization.

The economic growth of the economy is recognizing more and more the entrepreneurship of the universities, especially of the research universities. The successful experiences from around the world show that all entrepreneurial universities are committed to the institutional innovation.

In the literature it is shown that the fundamental research with its basic knowledge creation it is important in high-technology sectors while it is more generally for the knowledge economy. For this reason the scientists should be directly involved into more commercially oriented activities. As a consequence, the scientists will choose to be involved in research projects of scientific value, but also with practical applications. Therefore, it will be created a compromise between the production of the scientifically relevant knowledge and conversion of this knowledge into economical and social values ¹⁻⁴. Moreover, at present any top university needs to find alternative financial resources for the scientific research as the cost of such research is much higher than the budget that can be provided by the government. Therefore, the universities started to seek collaboration with technology driven enterprises.

In the new generation university model, universities cooperate with partners with whom they do not work traditionally. Good cooperation is conditional to good mutual understanding. For this reason, we will outline characteristics and developments of the main partners: technology-based enterprises, entrepreneurs and the financiers of new firms. Of these three, universities have perhaps the best understanding of industrial corporations, if only because many of their professors and governors originate from such enterprises. However, the landscape of corporate innovation and R&D has changed dramatically over the last decade of the twentieth century and universities should be aware of this if they want to be good partners.

Finally, much know-how is being commercialised through the creation of new firms, be it through entrepreneurs or university-initiated spinouts. New crops only emerge if there are good seeds and fertile ground, but they need water in addition. Likewise, new ventures need good know-how and a stimulating environment in order to emerge, but without a varied financial infrastructure they will remain a dream.

The present paper presents the creativity and entrepreneurship of the “Aurel Vlaicu” University of Arad, as key factors of the quality improvement in direct relation with the regional economic strategy.

2. Results and discussions

The documents that are composing the history of teaching in Transylvania and Arad are emphasizing the Arad's intellectuality admirable militantism for the setting up of a university in Arad city.

In 1972 was established the Sub-engineering Institute - a university type institution which was the foundation of the present Aurel Vlaicu University of Arad.

The events from December 1989 signified for the Arad's community new hopes in academic plans. After petitions, meetings, and admirable efforts the Arad's citizens voice was heard. Through the Government Decision (HG 567/18 May 1990) was established The Higher Education Institute in Arad, that was based on the former Sub-engineering Institute. Later on, through a Government Note and Ministry Order, in the beginning of 1991, the institute changes its name to the Aurel Vlaicu University of Arad.

Keeping the valuable traditions of the Romanian education and at the same time aligning its strategy to the European and international requirements and standards, Aurel Vlaicu University of Arad had a dynamic and efficient management with a real opening to the high values of the regional economic strategy. The university's strategy had never in attention to quarter in a restricted area instead was always opened to increase the institution's visibility at the national and international level.

Regarding this last aspect it has to be emphasized the activity of the research and consulting centers in different areas of activity such as: technologic transfer and innovation, assisted technology implement, quality control and safety of food products, financial problems and the labor market, and educational trainers' formation.

“Aurel Vlaicu” University of Arad has strengthened its international relations and has increased the number of international cooperation on research and teaching activities. Through these actions it could be increased the international visibility of the university and the growth of the academic mobility. Moreover, the number of projects in partnership was growing, and deserve to be mentioned the partnerships with prestigious universities from Europe, USA and Asia.

An eloquent example is the endowment of the electrotechnical and industrial electronic laboratories of our university with equipments with a total value of 250000 Euro. The endowment was made by the DSK, Germany and Socomar, France, and the collaboration continued through the exchange of professors from Saarbrücken who were coming as associated professors to teach at the university.

„Aurel Vlaicu” University of Arad through its missions is promoting to the excellence level the cultural, educational and specialty competencies based on innovative knowledge, permanent learning and interculturality. On the other hand, the university sustains and promotes its strategies to the local, regional, national and international community.

There are some important aspects from the university strategy that deserves to be mentioned:

- The quality is the central axle of the quality management
- The creativity and the entrepreneurship are promoted as key factors for the quality improvement
- Assurance of the rigor and discipline for the fulfillment of the university missions
- Accomplishment of a permanent dialogue with the students, economic agents, society and the staff in order to develop communication forms and a climate that allows the full involvements of all actors into the quality's objectives
- The update of the educational programs based on the labor market requirements and of the clients' satisfaction
- Assurance of the increment of the educational process performances through a high level scientific research activity correlated to the needs and demands of the society

The scientific research is an essential activity and one of the main objectives of the university that is in the attention of the entire teaching staff, researchers, and students. This is generating knowledge and innovation with the aim to develop science, technology and socio-economical progress.

As a consequence of the university effort invested in sustaining the research, the number of scientific papers and published books at well known publishing houses has known a growing tendency.

The intensification of the research activity in the last years led to the necessity to create a Scientific Research Department that takes care of all aspects dealing with research projects. The setting up of the department focused on the following aspects correlated to the scientific research:

- i) A clear evidence of all contracts that involves the university
- ii) The assurance of a collaborative relationship between the administrative services and the project leaders
- iii) The assurance of an efficient communication with the organism that are assuring the projects financial supports in order to avoid the appearance of any dysfunctionality
- iv) The mediation between the researchers/teaching staff and the economic agents

The employment policy of the university was always flexible and had in attention the attraction of the gifted teaching staff and researchers. This development direction was achieved through the employment based on competition of the valuable persons and researchers with high visibility at the national and international level. It is worth mentioning that „Aurel Vlaicu” University of Arad is a university with a high percent of reintegrated researchers that returned to Romania after extensive study and/or research stays in distinguished laboratories from abroad.

Moreover, these renowned scientists could promote on academic track and it has to be underlined the fact that three of these scientists became full professors before the age of 40 and three are on positions of associate professors, with highest chances of promotion on the full professor position, as soon as the situation at the national level will be favorable in this regard.

At the same time, through their international expertise, reputation and networks, the reintegrated scientists contributed an essential progress to the collaboration between the university researchers and the economic agents. This situation also served as good examples for the other university's teaching staff and researchers who soon started to have their own collaboration with the SME.

The technology and business incubator of the „Aurel Vlaicu” University is sustaining the regional economic strategy, having into its attention the following specific objectives:

- i) The fosterage of the sectors with growing potential and high added value
- ii) Human resources capitalization and assurance of an adequate occupational level
- iii) Promoting an equilibrated regional development and attenuation of the territorial dissimilitude.

The incubator is also strengthening the connection between the economic agents, especially with the innovative SMEs, creating the possibility to involve the students not only in the practice stages but also into research projects. The incubator is sustaining the students in their efforts to start a business plan, helps them to obtain a job on the labor market and in many studies that were realized for the SMEs are involved the students, giving in this way a higher degree of applicability to the educational process.

Nevertheless, the success of the university's technology and business incubator resides in the awareness of the Small and Medium Enterprises (SME) about the innovation concept and of its applications. From the contacts with the SMEs it could be concluded that it exists a generalized idea that the innovation means just the acquisition of a very expensive technology.

One of the most important activities of the Faculty of Economic Sciences is the formation of students or other interested persons as entrepreneurs.

Recently, it was finalized a project financed through the European Social Fund- POS-DRU, that had in attention the development of the managerial skills of the persons that are already having their own business plan, formation of the entrepreneurial culture and development of the ability to transform the business ideas into concrete actions, and last but not least, formation of entrepreneurial trainers who are going to be promoters of the entrepreneurship for the growth of the awareness and encouragement of a positive attitude regarding the entrepreneurial culture and to offer supporting services for a business plan initiation.

The performance of the “Aurel Vlaicu” University as entrepreneurial university can be graphically represented in terms of the yearly amount of money obtained from the cooperation with Romanian and foreign economic agents (Figure 1).

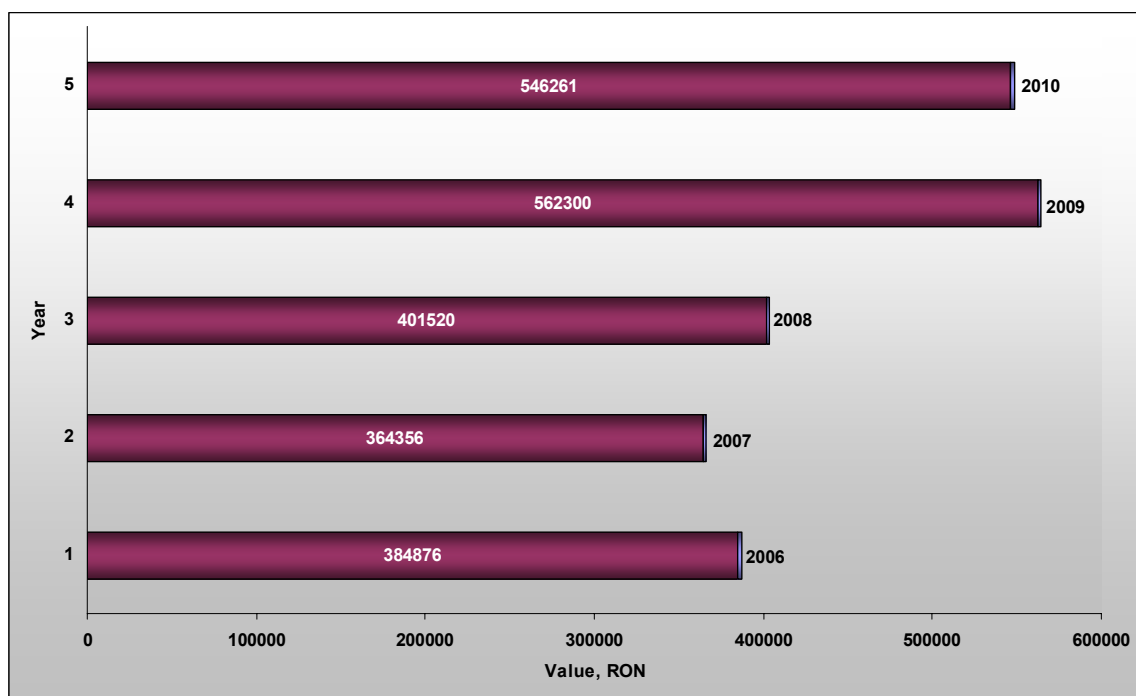


Figure 1. Evolution of the total value of the research grants with industry within 2006-2010 period

As it can be seen from this figure the annual amount of money gained from the partnership with the economic agents has a growing tendency, except in 2010, when a little decrease could be observed. This tendency for the 2010 could be due to the registered economical crisis in the world.

A growing tendency was also registered in the number of partnerships developed by the university with the economic, administrative and cultural organizations. It has to be mentioned that the number of collaborations with the business sector has gradually increased from 38 in 2006 to 113 in 2010, while the number of partnerships with organizations from the public area has gradually increased from 57 in 2006 to 106 in 2010. The same increasing tendency is also observed for the collaborations with the non-profit organizations (from 32 in 2006 to 56 in 2010).

The results presented in Figure 1 are in good agreement with the ones presented in Figure 2, where the total number of technologies, models, methodologies, prototypes and other similar products delivered to the economical agents.

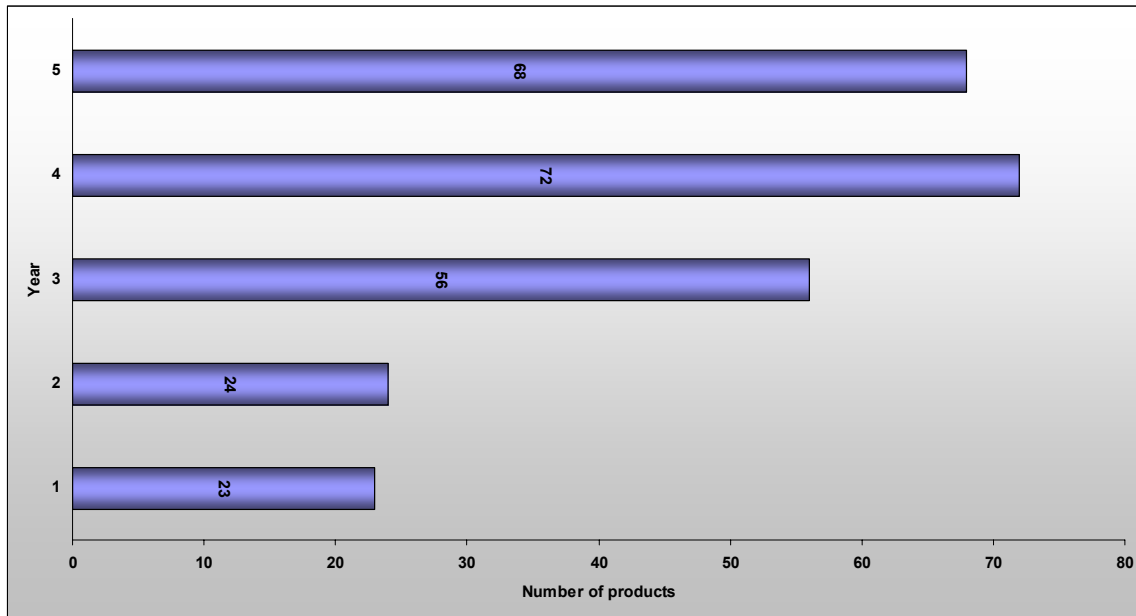


Figure 2. Evolution of the number of products delivered to the economic agents within 2006-2010 period

3. Conclusions

“Aurel Vlaicu” University of Arad has sustained and is continuously sustaining the elaboration of research projects with real practical applicability and capitalization potential through economical agents and prestigious companies and has facilitated the partnerships between the university and these companies through adhesion to European Research Networks. The university has strengths regarding the dynamism, a young teaching staff, a vast area of specialties, the teaching and research laboratories are endowed with performant equipments that are of international level, and the international visibility.

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EUR-ACE LABEL IN THE ENGINEERING HIGHER EDUCATION OF ROMANIA

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Abstract

This paper presents some personal and group experience in knowing, understanding and measure adopting for implementation of EUR-ACE label in higher education assessment of the engineering education. Some essential aspects, like the specific of engineering higher education, how the EUR-ACE label is understood inside of the general assessment of the higher education, how the EUR-ACE label is seen in the general willing for improving of the higher education quality and which are the methodology and the specific standards proposed by the commission of employers, for implementation of the EUR-ACE label in Higher Education of Romania. All these aspects are presented and discussed in full according with the Framework Standards for the Accreditation of Engineering Programs approved by the ENAEE Administrative Council on 5 November 2008. Ending remarks referring to the gained experience in applying of Romanian standards for EUR-ACE label assessment of some engineering programs. This work can be useful in final adopting of the EUR-ACE Romanian standards and for spreading of the good practices, if the paper will be published and debated in such an international conference, how International Conference on Institutional Strategic Quality Management in Higher Education is.

Key words: EUR-ACE, engineering education, ENAEE, framework standards.

1. Introduction

Somebody could say that what US President (1929-1933), Herbert Hoover said, namely „Engineering... it is a great profession. There is the fascination of watching a figment of the imagination emerge through the aid of science to a plan on paper. Then it moves to realization in stone or metal or energy. Then it brings jobs and homes to men. Then it elevates the standards of living and adds to the comforts of life. That is the engineer's high privilege.”, is a personal and subjective point of view.

It is possible... but surely, his saying contains much truth and his words are nowadays available.

An other observation could be made, namely, in many cases an engineer to graduate an other no engineering study program, but seldom a graduate of a no engineering program to graduate an engineering program. Why?

An answer would have to come, from each of us. Over these considerations, more or less subjective, much more aspects have to be analyzed, when we are talking about engineering, which come from the social roll of engineering and from the difficulties of becoming a good engineer immediately after graduating.

Next to it, by efficiency, an engineer could be able to entry in engineering profession, not only with success (often, this issue could be defined), rather with efficiency.

2. About Engineering Education and ARACIS

Like in others countries, a special attention is paid to the engineering higher education, beginning with the long of study period. In the context of implementation of Bologna process in our country, care for advanced engineering education has resulted, between others, by adopting a four-year periods. Figure 1 shows the long of university first cycle I (bachelor), in terms of ECTS credit number, in Bologna countries.

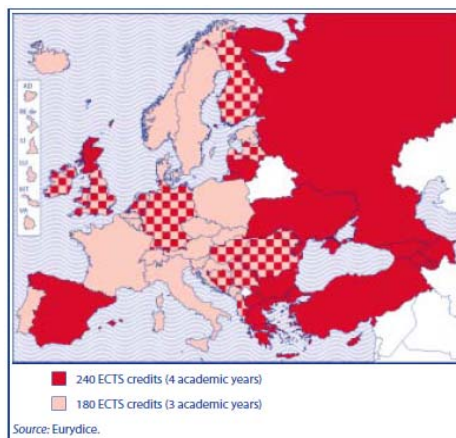


Figure 1. Workload/duration for the most common Bachelor programmes in the Bologna countries, 2009/2010



Figure 2. Workload/duration for the most common Master programmes in the Bologna countries, 2009/2010

Figure 2 shows the length of second cycle of university studies (master) in Bologna countries. Only for reasons of quality assurance, engineering education in Romania is four years long for the first cycle and 1.5 to 2 years for the second cycle, like in other countries, as we can see in the figures 1 and 2.

Our quality assurance agency, ARACIS, just from its beginning (2005), put on the base of assessment activities a number of permanent commissions (now, 15 expert commissions exist), organized on the specialization area. For the large domain of the engineering education, two commissions were organized. This means a care for quality of engineering education, by assuring a right and competence assessment. In other words, ARACIS paid a special care for engineering education before to be a member of ENAEE.

The activity of ARACIS was appreciated and recognized in the European area, so it became (in 2009) full member of the European Association for Quality Assurance in Higher Education (ENQA) which has 19 country full members and also 2 organisations (EUA - Institutional Evaluation Programme of the European University Association and ECCE - The European Council on Chiropractic Education). Next to these, other 10 country agencies are candidate members.

An other European recognition of the ARACIS is represented by its listing in the European Quality Assurance Register (EQAR - operational by summer 2008), for Higher Education. Until now, 29 quality assurance agencies, active in over 25 European countries, are listed in the European Quality Assurance Register for Higher Education (EQAR).

Now, we could say that our agency's strategy was fully dedicated to the mission assumed by ARACIS, for a constant assurance and improving quality in the Romanian higher education.

In this activities frame, a constant care for improving the external evaluation methodology, in full compliance with the European Standards and Guidelines for Quality Assurance in Higher Education (including engineering education), ARACIS is carrying out its activity according to the best international practices, which are taken in its own Methodology and whose implementation is focused towards quality assurance and evaluation of the Romanian higher education, as part of the European Higher Education Area.

Knowing just only these aspects presented above, we can easily understand the willing of our agency, ARACIS, to become member of European Network for Accreditation of Engineering Education (ENAE) and to be accredited for EUR-ACE delivering for Romanian engineering education.

3. EUR-ACE Label in Romanian Engineering Education

In november 2009, Romanian Agency for Quality Assurance in Higher Education, ARACIS, became full member of ENAE, organization which has 17 full members and 2 associate members.

In this period, ARACIS is external evaluated by ENAE for becoming an authorized agency to award the EUR-ACE® Label, side by side of the following seven agencies: ASIIN (DE)- Fachakkreditierungsagentur für Studiengänge der Ingenieurwissenschaften, der Informatik, der Naturwissenschaften und der Mathematik e.V., CTI (FR) - Commission des Titres d'Ingénieur, Engineering Council (UK), Engineers Ireland (IE), MÜDEK (TR) - Association for Evaluation and Accreditation of Engineering Programs, Ordem dos Engenheiros (PT) and RAEE (RU) - Russian Association for Engineering Education.

A general opinion, inside of Romanian engineering education, is that the engineering education has its own specificity, but in the same time, its diversity, specially from a country to country, even in the Bologna area.

The general European interest is that an engineer, nomatter where he graduated, he has to be, imidiately after graduating, a person with a good academic support, ready to be employed and to be able easily for adapting to job conditions, having good capabilities for communications, for management activities in industries or in researching. Until the finishing of 2010, a number of 699 engineering programs were awarded with EUR-ACE label, as we can see in the below table (Table 1).

As the ENAEE documents say, EUR-ACE® labels respect the great diversity of engineering education within the European Higher Education Area, create a system of accredited engineering programs that share common objectives and outlooks, facilitating the trans-national recognition of academic and professional qualifications.

Table 1. Authorized agencies and EUR-ACE awarded programs

AGENCY	COUNTRY	First cycle programs	Second cycle programs	Other programs	TOTAL
ASIIN	Germany	134	111	0	245
CTI	France	0	227	2	229
EI	Ireland	70	24	0	94
EC	U.K.	0	1	0	1
OE	Portugal	0	1	3	4
MÜDEK	Turkey	78	0	0	78
RAEE	Russia	9	9	30	48
TOTAL					699

As it is well known, the EUR-ACE® labels distinguish between First-Cycle (Bachelor) and Second-Cycle (Master) Degrees, in accord with the definitions given in the European Qualification Frameworks (EQF-LLL and QF-EHEA).

With such an understanding of the roll of ENAEE and EUR-ACE label, we hope it to be a right one and in the sens of improving the quality, ARACIS organized a special permanent commission – employers comision, for assesment of the engineering programs for awarding of the EUR-ACE label.

So, in Romania, ARACIS is based on two special assesment comisions for engineering programs: one for external academic and institutional evaluation of engineering programs, named speciality commissions for engineering science (two commissions, commissions 10 and 11) and an other one for evaluation these engineering programs from point of view of the employers (commission 15), of the training for a good adapting with busines medium and generally, with the tasks a job, easily and efficiently.

More than that, the ARACIS vision is that such assesment (from point of view of the employers) is necessary to be made for all university programs, in an apropiate maner.

We are fully agree with ENAEE apreciations regarding to the benefits of EUR-ACE label. These can be sistemised like in the below table (Table 2).

Table 2. The beneficiaries and the benefits of EUR-ACE label

BENEFICIARY	BENEFITS
HIGHER EDUCATION INSTITUTIONS	<ul style="list-style-type: none"> • Additional certificate of quality of education • Means of promotion: programme meets academic <i>and</i> professional standards • Assurance that programme meets quality standards set by the engineering profession • Benchmarked against other European programmes • Reliable information on quality of FC programme for admission for SC • Incentives for students to choose EUR-ACE labelled programme

STUDENTS	<ul style="list-style-type: none"> • Assurance that EUR-ACE® labelled programme meets high European and international standards • Facilitate application to EUR-ACE® Masters programmes in other HEIs • Additional quality label recognized by employers in Europe • International recognition of degree as meeting professional standards • Regulatory bodies accept EUR-ACE® labelled programmes as meeting requirements for becoming chartered engineer
EMPLOYERS	<ul style="list-style-type: none"> • Competences of graduates: Candidate's knowledge, understanding and practical capabilities meet international standards • Reliable information on quality of degree programme of candidate without knowing its details • Not only academic standard of programme checked but also relevance for profession • Complement to Diploma Supplement (giving academic point of view)
QUALITY ASSURANCE AGENCIES	<ul style="list-style-type: none"> • Offering additional quality label to customers (HEIs) • Certification of quality of accreditation agency according to ESG and employers' requirements • Integration into European network of engineering professionals • Possibility to accredit in other European and worldwide countries with no authorized agency
PROFESSIONAL ENGINEERS ORGANIZATIONS	<ul style="list-style-type: none"> • Guarantee that graduates meet educational requirements for entering into their registers (if organisation has set its educational standard at EUR-ACE level) • FEANI* automatically includes the EUR-ACE® accredited programs in its Index of European recognized engineering programs

*FEANI means Fédération Européenne d'Associations Nationales d'Ingénieurs

The employers commission, based on the EUR-ACE Framework Standards and on the experience of other agencies (specially Ordem dos Engenheiros from Portugal), elaborated a special assesment document for evaluation of engineering programs which could be awarded with EUR-ACE label.

This document (visiting file) is constructed starting from criteria, establishing referring standards, minimum standards, performance indicators, documents to be presented for the calificative „ACCEPTABLE”.

The adopted calificatives for EUR-ACE label certification are „ACCEPTABLE”, „ACCEPTABLE WITH RECOMMANDATIONS”, which means that after an established time period an evaluation will be made again only for made recommendations and „UNACCEPTABLE”, which means that the engineering program will not be EUR-ACE label awarded.

For each degree level (license or master), our assesment document has compulsory requirements and specific requirements. A special attention was paid to the programme outcomes of the engineering education, analyzed, as the EUR-ACE standards require.

So, by our standards and performance indicators, study programme outcomes are evaluated under following six characteristics: knowledge and understanding, engineering analysis, engineering design, investigations, engineering practice and transferable skills.

This approaching of the EUR-ACE label evaluation is one which covers other descriptors of the programme outcomes used in the European higher education area, as the Table 3 comparatively presents, for the first and second cycles only, where the eur-ace label system is available.

Table 3. Clustering of outcomes (qualifications) descriptors in different frameworks for different levels of qualifications and studies

Bologna, QF-EHEA Short Cycles (ShC), First Cycles (FC), Second Cycles (SC), Third Cycles (TC)	EU, EQF-LLL Level 5 (L5), Level 6 (L6), Level 7 (L7), Level 8 (L8)	EUR-ACE First Cycles (FC), Second Cycles (SC)
A. Knowledge and understanding	1. Knowledge	I. Knowledge and understanding
B. Applying knowledge and understanding	2. Skills	II. Engineering analysis
C. Making Judgments	3. Competences	III. Engineering design
D. Communications skills		IV. Investigations
E. Learning skills		V. Engineering practice
		VI. Transferable skills

For each outcomes descriptor, for EUR-ACE label, we defined the requirements for graduates, distinctly for those two cycles: first (license) and second (master).

Our Knowledge and understanding of the EUR-ACE system (with all his requirements), of the EUR-ACE Framework Standards, and of the requirements regarding to the outcomes, allow us to elaborated the Romanian EUR-ACE label standards, which statistically are presented in the following table (Table 4). Until now, five evaluation visits were made in different technical universities, so we could say that an owen experience exist.

Table 4. Synthetic description of the Romanian EUR-ACE standards

	LICENSE	MASTER
Compulsory requirements	8	9
Criteria	5	5
Reference standards	14	14
Minimum standards	25	25
Performance indicators	25	25
Evaluation parameters for the „acceptable” rating	39	39
Documents in proof and other evidence	134	134
Findings (acts, documents, ascertaining)	215	211
Synthetic data sheets	26	26
Descriptors of the program outcomes	21	19

Practically, the difference between those two Bologna cycles, the first and the second, Romanian EUR-ACE standards make difference by compulsory requirements and by outcomes description.

The outcomes description, in term of those six points of view, used in Romanian EUR-ACE label standards can be watched in the Table 5, for each first two Bologna cycles (license and master). This description is in concordance with the EUR-ACE framework standards and with the descriptors used by the Portugal accredited authority (OE).

Table 5. Description of the program outcomes from those six perspectives

Approaching Type		Expected Outcomes			
		License		Master	
I	Knowledge and understanding	1	Knowledge and understanding of the scientific and mathematical principles underlying their branch of engineering	1	An in-depth knowledge and understanding of the principles of their branch of engineering
		2	A systematic understanding of the key aspects and concepts of their branch of engineering	2	A critical awareness of the forefront of their branch
		3	Coherent knowledge of their branch of engineering including some at the forefront of the branch	-	-
		4	Awareness of the wider multidisciplinary context of engineering	-	-
II	Engineering analysis	1	The ability to apply their knowledge and understanding to identify, formulate and solve engineering problems using established methods	1	The ability to solve problems that are unfamiliar, incompletely defined, and have competing specifications
		2	The ability to apply their knowledge and understanding to analyse engineering products, processes and methods	2	The ability to formulate and solve problems in new and emerging areas of their specialization
		3	The ability to select and apply relevant analytic and modeling methods	3	The ability to use their knowledge and understanding to conceptualize engineering models, systems and processes
		-	-	4	The ability to apply innovative methods in problem solving
III	Engineering design	1	The ability to apply their knowledge and understanding to develop and realize designs to meet defined and specified requirements.	1	An ability to use their knowledge and understanding to design solutions to unfamiliar problems, possibly involving other disciplines
		2	An understanding of design methodologies, and an ability to use them	2	An ability to use creativity to develop new and original ideas and methods
		-	-	3	An ability to use their engineering judgment to work with complexity, technical uncertainty and incomplete information
IV	Investigations	1	The ability to conduct searches of literature, and to use data bases and other sources of information	1	The ability to identify, locate and obtain required data
		2	The ability to design and conduct appropriate experiments, interpret the data and draw conclusions	2	The ability to design and conduct analytic, modelling and experimental investigations
		3	Workshop and laboratory skills	3	The ability to critically evaluate data and draw conclusions
		-	-	4	The ability to investigate the application of new and emerging technologies in their branch of engineering
V	Engineering practice	1	The ability to select and use appropriate equipment, tools and methods	1	The ability to integrate knowledge from different branches, and handle complexity
		2	The ability to combine theory and practice to solve engineering problems	2	A comprehensive understanding of applicable techniques and methods, and of their limitations
		3	An understanding of applicable techniques and methods, and of their limitations	3	A knowledge of the non-technical implications of engineering practice
		4	An awareness of the non-technical implications of engineering practice	-	-

VI	Transferable skills	1	Function effectively as an individual and as a member of a team	1	Fulfill all the Transferable Skill requirements of a First Cycle graduate at the more demanding level of Second Cycle
		2	Use diverse methods to communicate effectively with the engineering community and with society at large	2	Function effectively as leader of a team that may be composed of different disciplines and levels
		3	Demonstrate awareness of the health, safety and legal issues and responsibilities of engineering practice, the impact of engineering solutions in a societal and environmental context, and commit to professional ethics, responsibilities and norms of engineering practice	3	Work and communicate effectively in national and international contexts
		4	Demonstrate an awareness of project management and business practices, such as risk and change management, and understand their limitations	-	-
		5	Recognize the need for, and have the ability to engage in independent, life-long learning	-	-
		TOTAL		21	

After paying the visits, the evaluator has to present the visit document and a personal report, for an analysis inside the employers commission. The analysis is finished by an assesment report signed by the permanent experts of the employers commission and a report of the meeting. All these documents are going to be debated in the decision levels of ARACIS, which will take a decision for awarding or not of the evaluated engineering program.

4. Conclusions

In Romanian engineering education, the ARACIS's belonging to ENAEE and the possibility of the engineering programs to be awarded by EUR-ACE label, were recived with all the opening for a plus of quality and appreciated for an easier recognition of studies and an easier mobility and employing. The evaluation standards used for accreditation and for EUR-ACE awarding ensure a higher quality, in a full according to EUR-ACE standards.

The employers will have to play a more important role in curriculum development. A culture consists of a mix of collaborative research, careers guidance systems with links to employers' bodies, alumni tracking etc. will have to be promoted by ARACIS and by the univiersity senates and rectors.

ARACIS, by employers commission, is interested in experience changing and spreading, in improving the standards, all for a better European engineer.

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AGENTIA ROMANA
DE ASIGURARE A
CALITATII IN
INVATAMANTUL SUPERIOR

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EDUCATIONAL STAFF'S OPINION ABOUT QUALITY ASSURANCE STANDARDS IN BOSNIA AND HERTEGOVINA

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Abstract

In Europe there is a coherent and useful external evaluation structure and process in higher education. It is not only the quality of the system but the similarities among the Agencies of Quality Assurance of all the EU countries. Their aim is to assess the quality of higher education in universities or in other institutions where are developed equivalent study programs, in order to increase the level of employability of the graduates. A new project aiming to create and synchronize new standards and procedures of external assessment in universities from Bosnia and Herzegovina, similar to the EU ones, has been developed by the Kaho Sint Lieven Ghent, in partnership with institutions from Portugal, Spain, Austria and Romania. In the present paper we investigate the opinion of 31 members from the 8 Bosnian state universities towards external standards and process of assessment in higher education.

Key words: reform, Bologna process, quality assurance, assessment procedures, standards.

1. Introduction

All over the world the educational system is changing repetitively while trying to offer to both national and international students a high quality education. The reform in Bosnian higher education system started with the new ratified Constitution and in 2003 Bosnia and Herzegovina joined the Bologna process [1]. There are 8 state universities (University of Banja Luka, University of Bihac, University of East Sarajevo, University of Dzemal Bijedic, University of Mostar, University of Sarajevo, University of Tuzla, and University of Zenica), 16 private universities, within higher education, and a National Agency for Development of Higher Education and Quality Assurance (HEA) – created in 2008 at 8 years distance from the European Network for Quality Assurance in Higher Education (ENQA). All the mentioned institutions are lying under one of the 13 Ministries of Education depending on the cantons of Bosnia and Herzegovina Federation or on the Srpska Republic. For that reason it is certainly difficult to create coherent procedures and accreditation standards necessary for the external assessment in higher education. More than this, citizens with BiH qualifications have severe problems getting them recognized internationally as well as across the country [2]. At present the improving process is possible because of the collaboration within a Tempus project contracted by Kaho Sint Lieven Ghent. There is a strong collaboration between 4 European partners such as Austria (World University Service- WUS), Belgium (Council of Flemish University Colleges -VLHORA), Romania (Transilvania University of Brasov) and Spain (Catalonian Accreditation Office-AQA) and Bosnia and Herzegovina (HEA and the 18 state universities mentioned above).

The commune purposes of the external quality assurance are: the improvement of quality, publicly available information on quality and standards, accreditation, public accountability and contribution to the HE sector planning process [3]. In our case the main aim of the project is to introduce the European standards for assessment and the accreditation procedures of the study programs in higher education system in Bosnia and Herzegovina. In order to achieve that aim the managerial team projected the following objectives: to compare and evaluate the present situation regarding the accreditation procedures and standards in European Union, also in Bosnia and Herzegovina, to create and adjust the assessment procedures the accreditation of the study programs in higher education, to improve the universities capacities, to develop a accreditation pilot project and to control and monitor the quality of the project [4].

Recently there were trained 31 specialists who are working for the state universities of Bosnia and Herzegovina or that are HEA members. They met on Sarajevo in order to be trained by the 3 European Experts in Quality Assurance in higher education. After the training session, the participants' level of expertise on the issue of external assessment in higher education raised. The target lot had to fill up two questionnaires: one questionnaire regarding their opinion about external evaluation criteria in Bosnian higher education and a satisfaction questionnaire designed for that training session.

2. Research methodology

2.1. Research objective

The research objective is to identify the participants' opinion about the external evaluation process and criteria.

2.2. Research instruments

First questionnaire aims to evaluate the trainers' opinion about the external assessment process and structure. It has 2 sections, the first one includes a series of factual data as gender, work experience, experience in the external assessment process in higher education, etc, while the second one is entirely designed to investigate the opinion about external evaluation process and structure, in accordance with the training received contents. It has a total number of 38 items, 10 in section A, 28 objective items and 7 subjective ones belonging to section B. The objective items that had dichotomy choices were 3 while the others had as an option a likert scale in which they could choose from extremely important to unimportant.

There are both objective and subjective items. The alfa cronbach for the section B of the questionnaire is 0.863. This proves that reliability coefficient of the questionnaire has a high rate, though the number of the respondent is not big and that the items were perfectly understood by the participants.

The second instrument has a number of 14 objective items and it is represented by a satisfaction questionnaire. The subjects had to use a likert scale in order to answer how pleased they are. The scale had rank 1 for very unsatisfied going till the rank 5 when they were very satisfied. Its aim is to investigate the quality of the training session at which they participated at. The alfa cronbach for this one is 0.895.

2.3. Research lot

There were a total number of 31 respondents, from 8 state universities of Bosnia and Herzegovina. They were both man and women, with ages starting with 27 to 65 years old that had different professional backgrounds in the academic field. Most of the subjects have administrative positions (60%) correlated to the internal and external assessment.

2.4. Research results

The answer for the first question concerning the need to improve the external assessment procedures in higher education was the following: 76% responded that the procedures need real improvement in order to be in line with the European ones while only 24% said the procedures are more or less similar with the EU ones and need partial improvement. The Bosnian external assessment standards need real enhancement and most of the respondents agree with it.

According to EU procedures the external evaluation committee must have an expertise in the assessed area, educational field and assessment expertise and international expertise in developing study programs. If we take in consideration the respondents' answers we will not see any correlation between all 4 indicators of team's expertise level. But if we analyze the average of the responses, in "Figure 1", we can say the international development of the discipline is considered to be less important than the other types of expertise (only 3.64 compared with 4.24, 4.36, and 4.28).

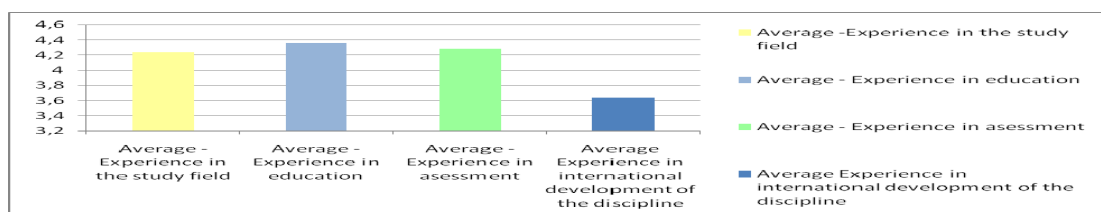


Figure 1. Averages of the teams' types of expertise

According to ENQA regulation, students are encouraged to participate as active members of the evaluation panel: they are able to see the situation from the learner's perspective, they can better understand the consequences for the students' situation because of their greater interest in education, and they can better see the factors that would lead to the education progress [5]. All the participants agreed with students' presence, as part of the evaluation team. They mentioned a few reasons for their choice: "students are consumers of education", "you can easily obtain information about the quality of teaching", they also come with a different perspective over the evaluation process, and they are considered part of the evaluation teams. Among respondents' answers we found the following selection criteria: educational results, year of study, enrolment in a full time study program, motivation, enrolment in extracurricular activities, level of knowledge about the quality assessment process, responsibility.

We expected to obtain a significant correlation among all the indicators of the feedback given by the evaluation team for the study program, but the results show there is such a correlation only between the feedback presented for each of the 7 criteria of external assessment and the feedback given for the entire report ($r = 0.610$, $p < 0.01$). No correlations were found with the item pointing to the suggestions offer necessary to improve the study program, meaning that our subjects are interested more in the assessment process than in offering tips for the program to be improved.

80% of the trainees find easy to align their programs to the Bologna Process, proving they are strongly motivated to make such a change.

The issue of objectives and outcomes is frequently discussed in the special literature. The quality of the educational process depends a lot on their connection. The objectives have the aim to lead to the outcomes, which are seen as finalities or learning outcomes [6]. In other words aims are concerned with teaching and the teacher's intentions while learning outcomes are concerned with learning. The learning outcomes are usually seen as competences or skills in the special literature [7]. A competence has a knowledge component, capacities and values or attitudes. There were given 9 major categories of competences: interactive use of information, leadership, problem solving, critical thinking, creativity, communication, entrepreneurial competences, research competences and professional competences. We expected to be a significant positive correlation between professional competences, research competences, and interactive use of information, problem solving, critical thinking, and creativity, but the results were different as presented in "Table 1". In our study, the professional competence correlates strongly only with the interactive use of information and critical thinking.

Table 1. Correlations among 9 categories of competence

Competences	Correlations			
Interactive use of information	Problem solving ($r=0.471$, $p<0.05$)	Critical thinking ($r=0.465$, $r<0.05$)	Creativity ($r=0.436$, $p<0.05$)	Professional ($r=0.530$, $p<0.01$)
Problem solving	Interactive use of information ($r=0.471$, $p<0.05$)	Critical thinking ($r=0.509$, $p<0.01$)	Communication ($r=0.500$, $p<0.05$)	Research ($r=0.474$, $p<0.05$)
Critical thinking	Interactive use of information ($r=0.465$, $r<0.05$)	Problem solving ($r=0.509$, $p<0.01$)	Creativity $r=0.787$, $p<0.01$	Professional $r=0.443$, $p<0.05$
Creativity	Interactive use of	Critical thinking	Entrepreneurial	-

Competences	Correlations			
	information ($r=0.436, p<0.05$)	$r=0.787, p<0.01$	($r=0.429, p<0.05$)	
Communication	Leadership ($r=0.437, p<0.05$)	Problem solving ($r=0.500, p<0.05$)	Entrepreneurial ($r=0.368, p<0.05$)	-
Entrepreneurial	Leadership ($r=0.513, p<0.01$)	Creativity ($r=0.429, p<0.05$)	Research ($r=0.488, p<0.01$)	-
Leadership	Communication ($r=0.437, p<0.05$)	Entrepreneurial ($r=0.513, p<0.001$)	-	-
Research	Problem solving ($r=0.474, p<0.05$)	Entrepreneurial ($r=0.488, p<0.01$)	-	-
Professional	Interactive use of information ($r=0.530, p<0.01$)	Critical thinking $r=0.443, p<0.05$	-	-

A second external assessment criterion presented at the training session was “the curriculum” of the study program; it has 5 indicators “coherence between objectives and curricular contents, interaction between education, science and research within certain disciplines, the relevance between study time and those 60 credits, using new approaches in teaching. We only found significant correlation between the 1st and the 3rd indicator ($r=0.468, p<0.05$), 2nd and 3rd indicator ($r=0.480, p<0.05$). A possible interpretation could signify that the credits number and the introduction of new teaching strategies aren’t as important as the first 3 indicators were.

Teachers are the most valuable resource that students have, reason why it is important to have developed the necessary skills and experience [8]. On the topic of teaching staff’s evaluation, the respondents frequently mentioned as assessment items: students’ evaluations, research and publications, teaching mobilities’, quality of teaching, motivation and professional competences. The most common items met were the research and the international teaching experiences. Also students are seen by the participants as partners in education, able to improve the quality of teaching – learning process.

Alternative methods of assessment for students are perceived only by the 8% of the respondents as “extremely important”, while 48% consider them “very important” and 44% “important”. An aspect of external evaluation is represented also by the communication and guidance relation between the teacher and students. 4% consider unimportant this issue, other 4% consider it to be not very important, 16% relative important, 48% very important and just 24% see the discussed aspect as very important. The facilities of the assessed institutions or study program are considered to play a “very important” role only by 24 % of the questioned people, while 64% see the aspect as “very important” and 12% see it just “important”.

Last criterion for evaluation is the one that refers to the outcomes and the outputs of the education. For the interviewed persons the most important indicators are: the acquired competence level and the degree of employability.

After the training, the results show a significant correlation between the satisfaction generated by the workshop and tutors support and counseling ($r=0.469, p<0.01$), motivation developed by tutors ($0.431, p<0.05$), the possibility to address questions ($0.439, p<0.05$), adequate training methodology ($r=0.400, p<0.05$), training contents ($r=0.399, p<0.05$), level of resulted knowledge ($r=0.497, p<0.01$). The degree of contents understanding correlates significant only with the developed and trained assessment capacities ($r=0.431, p<0.05$) though we expected to have a similar correlation with the training methodology.

The working groups dynamics seems to correlate with the support and counseling offered by the trainers ($r=0.478$, $p<0.05$), tutors motivation ($r=0.530$, $p<0.01$), the possibility to address questions ($r=0.454$, $p<0.01$), strongly correlates with the quality of team work ($r=0.618$, $p=0.00$), achieved knowledge ($r=0.356$, $p<0.05$), developed capacities ($r=0.543$, $p<0.05$).

There are also significant correlation between the level of achieved knowledge and the developed or trained capacities, meaning there was balance between those two aspects.

The entire organization of the seminar correlates significant with 10 from the 14 items. Meaning there is a strong relation among most of the training elements.

3. Conclusions

The EU quality assurance politics in higher education are considered valuable by other non-European countries like Bosnia and Herzegovina, which is willing to align to the EU quality assurance standards, in order to offer more chances of success on the labor market to their graduates. The trained staff from Bosnian universities is motivated to cooperate in order to achieve the aim of the project.

All the participants at the training were satisfied by the organization of the seminar. They appreciated the training materials, the tutors' activity, the used methodology and resulted outcomes of the session.

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SATISFACTION WITH THE QUALITY OF STUDY PROGRAMS AMONG FINAL YEAR BACHELOR LEVEL STUDENTS IN PSYCHOLOGY AND EDUCATIONAL SCIENCES

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Abstract

The paper presents the results of an exploratory research which deals with the issue of satisfaction with the quality of study programs in final year bachelor level students in psychology and educational sciences. The research uses the Tuning methodology in identifying the level of importance and the level of achievement of the main competences targeted by the respective study programs. The results show important discrepancies between the level of importance and the level of achievement of these competences, which indicate the need for revising the curricula of the study programs in order to respond to the expectations of the students and to improve the employability of the graduates.

Key words: satisfaction with study programs, competencies, graduates' employability, bachelor level.

1. Introduction

Nowadays universities are more and more concerned with increasing the employability of their graduates and thus responding to the evolving demands of the labour market in terms of competence by restructuring their curricula. The employability becomes a dimension of the quality of study programs [1]. The Bologna process has restructured the university educational system in order to ensure a common and coherent framework for the countries in the enlarged space of the European Community. A common framework means not only the similarity of the length of studies in different areas, but also similar contents in order to facilitate the mobility of the students and graduates in the European space.

Some study programs already use as a frame of generic and subject specific competences the results of the Tuning researches [2], [3] for designing their curricula. These studies consulted the main stakeholders of higher education – academics, employers, and graduates – in defining the generic and subject-specific competences for different areas, as well as their level of importance

and level of achievement. The feedback provided by the employers and the graduates on the actual competences required in the world of work are very valuable for the universities for restructuring and updating their curricula in the right direction.

Recent researches coordinated by our university extended the Tuning methodology of consulting the above mentioned stakeholders from several countries for defining the generic and specific competences required by the industrial sector [4], [5], regardless of the subject area. Another study [6] aimed to identify the entrepreneurial competences acquired by practical placement of the students. For the doctoral school organized in the new Bologna format, our university conducted two large researches concerning the competences acquired during by the doctoral program [7], [8].

For the area of Psychology one can use, starting with 2009, the competences defined by EuroPsy (the European qualification standard for psychologists). For the area of educational sciences, the generic and specific competences were already defined in [2].

The bachelor studies in psychology and educational sciences opened by our university in the Bologna frame in 2005 were designed having in mind the competences recognized as defining for the two areas at international levels. Having the opportunity of the mobility programs, our students spend semesters in other European universities and, in these cases, the compatibility between curricula is important in order to maximize the functioning of ECTS. The mobility allows our students to enrol for the second and third cycle of Bologna system in European universities.

For the success of the study programs it is also vital to know if the curricula delivered are fit for ensuring our graduates the competences that enable them to find and to keep a job in the field in Romania. The employability of our graduates becomes thus a factor of increasing the attractiveness of our study programs for future students. Therefore initiating and conducting surveys on the degree of satisfaction of graduates, on the way graduates perceive the quality and the utility of their professional education as well as their employability is a main concern for our faculty.

2. Method

2.1. Objectives

The main objective of the present research is to design and refine an instrument for the assessment of the graduates' employability for two programs: psychology and educational sciences. The long-term goal of the research is to design a follow-up system for studying the employability of the graduates and the degree to which the curricula for the two study programs meet the actual needs on the labour market and, in the end, satisfy our graduates as beneficiaries of our educational services. The refined instruments resulted from the preliminary research are intended to be applied to all graduates from 2008 to nowadays. The results of the present paper are obtained from the second part of the preliminary instrument which also encompasses a part referring to the relationship final year students have with the labour market. In the present study we aim to identify the way future graduates evaluate the importance of the main competences of the study program for their future profession as well as the level of achievement of these competences. From the discrepancies between the importance of the competences and their actual level of achievement we intend to deduce the aspects of the respective curricula that need to be improved or even redefined.

2.2. Sample

The participants in the preliminary research are 62 students in the third year of bachelor studies in Psychology (42) and Educational Sciences (20), with an average age of 21,6. The participants were asked to anonymously answer the questionnaire and also to give feedback on the way they perceive the content, format and relevance of the questions

2.3. Tools

The instrument used in the preliminary research is a program-end feedback questionnaire of 30 items, structured in four parts: demographics relevant for the aims of the research (11 items); relationship with the labour market and career plans for the next years (12 items); level of importance vs. level of achievement of main competences aimed by the respective study programs (1 complex item encompassing a comparison table for the 10 competences in question); satisfaction of the students with the quality of their education (6 items – 3 with choice answers and 3 with open answers). The competences given for assessment of importance and achievement are those included in the Diploma Supplement and the respondents were asked to use a 5-point Lickert scale from 1 – "very low" to 5 – "very high" level for the assessment of the importance and of the achievement. The results presented below are related to parts 1 and 3. Even though the number of participants is quite small we need to analyse the results for the two study programs separately because they are distinct subject areas.

3. Results

3.1. The Psychology program

The average scores for the level of importance range between 4,86 and 4,07 out of 5, while the average score for the level of achievement range between 4,52 and 3,20 meaning that for some competences the level of achievement is of "high" but not "very high". The most important competence is considered to be "Respect of professional ethics and deontology", which is quite remarkable (see Table 1). On the second rank comes the competence of "Explaining the psychological states, phenomena, processes, and mechanisms", while on the third rank is situated the competence of "Using natural and basic professional psychological language in communication with clients, as well as communication media". The least important competence is considered to be "Participating in the elaboration of evaluation reports for individuals and organization".

As in previous researches conducted for several academic subject areas [2], [3] as well as for the generic and specific competences for industry, regardless of the subject area [4], [5], and entrepreneurship [6], the average scores for the level of importance are much higher than the scores for the level of achievement, meaning that the respondents perceive those competences as being very important but do not consider that they actually achieved the competences at the same level (see mean values for importance and achievement of the competences in Table 1). The discrepancies between the level of importance and the level of achievement are statistically very significant for 8 competences ($p < ,001$), and only for 2 out of 10 competences we have slightly lower levels of significance: "Using basic concepts and theories in the field" ($p < ,004$) and "Establishing personal relationships in the professional team" ($p < ,01$).

Four out of ten above mentioned competences are evaluated for the level of achievement with mean scores under the value of 4, which means that their actual level of achievement is considerably lower than the mean scores for the level of importance: "Participating in the

elaboration of evaluation reports for individuals and organizations" (level of achievement

Table 1. Main competences for the Psychology – bachelor level program – statistics for the level of importance, the level of achievement and the difference between them

Competences for the Psychology program	Level of importance			Level of achievement			Paired t test
	Rank	Mean	St. Dev.	Rank	Mean	St. Dev.	
Respect of professional ethics and deontology (under supervision)	1	4,86	0,46	1	4,52	0,69	t=3,32, p< ,001
Explaining the psychological states, phenomena, processes, and mechanisms	2	4,75	0,53	4	4,18	0,62	t=5,42, p< ,001
Using natural and basic professional psychological language in communication with clients, as well as communication media	3	4,75	0,53	2	4,25	0,71	t=4,18, p< ,001
Diagnosis of individuals, groups and organizations using observation, tests, inventories, questionnaire surveys	4	4,68	0,63	3	4,23	0,74	t=4,54, p< ,001
Self-management of the learning and personal development process	5	4,55	0,76	5	4,00	0,80	t=5,45, p< ,001
Designing and implementing applied researches using qualitative and quantitative methods for gathering data and statistical analysis	6	4,34	0,91	8	3,70	1,04	t=5,03, p< ,001
Using basic concepts and theories in the field	7	4,30	0,97	7	3,80	0,70	t=3,48, p< ,004
Establishing personal relationships in professional teams	8	4,28	0,82	6	4,00	0,97	t=2,38, p< ,01
Designing, implementing and evaluating primary intervention oriented towards individual and groups (under supervision)	9	4,11	0,97	9	3,39	1,03	t=4,84, p< ,001
Participating in the elaboration of evaluation reports for individuals and organizations	10	4,07	0,87	10	3,20	1,04	t=5,46, p< ,001

3,20; 10th rank of importance), "Designing, implementing and evaluating primary intervention oriented towards individual and groups"(level of achievement 3,39; 9th rank of importance), "Designing and implementing applied researches using qualitative and quantitative methods for gathering data and statistical analysis" (level of achievement 3,70; 6th rank of importance), "Using basic concepts and theories in the field" (level of achievement 3,80; 7th rank of importance). For these competences, the curriculum must be revised and improved.

3.2. The Educational Sciences program

The basic competences aimed by the Educational Sciences program are different from those of the Psychology program. However, the average scores for the level of importance range between 4,94 and 4,13 out of 5. As for the level of achievement, the average range between 4,41 and 3,68 meaning that the final year students of this program are more confident about the level of achievement. Similar to the previous program, for some competences the level of achievement is of "high" but not "very high" (see Table 3). The most important competence is considered "Personal and professional development", on the second rank comes the competence defined as "Active and responsible involvement in professional activities", and on

the third rank is situated the competence named "Teamwork in interdisciplinary educational teams". The least important competence is considered to be "Research in educational field".

Table 3. Main competences for the Educational Sciences – bachelor level program – statistics for the level of importance, the level of achievement and the difference between them

Competences for the Educational Sciences program	Level of importance			Level of achievement			Paired t test
	Rank	Mean	St. Dev.	Rank	Mean	St. Dev.	
Personal and professional development	1	4,94	0,28	1,5	4,41	0,79	t= 2,72, p< ,01
Active and responsible involvement in professional activities	2	4,82	0,39	6	3,94	0,96	t= 3,66, p< ,001
Teamwork in interdisciplinary educational teams	3	4,71	0,58	1,5	4,41	0,79	Not significant
Psychological assessment and personalized approach of students	4	4,65	0,49	4,5	4,06	0,96	t=2,58, p< ,01
Communicating with educational partners: students, parents, colleagues, economic environment partners	5	4,59	0,87	3	4,29	1,04	t=2,58, p< ,01
Animating groups and managing interpersonal relationships	6	4,47	0,80	7	3,88	1,11	t=2,41, p< ,02
Designing, implementing, managing and evaluating the educational approach	7	4,35	0,93	8	3,82	0,80	t=2,49, p< ,01
Information management: documenting, analysing, editing and presenting data	8	4,29	0,77	4,5	4,06	0,96	Not significant
Analysing, reflecting and interpreting the conceptual system and the theoretical models in educational sciences	9	4,18	0,80	9	3,71	0,68	Not significant
Research in educational field	10	4,13	0,95	10	3,68	1,02	Not significant

For the final year students of this program the differences between the level of importance and the level of achievement of the competences are not so big and some are quite non significant. The most important discrepancy is noted for the competence "Active and responsible involvement in professional activities" (0,86 points out of 5; t= 3,66, p< ,001), but for other competences the discrepancy is less significant, (p< ,02; see Table 2). In the case of this program, five out of ten competences are evaluated for the level of achievement with mean scores under the value of 4: "Research in educational field " (level of achievement 3,68; 10th rank of importance); "Analysing, reflecting and interpreting the conceptual system and the theoretical models in educational sciences" (level of achievement 3,71; 9th rank of importance); "Designing, implementing, managing and evaluating the educational approach" (level of achievement 3,82; 7th rank of importance); "Animating groups and managing interpersonal relationships" (level of achievement 3,88; 6th rank of importance); "Active and responsible involvement in professional activities"(level of achievement 3,94; 2nd rank of importance). For these competences, the curriculum must be revised and improved too.

Comparing the two groups – Psychology and Educational Sciences in terms of level of importance of the similar competences (7 out of 10) we found only few differences:

- For the students in the Educational Sciences program the competence related to "Teamwork" is more important than for the students in the Psychology program (t=3,58, p<,001) as well as the competence related to "Personal and professional development"

($t=3,13$, $p<,003$). The last competence is also considered as having a higher level of achievement by the same students ($t=2,00$, $p<,05$).

- For the students in the Psychology program the competence related to "Using basic concepts and theories in the field" is more important than for the students in Educational Sciences ($t=3,06$, $p<,005$).

4. Conclusions

The data collected till now indicate that there are significant differences between the level of importance and the actual level of achievement of the main competences of the two study programs. For some competences the level of achievement is considered as High, but not very high, which indicates the necessity of rethinking some issues of the curriculum. For the students in both programs the level of importance of the theoretical aspects of their education is rather low: rank 7 for Psychology and rank 9 for Educational Sciences, which indicates a very pragmatic approach on the behalf of the students, but also a closer link of the "theoretical disciplines" with the practical issues of these two fields in the future. A good sign is that Psychology students consider "Respecting professional ethics" as being the most important competence which suggests the internalization of the core values of the psychological profession. Despite of the limited number of participants, the preliminary research allowed the refinement and the redesign of the questionnaire. We intend to apply the next step questionnaire to all the graduates of the two programs and to make suggestions for the improvement of the two programs. Thus we will be able to increase the quality of the programs and to attract more students.

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CAN EUROPEAN UNION FUNDED GRANTS IMPROVE ROMANIA'S ACADEMIC PERFORMANCES?

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Abstract

Within our study we intend to develop a brief analysis upon the totally new academic domain from within contemporary Romanian System of Higher Education. We are talking about the new possibilities for the young researchers which are made available through grants from EU. Our undertaking is centered around two questions. First one is about the chances of the new type of funding and the new type of dealing with academic standards brought by these EU grants to raise the quality of Romanian academic standards and performances. Do these grants with their set of benchmarks can change something in the essence within the academic system in nowadays Romania? The second question is about an issue in its strictly scientific perspective: can these grants really impose a set of academic standards which later can bring us to the point from which the scientific progress will be indeed possible in Romanian System of Higher Education? In other words, can these grants fulfill the task of integrating the Romanian academic community into the international academic environment? Our conclusions will recommend caution and patience regarding the evaluation of the efficiency of these EU funded grants. We propose some methods for the task of a proper evaluation of the efficiency of these EU funded grants. We think that this goal is more actual than never for Romania because after EU integration Romanian System of Higher Education has for the first time in history the chance not only to obtain a substantial financial support but also to benefit for a real and authentic Western academic expertise.

Key words: scientific research, human resources, post-doctoral fellowships.

1. New opportunities for Romanians Young Academic Researchers. Where we were and where are we now?

Starting with the beginning of 2007 Romanian academic system has a new horizon of opportunities. Briefly speaking we talk about the new opportunities which had become available for a significant part from within Romanian system of higher education. A large number of EU funded grants are now in the phase of implementation especially for the young researchers. As it

is known, a special segment of these EU funded grants are designed to reduce or, in least in theory, to stop the so called “brain draining” process among young researchers. The primary target of these grants is the segment of young academic scholars who just received their PhD diploma and who are at the beginning of their scientific career. This is the main reason for which any human resources centered programme within this area is primarily designed to offer financial support through post-doctoral fellowships. We must underline this fact because is very important in the economy of our study to notice that this type of financial support is in the first place designed to sustain peoples and not some standard research projects in which human resource factor is assured without problems from the start. This distinction may not be perceived, at a first look, in its true impact but, however, we must take it into consideration: these EU grants *are not* designed for a cutting edge level in academic research but they are developed in order to support and to maintain a human potential at a reasonable professional level. Of course, here we add the primary goal: to keep researchers in their countries by offering financial support.

The conceptual frame of human resources development within operational programmes is very easy to understand and to accept. This is especially true within post-doctoral programmes of fellowships. The idea is good and the money from EU are more than enough. In order to disclose its effects in Romanian academic system we must start with an analyses upon the actual status of scientific research in Romania. After this we must see the way in which EU funded grants are obtained, especially within the segment of post-doctoral fellowships programmes and, finally, to see who really have access on them after all. In the end, a survey upon the effects of these grants will be made.

For the task of obtaining a quick view on actual status of Romanian scientific research within higher education system we will follow two major coordinates of approach. The financial dimension and the human resource capital. There are relatively many studies on the contemporary status of scientific research in Romania and almost all of them indicate the very poor condition in which has wrecked Romanian scientific research. In terms of financial support the situation is indeed alarming. Statistical data indicate that in Romania the percentage of financial support for research from the public budget is only 0,39 while average European limit is 1,9 [1]. Another indicator is also very poor: in terms of financial support the statistical data shows that total public spending per one researcher in a year is in Romania at a level of only 5000 Euros while European media is approximately 80.000 Euros per year [2]. Other statistical data available are disclosing approximately the same level of financial support for academic research in Romania. So, while other countries from the region have a limit which always exceeds 0,5 % from GDP, even in countries with fewer people than Romania, in Romania the limit is only reached with negative fluctuations [3].

If the financial dimension of the disaster is too obvious for everyone we also must consider the other dimension, the dimension of human resources. And here the things are not so evident as they are from a financial perspective. On the one hand there is the perception that indeed Romanian potential in scientific research is considerable and it could not be questioned especially if we mention some cases of Romanian researchers which were able to obtain an obvious success in academic communities from Western World. On the other hand there is an objective factor which cannot be underestimated if want to get a real and accurate image upon the status and upon the mode in which is functioning the segment of Romanian academic researchers. We have here in mind the mentality, the style of work and the formal training in academic research of Romanians researchers. From this perspective the entire issue can be reduced to this: in general, Romanian system of academic research is unprepared for a proper integration in Western academic system. The main reason for this is not necessary the financial

dimension but, at least in some areas, the lack of Western expertise in order to properly develop an academic research activity.

It is simple to see that the past has almost nothing to offer to Romanian researchers but how does it look the present status of these researchers? The answer stays in the past: the actual status of Romanian system of academic research can be summarized as it follows:

- a. The absence of a solid financial support.
- b. The absence of solid training in terms of professional skills and western scientific mentality regarding the research activity
- c. The absence of a national plan regarding scientific research and reform within this system even if some institutions which have responsibilities within Romanian scientific research system had made some changes regarding the conceptual frame by which in the future will be allocated the financial resources. We strongly want to underline this regardless the presence of some recent official documents which seems to contradict us. We believe that a solid national plan for scientific and academic research could not be done through some official and political statements. The task of obtaining such a plan should have two major lines of approach: on the one hand it should indicate what we must do in order to rebuild a very damaged system and, on the other hand, it should indicate a development plan in a reasonable manner and not accordingly only to some shining thoughts and nice words. The so called "new" plan of CNCSIS regarding scientific research in Romania seems to do just this and to ignore the real possibilities of the system. Even more, it seems to exaggerate with new criteria which must be realized in order to obtain financial support. We consider that this could not be a proper manner to correct some mistakes from the past because, as we mention, it does not take into account the real possibilities of the system [4].

In this type of historical context it should be obvious for everyone that the presence of EU funded grants must be considered as an almost incredible historical chance not only to improve the academic standards in general within Romanian System of Higher Education but also to hope that the task of integration within Western academic communities could become realistic [5]. In what will follow we intend to make a brief analysis upon one of the most important segment from within actual EU funded programmes designed to sustain and to develop Romanian System of Higher Education: the post-doctoral fellowships programmes.

1.1. The Reality of Nowadays Post-doctoral Fellowships in Romania: Who gets the money and how they are obtained within EU funded grants in Romania?

The above two questions are the most important in our view in order to obtain later some answers regarding the efficiency of EU funded grants upon Romanian academic system in general. We will try to be brief and transparent.

At the first question the answer is in general a simple one: anyone who is eligible can obtain the funding. But, beyond this formal approach we can simply see that in the vast majority of situations the recipients of these funds are young Romanian researchers, under the age of 40, which do not have a Western academic expertise about how to develop and how to make a proper work of academic research. Regardless the relatively large number of purposes which these grants claim to have those who benefit from them are, in general, a product of Romanian System of Higher Education. Of course, there are exceptions but, in general, these isolated situations are nothing more than negative experiences for those individuals who had hoped that their return from a solid Western academic system back into Romanian system would be a real chance to continue what they started in West. Even if the statistical data regarding this

phenomenon are still relatively limited, we now have, yet, a sufficient number of personal testimonies which are describing in a very clear manner those negative experiences. Even more, this phenomenon was, fortunately, already described, in its general significance, within books dedicated to the present situation of Romanian academic research system [6]. The fact is that there is indeed a significant number of cases in which highly skilled and very well prepared young researches had been blocked in their careers from a system which still seems to be closed to innovation and progress. And when these individuals had hope for a better future through new EU post-doctoral fellowships programmes they encounter the same system and the same bureaucratic inefficiency with which they fought before. They rapidly found that the vast majority of those who had applied for EU post-doctoral programmes of fellowships, and who ultimately win those fellowships, are young Romanian researchers which had obtained their doctorate from within Romanian system and only a very few of them are indeed researchers with some Western academic experience. This situation, in our view, has a great impact upon the quality of academic work within those EU funded grants. One of the reasons is the fact that for a long time the weakness of the Romanian Higher Education System have been a clear obstacle to produce a generation of advanced researchers.

Without having a significant real Western academic experience these so called “researchers” are ending by doing what they were doing their entire life. In reality they only mimic a research activity and maybe the worst thing is not this but their belief that they are really making an academic job.

In case of Romania the above situation is very transparent in the field of human and social sciences and it is defining for the EU funded grants. This could very easily be proved by searching their academic background and by a close monitoring in the near future in order to see their real performances within EU funded grants. One of the main reasons for which we do not have now a serious and well documented image on the performances of these EU post-doctoral fellows is the fact that these grants started their activity only some months ago and we still do not have relevant technical data about it. Here we may add another aspect: we think at this moment it does not exist a real will to study and to assess these grants with the exception of the official and political bureaucracy. And, of course, when these EU funded grants will be finished we can imagine from now how it would look the bureaucratic documents in which it will be mentioned their stunning academic “achievements”! When we say this we base our opinion by an already existing document, a sort of opening political document for these grants which perfectly illustrates the lack of substance and the absence of a solid and realistic vision upon academic and scientific research. We have here in mind the *National Research, Development and Innovation Strategy 2007 – 2013*, an official document of the Romanian Government [7].

Maybe is too early to for negative conclusions but we still express our deep skepticism regarding a virtual positive impact of these EU funded grants upon Romanian System of Higher Education. And regarding the status of post-doctoral fellowships programmes it seems that a perfect mixture of bureaucracy and Romanian style of work has met together in order only to get the money and to complete the paper work. We cannot ignore here a position expressed by a former Romanian Ministry of Education, we speak about Andrei Marga, which recently observed, in a brief and fair manner, the lack of efficiency and the proliferation of a very large number of debatable, in terms of their claimed seriousness, EU funded grants in Romania.

As an intermediate conclusion for this first question from within this chapter we want to underline the fact that in the end there are two fundamental aspects for the entire present situation of EU funded grants in Romania. First there are the researchers from within these EU funded grants who can be no better than the system which created them. Second there are the so called

“managers” who, again, in the vast majority of situations, do not have an academic expertise robust enough in order to manage a proper academic research programme. Many of these individuals are nothing more than some obscure names in their own universities and can be easily recognized by their prolix and vague style of doing “science” in the field of human sciences in general. They had no other interest but the money and eventually to gain some bust upon their local visibility. And going further on this line we must be honest and we must admit the fact that there are indeed happy situations in which the quality of management cannot be questioned. But we consider that these situations are not too many and the general “rule” is, anyway, a weak management and an excessive bureaucratic dimension. And at this bureaucratic work these “managers” are indeed “experts”. Without having any significant achievements during their entire academic career in Romania they can do nothing more than only bureaucratic work within these grants. And, in order to be complete, even these bureaucratic activities are in many situations very bad undertaken. The situation of the management within EU funded grants in Romania is another factor because of which the chances of positive results are low even more.

The second question is about the way in which these EU funded grants are gained? We do not enter here in too many details. We only underline two things. The first one is the fact that indeed these grants are gained *legally*. Even if not all of them but, anyway, the vast majority of EU funded grants are legally gained. This is important to mention not because this situation could shed a positive light upon Romanian academic groups who compete for these grants. It would a daring decision to believe in the correctness of Romanian academic system. These EU funded grants are obtained legally just because they are not funded by Romania but by the European Union! But let us not be mislead. This legality is in many situation only on the paper because *the quality* of the projects are in many cases very poor or at least debatable. This could be also explained by the poor real academic experience of those who eventually are gaining these grants.

The last question can lead us further into disclosing how these grants are ending their meteoritic presence and, eventually, disclosing some situations in which these funds can indeed improve the general academic standard within Romanian higher education system.

2. The Scientific Research within EU Funded Grants in Romania. Which could be the Results from Post-doctoral Fellowships Programmes?

How does it looks the activity from within these EU funded grants in Romania? Without ending our purpose in general issues we can summarize our question by reducing it to some key features. These are: the type of research developed within these grants, the type of impact that this research can have and the effects upon personal careers of the individuals who are the recipients of these EU funded grants. In order to speak about these aspects in a proper manner we must underline the fact that at this moment we still do not have sufficient data about these EU funded grants. This is the main reason because of why we only will draw a general image. Anyway, after this we will try to indicate some methods by which these grant could be properly asses in the near future.

Regarding the first issue at a first look it could be observed the fact that the academic and scientific activities from within these grants are far away from what it should be. Most of them are focused upon projects which had been accepted by commissions which, in the vast majority of situations, do not have a proper expertise on the project's themes. This situation is widely spread within so called human and social sciences and it could be hardly denied by anyone who

have a minimum of expertise about the way in which is functioning Romanian System of Higher Education.

Starting from the above described situation the so called “research” activity from these grants can go further and, usually, is ending into a vast collection of “scientific papers” which in fact are nothing more than some prolix and elementary compositions. This situation could be also very easily illustrated by consulting the journals in which those papers are being published. With the exception of ISI journals the vast majority of those papers are far away from any major academic standard. You do not need a “scientific methodology” to see this. In many cases the rigor of academic standards is only being mimic even though, at a first look, those articles seem to be credible and honorable. In reality they are almost only rubbish and they perfectly illustrate the incompetence and the imposture of those authors. The issue here is not the fact that these articles are not been published in ISI journals but the fact that they anyway are bad written and conceived. You can publish an honorable paper in a small rated journal and this will not low your article.

As a first conclusion we may say that almost the entire “scientific” activity from those grants can be reduced to a type of articles production which seems to have only one purpose: to justify on the paper the large amounts of money “invested” in those EU funded grants. So, we have indeed a production of article but this is, in almost every case, just a form to obey, on the paper, to the contractual rules of those grants. Also this situation can be easily seen by consulting the articles and even the web sites of those grants which in many cases are filled with grammatical and topical mistakes.

A special issue is the issue of ISI articles. As it is known in many post-doctoral contracts for fellowships it is stipulated the condition of publishing ISI articles by the post-doctoral candidate. This is another good thing which nobody could deny. But, regarding the ISI articles which post-doctoral candidates have to publish due to their contracts there are some aspects which must be consider in very serious manner.

The first one is strictly scientific and is about the resources which post-doctoral candidates from within Romanian EU grants have at their disposal on their own universities. It is almost needless to say that the actual resources, in terms of libraries and technical equipment are at a level which cannot allow a real completion with their Western colleagues. There is no doubt about this [8].

The second aspect is also linked with the scientific dimension. Is about the human resource from the segment of tutors from this EU funded grants. Many of them do not have themselves ISI journals and we ask ourselves how it would be possible in these conditions to coordinate a post-doctoral candidate in order to be able to publish a very specific type of scientific material if yourself did not publish such a type of article? And here we propose, as a particular parameter about the quality of these EU funded grants to develop a study in order to see how many of those tutors from these grants have themselves ISI articles. This would be one of the possible approach in order for a proper analysis on the quality from within EU post-doctoral fellowships programmes.

The third aspects is linked with a moral plan. Due to the fact that scientific community in Romania are very small you have great chances to personally know the person to which you are sending your article in order to be evaluate by the peer-review process. To this situation we can add even the fact that the number of ISI journals in Romania are very small. This is why in Romania, from our point of view, it is hard to believe in the objectiveness and correctitude of the

peer-review process. We personally know individuals which had published ISI journals without knowing English language and, much worse, without knowing the language of the author that they wrote about.

The fourth is purely legal and, due to our knowledge, it was not mentioned until now in any journal or official position by the authorities who manages these EU post-doctoral grants in Romania during this period. This aspect is about the legality of using ISI published articles in order to demonstrate that you are fulfilled your contractual conditions. There are many situations in which the authors with ISI articles are in the same time members in editorial boards of the journal where they published their ISI article. Is nothing wrong until this point. But, yet, he has to see that by publishing an ISI article in these conditions those individuals are having material benefits. And we are not talking here about private journals but about publicly funded ones.

The second general issue from within chapter is about the impact of those articles at a scientific level. Regarding this theme in Romania in the present time there are not too many serious debates and studies. As we already seen in almost every study about the past and the present status of Romanian scientific research can be discovered descriptions about how bad things really are within Romanian academic research system [9]. But within those studies there are not yet analyzed and described the reality from within these EU funded grants. Remains that in the near future serious and solid studies to be developed in order for a proper evaluation on these grants and especially of those post-doctoral fellowships programmes. However, before we will try to indicate some possible methods for this type of assessment we can underline even from now the risks posed to these grants: the lack of international visibility and the very low standard in scientific research are the main aspects which could be mentioned. It is very unlikely that the set of mobility programs involved in many of the EU funded grants for Romania will be able to change something. We consider that this is true because, even if the mobility could be a success for a particular individual in terms of scientific expertise it is very unlikely that this expertise could be ever capitalized within Romanian system as long the system is self replicating and is maintaining its own low standards.

About the third and the last issue we can say only this: it is obvious that any expertise accumulated within western academic system it would be anytime useful for the individual who may have the chance to obtain that expertise through EU funded mobility grants from Romania. But, as far as we know, in a vast number of cases the end of a grant is also the end of getting the chance to work outside Romanian academic system. Of course, there are not universal rules in this but, and this is in fact what we wanted to emphasize, the impact of an experience gained through a grant even though it could be capitalized by the individual, still remains very low because the individual is trapped inside a weak system in terms of performance or even in terms of an ethical approach. So, even that minimum of a real academic expertise gained through external periods of research at Western universities, periods which are compulsory within some of these EU funded grants, could not be properly capitalized, at least in our view, because the reality of the entire system.

3. Suggestions for qualitative and quantitative research on the efficiency of these EU funded grants on post-doctoral fellowships programmes.

Now we want to indicate in a brief manner a set of possible methods for a proper evaluation on the efficiency of post-doctoral EU fellowships programmes. As we said earlier, due to our knowledge there are not yet studies upon this subject in Romania and we do not believe that statistical data available from the authorities, such as are the data regarding the amount of money which was absorbed until now by these programmes, are representing significant indicators able to say something about the efficiency of these grants. By the contrary we want to

suggest the fact that any serious assessment on these programmes must, in general, to be skeptical about the official data and official statements. In our view a proper frame for evaluation have to describe any step of these grants starting with the process of conceiving them and the stage of admission and ending with a long time surveillance on the fellows after they are finishing their post-doctoral contracts. And it would be very recommendable that this evaluation be made by international neutral experts without any interference from EU officials authorities.

In terms of concrete context for evaluation, in our view, it would be imperative to know and to analyze these types of informations for a general evaluation:

- a. The structure of human relations within these EU post-doctoral fellowships programmes. Even if apparently this indicator is less important it still could say something about the objectiveness of all contests that took place in order to gain a fellowships in these programmes. And this is also significant if we consider the fact that in many grants the admission could be decided in 75% proportion by interviews and through an analyze of the post-doctoral project which the candidate propose to the commission. And, finally, this indicator could also tell us a lot about the future evolution of the candidates because it would be interesting to see if their performance during the grant period, which are asses by those who admitted them into these grants, will be the same in the future on the open field of international academic research.
- b. The academic background of the evaluators from admission commissions and from within these grants. Here a very clear quantitative analysis is easy to make, at least in its formal perspective. It would be important to know their academic past and their academic research activity because this could also tell us something about the efficiency of the tutorial activity and the credibility of those tutors within these grants.
- c. The status about the level of transparency and legality of all processes that took place within these post-doctoral fellowships programmes. This could be done by a serious control which should not be limited only to the management authorities. This indicator could be less important for the evaluation of the scientific part of work from these EU funded grants but still is important because it could be disclose serious problems from the past of candidates or tutor's careers.

Regarding now the issue of the strictly scientific content of the activities from within these post-doctoral programmes things are very transparent and very easy to understand. Beside other things the main factor for the assessment should be the international visibility of the candidate during and after he has finished his post-doctoral period. And here we can indicate some concrete parameters:

- a. The number of ISI or IDB rated journals in which the candidate will be able to publish. To reduce some possible suspicious about the objectiveness of the peer-review process a positive factor should be considered the number of these types of journals and not only the number of articles. Also should be considered with caution the articles published in Romanian ISI rated journals due to the suspiciousness about the objectiveness of the peer-review process. Here we recommend an additional form of evaluation by international experts. We strongly recommend the rejection of all ISI articles if they have been published in journals in which the author is also member in the editorial board and the article is published within a post-doctoral fellowships programme. The article could be excellent but we consider that it could not be used to indicate the good level of a one post-doctoral grant or another as long as there could be some moral and legal problems. It could be used, in some limits, for a general evaluation of the

author but definitely not to assess the grant in which the author of that author is member.

- b. The number of international grants which the candidate will be able to gain, as a project director, and also to finish them in good conditions. It should be considered with caution the grants gained from private foundations or national Romanian institutions.
- c. For social and human sciences it should be implemented another additional general criteria as it is the publishing of books at prestigious international publishers. Also this criteria could be expanded by including other forms of publishing, forms which are not limited to an ISI type of international classification. This is still an open debate[10].
- d. The future trajectory of those who now benefit from these EU post-doctoral fellowships programs. This could be done very easy and the statistical data would be able to show us which will be the average rate of success of these researchers. Of course, this rate of success should be measured by criteria such are those described above.

Of course, this set of indicators can be polished depending of some particular situations but, anyway, we believe that any form of assessment on these EU funded grants should not ignore any of the above indicators.

4. The Other Side of Story. Human Factor and the Advantages of EU Funded Grants for Romania Post-doctoral Researchers.

Beyond the critical position upon the way in which are being developed these EU funded post-doctoral fellowships programmes it would be hard to deny the fact that some positive aspects are still present within them. Even if, from our point of view, these positive aspects are not too many they still exists and they cannot be ignored from any objective analysis upon them. These aspects could be reduced to two fundamental dimensions.

The first one is about the financial support for the young researchers. The fact that now is possible to be paid at a decent level for your work as a young post-doctoral researcher could not been seen as a negative factor and this is beyond any doubt. Still, this dimension of financial support has its own debatable parts. The main problem here, in our view, is *the type of contracts* which were signed by post-doctoral researchers. Here it can be found two distinct types of possible problems. On the one hand, the way in which those contracts are conceived and written could be the problem itself. Many of them contain some ambiguous clauses and there are enough whit even some illegal clauses. In our opinion this is due to the lack of professionalism and inefficiency of the bureaucratic part involved in the management of these grants. The problem could become more serious when the contracts will end because there is a real possibility that some of the post-doctoral candidates to ask for their rights in the court of law. Anyway, these aspects are could be solved in a friendly manner and the positive factor of a significant financial support through these EU funded grants remains.

The second positive factor in our view regarding the development of these grants is the fact that within these programmes there is the possibility to gain experience from Western academic communities. This could be done by the mobility programmes from these grants and it is, from our point of view, one of the fundamental positive factor. The chance of personal professional development by mobility programmes ar Western universities should not be ignored by any form of evaluation about these grants. Is still remains to be seen the efficiency of these external periods but this could only be evaluated in time. This aspect requires a distinct level of

evaluation and we suggest that even in this case the evaluation about the efficiency of mobility programmes should be done in the same objective manner which we already indicated.

5. Conclusions

Our brief incursion does not need some extended conclusions. Of course, we want to go beyond these short considerations and to illustrate them in a future extended paper. Here, in the end, we would like to underscore two aspects.

Firstly, it is obvious that these EU funded grants, with all their problems within Romanian system, are representing a serious chance for anyone who gains a fellowship by them. Maybe indeed, at some point in the future, it will born that so called "critical mass" which later will be able to change something at the essential level the entire Romanian academic system [10]. We consider that at this particular moment we are still very far from that future. So, at the first question from the beginning of this study, the question about the possibility of these EU funded grants to change something within Romanian System of Higher Education in general the answer should be optimistic but with caution and patience. Secondly, beyond the lack of consistence in terms of a real scientific impact we have to be honest with ourselves and to admit the fact that these EU funded grants are very good things for those individuals which are now at the beginning of their academic careers. The funds are an important measure to avoid the process of brain draining. It remains to be seen in what proportions those researchers which will not leave Romania will be able to capitalize their own Western academic experience, gained through these EU grants, for the benefit of the Romanian System of Higher Education. So, regarding the question about the possibility of these EU funded grants to play a fundamental role in the process of integrating Romanian Scientific Research into Western academic communities, the answer should be considered in the same manner as the first one. We also need here optimism and patience.

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AN EXCEPTION TO THE RULE "INCREASING COMPETITION IMPROVES QUALITY" – THE HIGHER EDUCATION SYSTEM IN ROMANIA IN THE LAST DECADE

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Abstract

This article has in attention a problem of lowering quality of Higher Education in Romania in the last decade, due to a complex of factors. Among causes which determine this situation we are interested in: the deficient academic background of the High school graduates in the last years, the inefficient method of recruiting new members of the academic environment, the low interest of the best students to remain in Romania to practice their specialties and to succeed in the chosen careers. All these, and not only cause a low quality of Higher Education in Romania. Besides acknowledging this situation, an important element would be to introduce a minimum of conditions for the ones entering the Higher Education system, and furthermore to calibrate the system of evaluating on an objective scale, implying the minimum for the student to pass each exam. In conclusion, the quality of the education at the higher level is diminished due to some problems, which could be solved if we think of restructuring the basic feature of the system of education.

Key words: quality, performance, change.

1. Introduction

The quality of the Higher Education system in Romania is affected due to some factors which go from the superficial aspects of form, to the more deep levels of content. The general perception is composed from the perspectives offered equally from students, professors and employers, as these three categories are the main recipients of the results of the education system. According to these perceptions, the university is "an instance / institution of general academic training / preparation, to which services should have access only the best students (the nostalgia of the admission examination practice is still general among academics). The main goal to which the University should subscribe is to prepare elites ([5])".

From some perspective, this point of view is not justified anymore, as the University should prepare graduates in order to find an occupation in the line of work. We could say that Higher Education should address not only to the best or to the elites, but to everyone willing to study.

Therefore, as Petre Andrei said many decades ago: this solution which restrains the number of students is the less appropriate, as it gives / designs a dangerous perspective towards university and higher education. *It is understandable that the state, for accomplishing its needs, appeals to its institutions of culture, institutions it founds and supports. These institutions ought to respond to the requests, but we cannot conclude from this that the process of learning serve only for training of officers in the public services. Everyone should have access to culture, as many as possible. The state must not be afraid of light, but of dark. The University does not create inexorable rights to public functions, but it offers academic titles which prove the training of alumni in different knowledge areas. That is all. Hence, through its schools the state does not engage itself to appoint positions for its alumni. Of course, there is the need of an intense selection of the students, but not to prevent them to come to the university, but to recruit the best elements for the university ([6]).*

Higher education's quality decrease is caused by numerous indicators and factors, but we shall focus only on the analysis of a limited number.

2. Quality of students

One of the first indicators affecting quality of education at the higher level is the quality of the high school graduates. This connection may help us understand the problems of the University nowadays. Statistical data indicate that academics wish an environment preponderantly selective, defining a critical attitude towards the quality of their students. The tendency, which deepened in the last years, is to manifest discontent and disappointment towards the character and quality of the new students.

In 2009 the percentage of the respondents indicated that their students are well prepared in proportion of 50%, but in 2010 this percentage lowered under half of it. From this point of view, the expectations of the academics refer to a higher level of training of the graduates of high school who furthermore enter the system of Higher Education ([5]).

In 2009, 42% of the academics said that more than half of their students are 'good'. In 2010 the percentage of academics sustaining the same idea lowered to 19%. The diminution becomes obvious. Moreover, in 2010, only 4 % of the respondents considered that the good students would be above three quarters of the whole, 15 % specified that the number of the good students are between half and three quarters of them, 33 % said indicated a proportion under half of all students, and 46 % of the academics who responded indicated that the good students are fewer than quarter of all ([5]).

This critical and rather subjective perception of the academics, determined by commanding standards, differ from the general strategies of universities, which have in attention increasing and absorbing as many students as possible, mainly due to deficient methods of funding.

The issue regarding quality of education in the Higher System intensifies in the context of discussing the goal assumed by the University. This could be depicted from a dual perspective, both from students and academics point of view. The conclusion becomes rather worrisome, as studies underline that University in Romania is more self-centered than expected. It is more

preoccupied with its financial survival than with the quality of the process of teaching and learning. Students become important only in quantity, as they assure the financial incomes of the institutions (even if they take scholarships or they pay taxes).

3. Demographical indicators - 'Massification'

The low quality of students and also the lack of interest in genuine academic education, manifest in the context of 'massification' of the students' population. Only in the last years, from 1998 to 2007, the number increased three times ([4]). This process was not related to a proportional increase of financial incomes of the universities, the system being characterized by underfunding from the public budget. Also the increase was not uniform in all academic domains, some facing an inflation of students, some facing phenomena of depopulation.

Firstly, this background generated dysfunctions, noticeable in the ratio between students and academics. During the last two decades it increased from 13.8 / 1, in 1990/1991, to 25.7 / 1, in 2006/2007. In other words, in less than 20 years, the average number of students for a professor almost doubled. We should keep in mind that these numbers refer to average values, in one university, in 2010, the ratio being of 320 / 1!

Secondly, state universities developed two different types of policies. The ones facing the process of aforementioned massification chose, due to underfunding problems, to cover their costs by introducing as many places funded by taxes as possible (much over the average ratio from 2007 which was of 25.7 students to a professor.) The other ones, defined by depopulation, centered their policies towards accessing research funds. The prevailing method was the first one mentioned, to increase the number of students paying taxes.

Thirdly, when talking about depopulation of students in universities, most of them chose to mitigate admission condition, in order to cover all the places available in the University.

Finally, all dysfunctions led to a low quality of higher education, which manifested in the incapacity of graduates to find a workplace after the completion of studies. Reports for 2009 ([2]) show that one out of four young alumni does not have a job, the unemployment rate among them being of 24.5 %.

4. Dysfunctions in recruiting

Dysfunctions in the Higher Education system become even more evident when we refer to the human resources of universities. On one hand, the system of recruiting new academics is rather closed and inaccessible, mainly due to nepotism. This feature „aggravates even more the problems of the educational system, raising question marks over the objectivity of the promoting system. The numbers of family members in the same universities is still high ([3]).

On the other hand there is the system of recruiting professors from the alumni of the same university. Recruiting the academic staff from their own alumni and employing them in the same institution they graduated allows universities to reproduce deficient or problematic policies. Also it is limited the possibility of attracting diverse human capital. In the same time, the connections between the institutional environment and the larger academic and social areas are reduced, with direct influence on the innovation processes ([5]).

5. Disloyal competition – state universities versus private universities

The controversy upon educational system' quality at the higher level intensifies when it appears the dispute between the state universities and the private ones.

The law of education from 1995 ([1]) created the legislative framework for the state universities to introduce tax places in its faculties, due to the incapacity of the system to assure the financing for the efficient functioning of the higher education system. The quality of the educational process was altered from the moment when no one controlled the number of the tax places within a faculty. Also, in order to attract / draw in as many students as possible, the tax values were established at the same level with the tax from the private universities' system. Of course, the landmark should have been the amount of money the state spends per student.

In this setting the major concern of the educational system was removed from the quality component and focused on the monetary aspects and implicitly on the number of students. Hence the educational process has begun to be defined by superficial landmarks, overlooking its assumed mission to train valuable alumni for the society. Academic training decreased in quality and in content, being characterized by economical strategies improper for this area.

This situation is articulated by logic of survival in which the stress is on sharing knowledge by teaching, not on creating / producing knowledge through research activities.

6. Calibrating requirements and results

The change may come within the system, which should focus mainly on the quality component of the educational system. Thereby, leaving on a second place the financial problems, the Higher Education institutions, either state or private, shall focus on establishing minimum standards to be achieved by a student when entering the system. The present university's policy is to draw in / attract as many students as possible, not to train these students according to pertinent academic criteria.

Besides these somehow formal aspects of the higher education system, maybe the most affected dimension from the quality perspective is the process of evaluating education from inputs to outputs.

One element which could show us the evolution of educational system through an objective perspective would be the grading scale. It would be useful if we introduce in the higher education system the practice of defining the minimum of knowledge to be achieved, not the maximum. In Romania we still have the practice of indicating the highest level of an evaluation process, as if we could determine precisely the upper limit. This comes to increase the attractiveness of higher education, a feature not appropriate for the educational system.

The tendency is to eliminate fix standards which could determine erroneous delimitations. We raise the problem that subjective indicators / factors that define the evaluating system should be decreased by establishing a minimum level of knowledge. This minimum is to be focused on knowing how, better than a maximum level which would correspond to the expression knowing what ([9]). In Higher Education there is a dual interpretation of the process of gaining knowledge, as there are in contrast the 'knowing that' and the 'knowing how'. The latter is the more difficult to accommodate in the kinds of grading scale that are typical of higher education.

When making the distinction between the knowing what and knowing how we refer furthermore to the gap formed by the academic strategies which focus more on the input values than on the output ones. The input indicators refer to the knowledge the student gains by the academic training, and the output ones have to do with the manner in which the student uses their academic training in their professional career or at the workplace.

Also we suggest the grading system in Romanian Higher Education institutions to establish a necessary minimum limit, and not a maximum level to be achieved for the upper grade, which would be the mark 10. The suggestion is sustained by the fact that a grade is a one-dimensional symbol into which multidimensional phenomena have been incorporated, a true salmagundi [i.e. hotchpotch] ([8]), and we should not try to incorporate all the processes.

Some examples of measuring academic performances of students may offer a key to the problems of evaluating. In UK, the scale implies values from First class honors, Upper second class honors, Lower second class honors, Third class honors, Non-honors degree ('Pass' or 'Unclassified'); in *France* it is used a 21 point scale, running from 20 (highest) to 0, Pass grade being normally 1; in *Germany*: 1 (Excellent), 2 (Good), 3 (Satisfactory), 4 (Sufficient), 5 (Unsatisfactory), 6 (Poor); and Denmark uses a 10-step scale covering the range from 13 (highest) to 00 Minimum pass is 6. But the most interesting system in the light of the present issue is from Sweden, which does not imply a maximum percentage, but a minimum. In *engineering institutions* the scale goes from 5 (80% and above), 4 (60–79%), 3 (40–59%), to U – Underkänd (Fail) and at the *Stockholm University* from VG – Väl godkänd (Pass with distinction: 75% and above) G – Godkänd (Passed 50–74%) to U – Underkänd (Fail: below 50%) ([11]).

Contemporary students are expected to demonstrate a host of attributes, qualities and skilful practices that can be grouped under headings such as 'employability' or 'workforce development' ([7][10]). These are not easily measured, even with the resources of an assessment centre, let alone the much more limited resources available for this purpose in higher education. They may be broadly gradable, but in some instances it may be possible for an institution only to warrant that they have achieved a passing level of performance.

However, the evaluation system does not refer to a minimum yet. Taking into account the process of 'privatization' of the Higher Education system by introducing tax places in the universities, we could speak of a tacit agreement between the student paying the tax and the university providing the academic training. The first one has assured their passing grade by paying the tax, the second gives the minimum grade, irrespective of the actual knowledge.

7. Conclusions

The academic environment confronts multiple problems these days, targeting the quality indicator. On one hand the professors express their disapproval respective to the high school graduates training. On the other hand, maybe due to an initial deficiency in preparation received in the high school years, they focus mainly on transferring knowledge to the students - *knowing what* – rather than preparing them for *knowing how*. The problems persist within the system, in which we observe corruption, a disloyal competition, caused maybe by the process of 'privatization' aforementioned, when tax places were allowed in the Higher Education system. This turning point changed the evolution of education institution, as the state universities are defined by underfunding, and the private ones must support a treasonable competition. Hence, the academic system transformed in a so called 'diploma factory.' The efficiency of the academic institutions, as it was postulated by Petre Andrei decades ago, should reflect in the ability of offering titles which give evidence of the knowledge one student has achieved. The

inconsistency between academic title and quality / academic value becomes preeminent when we look in the international ranking of universities. There is not even one Romanian university which we could find in the first 500 places of these global rankings ([12][13]), and at the European level, we could find only 4 universities ([14]). Also, our Higher Education institutions are not in the top five destinations for students of any European country ([4]). Sorry that we ask ourselves about the competitiveness of the Romanian universities, although the academic staff sustains that our universities are comparable with the ones from the Western Europe (59% of the professors) ([4]).

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QUALITY ASSURANCE - MAJOR REQUIREMENT OF THE ROMANIAN HIGHER EDUCATION

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Abstract

In the study conducted, starting from the changes that took place in the social, economic, spiritual and political field of the Romanian society after 1990, we intended to approach the problem of ensuring the quality in the Romanian higher education. To demonstrate the need and desirability of this process, we analyzed the factors which required the assurance of the quality of education. Also, we discussed the acts which have set up quality assurance, the stages of its accomplishment, the institutions called upon to put it into practice. In the final part we highlighted some new aspects of the accreditation process revealed by the field visits, coupled with the requirements of the new law of education. The major conclusion we reached is that quality assurance in Romanian higher education is not optional but necessary and mandatory for the preparation of quality future graduates and a condition for the integration on the labor market of the national, European and international community. Ultimately, quality assurance in general, particularly in education, is a requirement of the new type of social development, a condition of general progress of the Romanian society.

Key words: Providing quality education, accreditation, criteria, standards, organizations providing education.

1. Introduction

The quality of Romanian education, especially of the higher education, of university management can be understood only in close connection to the changes and transformations that took place in post-revolutionary Romania. Following this event the entire Romanian society was subject to a major interest and reform, restructuring and social renewal process. This was normal and necessary as it made the transition from a closed, anti-democratic social system to a new one, open to development, based on new principles and values, quite opposed to the other.

Education itself, with all its forms, systems and sub-systems, from primary, gymnasium, professional, to its final form, superior education, could not be excluded from this process of social renewal and restructuring. It is determined by a series of factors:

- The need to depoliticize and de-ideology education. Education promoted by the communist system was strongly implanted in communist politics and ideology, being used as an effective tool in the spiritual and political indoctrination and subordination of society and its members. In a democratic society that was to be achieved, such a teaching could not fit, it contradicted its new principles and values and the expected social ideal;
- Restoring the social and political democracy also required the reform of Romanian education, which would provide a minimum of social-political knowledge that would allow citizens to know and understand the new political phenomena and to ensure their conscious, active and responsible participation to the new political life;
- The transformations suffered by the social, political, cultural life, the turn to a market economy require new specialists and specializations, which were missing in the old system;
- The emergence and expansion of private education, especially in its superior form as an alternative to the public one also imposed an ordering, selection, assessment of minimum conditions of quality of the education act, which were not respected in all situations;
- Connecting the Romanian education system to the European and international one, a process that became a necessity after January 2007, when Romania joined the European Union.

All these factors claimed the reform and restructuring of Romanian education from all points of view, but especially the assurance of its quality with a high accent on superior education. This required the creation of an institution, authority to conduct the quality assessment process, which was to be independent from the ministry or another institution and to have European recognition. Qualitative assessment of higher education needs to be multidimensional, to be achieved in stages – temporary functioning authorization and accreditation, to be based on criteria, standards, minimum indicators for performance and reference. In this context, the accreditation of programs of university studies as the final step was to take an important place in quality assurance. This was the spring that prompted us to choose this theme. To this was added the experience as expert appraiser and member of the Permanent Commission of Social and Political Sciences.

2. Methodology

In compiling this article we used as information sources the Romanian and foreign literature. To highlight some papers, articles and studies used: Antonescu L. "Managementul Universitar" Polirom, Bucharest, 2000; Atanasiu, G.M. "Managementul internațional și asigurarea calității învățământului superior", Economic Publishing House, Bucharest 2005; Brătianu.C "Ghidul calității în învățământul superior", University Publishing House, Bucharest 2004; Charles Verger, "Istoria universităților" (translation), European Institute, Iași 2009; Drăgulescu, N. "Standarde pentru evaluarea calității învățământului superior din România" UPB, Bucharest, 2003; Militaru Cezar, "Proiectarea și implementarea unui sistem de asigurare a calității învățământului superior economic" (doctoral dissertation), Bucharest 2005. Also, the content analysis of the Romanian legislation on Romanian education after 1990 was an information support for this material. We have especially taken into account Law no. 88/1993, which laid the foundation of the quality assurance process in the Romanian higher education and established the National

Council for Academic Evaluation and Accreditation (N.C.A.E.A.). An important place in the legislative information system regarding the insurance of quality of Romanian education was the Government Emergency Ordinance no. 75/2005 and the legislation adopted later on. This ordinance established the current institution the Romanian Agency for Ensuring Quality in Higher Education (R.A.E.Q.H.A.).

In our study we used the statistical comparison method, both in synchronic and diachronic field. It was meant to highlight the evolution of standards, criteria and indicators for assessing the old authority N.C.A.E.A. to the present Romanian Agency for Ensuring Quality in Higher Education (R.A.E.Q.H.A.). Our experience as expert appraiser and member of the permanent commission R.A.E.Q.H.A. of Social and Political Sciences, was a major support in this endeavor.

3. Discussion

3.1. One of the issues debated in academic circles is the one of the quality of university education. The quality of education act interests all participants: students, parents, government, society, who are its beneficiaries, but also faculty and academic staff, i.e. those who create, provide and ensure the quality of education.

Introduced in the sixth decade of the 20th century in the U.S., the concept of insuring quality has also expanded in education. The term "quality" refers to "performances that an organization providing services can achieve and arises from the contribution of all activities directly or indirectly related to the conception and development of the service" [1]. The importance of the quality of the education process determined the European Commission to initiate and fund a pilot project between 1994-1995 involving 47 higher education institutions in 17 Member States, aiming at experimenting and developing a unitary assessment model for higher education. Based upon the experience gained from the application of that pilot project in 1998, the European Council issued a recommendation to Member States to promote comparable quality assurance systems within national higher education systems in order to facilitate the exchanges and recognition of studies among Member States. In its turn, the Bologna Declaration has imposed a new framework for quality assurance in higher education. Ministers of Education within the European Higher Education Area have been engaged in meetings in Prague 2001, Berlin 2003, Bergen 2005, to support the implementation of quality assurance system at institutional, national and European level. In countries like England, Germany, France, Denmark, Norway, Sweden, they have created quality assurance systems for higher education. In these societies, the application of quality assurance at national and European level is already a reality. Process with European valences, ensuring the quality concerned the Romanian authorities and institutions in the field, in principle the ministry and its university centers.

A first step regarding the quality assurance in the Romanian higher education and the accreditation of higher education institutions, as well as the recognition of diplomas, was the issuance of Law no. 88/1993.

According to Article 3 the process of accreditation of the institutions of higher education comprises two phases: a) the interim operating authorization which grants the right to organize the admission and conduct the education process; b) the accreditation which grants the right to organize the exam for the Bachelor Degree, diploma, graduation, or as the case may be the issuing of diplomas recognized by the Ministry of National Education [2].

For the first time a legislative act made reference of ensuring the quality of education process

that would be done periodically and also took into consideration the evaluation of academic specializations and institutional structures.

According to Article 4 of the same law, "For the assessment and accreditation of higher education institutions in order to ensure the quality of the education process, a National Council for Academic Evaluation and Accreditation is established under parliamentary control. The Council subordinates assessment commissions over domains, profiles, and/or specializations." [3].

Article 18 defined, based on the situation and reality of the Romanian higher education, academic assessment and accreditation criteria and standards. In order to obtain the accreditation of the institution, every faculty, college and specialization had to have at least 50% full-time professors or reserved positions of the total positions, full professors within higher education according to the law and of these 20% would be professors and assistant professors, thus under current standards. Also under the current standards for accreditation were other indicators such as using at least 25%, as against to 30% as required by present standards, from the revenues for the infrastructure, or 50% of the area of education – at present 70% – to be owned by the institution subject to accreditation.

Article 29 of Law 88/1993 clearly stipulate that "subsidiary faculty institutions, colleges and specializations are considered separate units. They are subject to separate academic evaluation and accreditation procedure stipulated in this Law" [4], was interpreted according to the particular interests of some private educational institutions, meaning that if there is a university or a temporary licensed or accredited specialization at central level, one can open legally running branches in other locations, without the obligation of assessment in view of approval or accreditation, which gave birth to live disputes among the Ministry, the R.A.H.E.Q.A and those concerned.

Romania's accession to the E.U., the integration of its higher education in the European education space, but also taking into account the need to ensure the quality of education by establishing a legislative framework and the fact that Romania is among the few European countries which lacked a regulated mechanism of ensuring the quality of education, determined the issuance of emergency ordinance no. 72/2005, later on completed by other normative acts. The new law brings new elements, such as defining the notion of providing education that is "an educational institution, an NGO or a company, which according its statute carries out legally authorized activities or programs of initial or continuous training" [5]. The same law subsequently became Law no. 87/2006 defined in Article 3 the quality of education as "all the characteristics of a study program and its provider, through which beneficiaries' expectations and quality standards are satisfied" [6].

Being part of ensuring the quality of the education act, the accreditation of organizations providing education and of the programs of study is defined as "a means of ensuring quality through which one certifies compliance with pre-determined standards for establishment and operation of organizations providing education and their curricula" [7]. Becoming a permanent priority for any institution, organization or school unit, for the policies promoted by the Ministry of Education, the legislative act established a national independent institution with legal personality and its own budget of income and expenses – the Romanian Agency for Ensuring Quality in Higher Education (R.A.E.Q.H.A). The law set up the methodology of ensuring quality, the criteria, standards and reference standards, performance indicators, qualifications.

At Article 9, the criterion is defined as "a fundamental aspect of the organization and functioning

of an organization providing education", the standard as "describing the requirements formulated in terms of rules and outcomes that define the minimum level required to achieve an education activity", the reference standard defines the optimal level requirements to achieve an educational activity, the performance indicator "is a tool for measuring the degree of realization of an activity by an organization providing education, by reference to standards, and standards of reference, respectively" and classification which is "the result of learning obtained at the completion of a vocational or university program of study" [8]. Ensuring the quality of education was to be achieved both internally, by each organization that was providing education for which commissions for evaluation and accreditation would be established, and externally, that was to be done for higher education by the R.A.E.Q.H.A.

3.2. Accreditation – major process of quality of the education act

This process is a consequence of the transformations that took place in the Romanian society after 1990. Accreditation is a multifunctional process that has been imposed in education. In this area it was imposed by the emergence of private universities. Neither in the interwar period, nor in the communist era, did the Romanian society have a private higher education, and therefore an accreditation process was not required, it would be characteristic only for the post-revolutionary period.

The first private university that emerged in Romania had the legal status of a limited liability company, which put into question the non-profit character of the educational process and its mission. The increase in the number of private universities, but also the emergence of new faculties and specializations in public education raised the issue of the quality of the education act provided by them. So it came to the issue of Law no. 88/1993 and creation of N.C.A.E.A. and then the issue of Government ordinance no. 75/2005 and the appearance of the R.A.E.Q.H.A., thus of the legislation and institutions that were designed to provide quality in higher education.

Accreditation in education is a final process, which aims at measuring based on criteria, standards and indicators the quality of education achieved by the organization providing education in general, higher education in particular. It leads to the modification of the status of specialization, faculty or institution, in this case the university. The accreditation certified the achievement of criteria, standards, indicators, at least at the minimum level of quality according to which the education provider gains national and international recognition. The accredited specialization gains the right to organize the diploma or license examination in their own faculty, with its own teaching staff and the right to establish a masters program. In the case of the university's institutional accreditation, it is fully recognized in the national and European education system and may issue graduation diplomas.

Accreditation is a multi-criteria process that takes into account all aspects of education: institutional capacity, the content of the educational process, students, the material base, scientific research, financial management. Its objective is to ensure the quality of the education act on the basis of European and national standards for academic programs and structures. Increasing the value of standards and criteria from the times of the N.C.A.E.A. to the present ones imposed by the R.A.E.Q.H.A that we outlined above is a means and proof of the importance given to the educational quality process, of its growth, of the exigency, but also of the change in the reality of the Romanian higher education. The experience gained as appraisers and members of the Social and Political Sciences Commission has created us the opportunity to highlight some of the issues to be pursued and emphasized in evaluations for accreditation in the field:

- Check how the standards, criteria, quality indicators have been met, from the moment the temporary authorization was obtained until the accreditation process, as well as the allocated number of students. In the field visits we found that in some situations the allocated number of students was not respected, a phenomenon common in private universities;
- Check workman's passports and teaching staff contracts by certifying their tenure in that institution. Under the new Law of education no. 1/2011, special attention should be given to personnel who turned 65 years old and who can no longer be considered as full-time holder of the position, but can be counted as an associate professor in the limit of 20%. This is common in the verification of professors and readers in private universities, in achieving the minimum criterion of 25% of staff.
- The requirement that a professor cannot have more than two norms: the basic work norm and paid per hour regardless of the institution also constitutes an important requirement because by neglecting it one can adversely affect the quality of education.
- The presence of a young or middle-aged staff to ensure operation for a minimum cycle of the evaluated program shows the prospect and viability of that program.
- Special attention should be paid to analytical programs – important component of the package of the educational process. One must follow whether all subjects have syllabi, if they respond by thematic content to the course, to the mission of the program. Consideration should be given to the bibliography included in them. Requirements of a quality education today require that at least one reference in the bibliography offered to students is from Romanian and foreign literature and the bibliography should be updated. Particularly important is the fact that the titles given are found in the library of the institution. The field findings show that these requirements are not always and in all cases met.
- The curriculum – important document of the education process – must be carefully assessed because through it one realizes the goals and missions of the program evaluated. One must analyze the manner in which the disciplines indicated and proposed by the R.A.E.Q.H.A are found, if it has a logical structure, the relation between course and seminar, the form of evaluation. The structuring of disciplines is made on the two branches: fundamental, complementary, specialty, and mandatory and optional. Special attention must be granted to credits, whether the program has 180 credits, whether they are allocated 60 for each year of study. The creation of practical skills of future specialists constitutes an objective of each program of study that is why one has to follow the introduction of practice within the curriculum, the year in which it is accomplished, the number of hours allocated, the existence of conventions and programs of practice, and especially of the analytical programs proper to this activity.
- The existence of a material base with modern equipment capable of ensuring a quality education, classrooms, workshops, laboratories, library with reading rooms and social services, also constitutes an object to follow. In particular, the requirement of holding at least 70% from the property by the institution evaluated is an important criterion.
- The level of taxes is important for the quality of the program assessed. A small tuition fee, under the average costs can affect the quality of education, a fact met with private universities, but also with some public ones.

4. Conclusions

Following the theoretical approach one can draw some conclusions, which are able to give us a picture of the quality of Romanian higher education.

- Ensuring and continuous improving the quality in higher education should be an ongoing concern of both the government authorities, in this case the Ministry of Education, and education providers: universities, faculties, specialties, irrespective of their public or private.
- It requires the existence of an institution, of independent authorities in all respects, with international recognition, to coordinate, conduct the evaluation and institutional accreditation of university programs of study. In this sense, we can say that the Romanian higher education is on the right path. **R.A.E.Q.H.A.'s** existence is able to provide monitoring, evaluation and accreditation for institutions and curricula.
- Accreditation shall be the means, the main tool for ensuring minimum quality of the education process, but also to boost performance. It must be multi-dimensional and multi-criteria, to be based on national, European and international criteria, standards, performance indicators.
- There should be no discrimination as regards the institutional evaluation and accreditation of study programs, education providers, whether public or private, and any concessions made by either of them, because in the near or distant perspective they might adversely affect quality education, the training of beneficiaries, the very progress of the Romanian society.
- Maintaining a high standard of quality education, concern for continuous improvement, should be an ongoing concern of the actors in the Romanian higher education system, because it is a condition for integration at the national and European space of young graduates. Competition today requires well-trained, high quality youth who can prove that they have competences and practical skills as required by the current social development.
- A special attention must be granted to the indicator integration to the labor market of graduates within their graduated field during a 18 month-period. Such an indicator is able to highlight the quality of education, its reception by the labor market, its efficiency and utility. The rate of professional insertion presented by this indicator within public universities is of almost 20%, which raises great doubts regarding the quality and utility of the Romanian higher education. The value of this indicator must differentiate the universities and programs of study, to stand at the basis of their financing.

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BEYOND THE OPEN METHOD OF COORDINATION: THE CONTRIBUTION OF HIGHER EDUCATION TO THE EUROPE 2020 STRATEGY

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Abstract

The purpose of this paper is to demonstrate that the governance of the actions and initiatives to be undertaken within the Europe 2020 Strategy in the field of Higher Education implies more than an open method of coordination EU-governance model. The open method of coordination appeared in the context of the Lisbon Strategy as a way of helping EU Member States achieve the Lisbon goals through developing joint actions and initiatives. It has been primarily applied to the employment and economic policies, but it has been extended to other policies – e.g. education – as well. Due to the failure of the Lisbon Strategy in reaching its targets, the open method of coordination is believed to be insufficient for reaching the goals of the new Europe 2020 Strategy. The author has chosen to assess the contribution of the Higher Education domain to the achieving of the Europe 2020 education goals through analyzing the governance mode of the actions which have to be undertaken in this field in the next 10 years. The normative basis for this analysis is the Treaty of Lisbon, where it is stated that education is a policy field where the EU holds only the competence to support, coordinate and complement the actions undertaken by the Member States.

Key words: open method of coordination, higher education, Europe 2020.

1. Introduction

Education, in general, and higher education, in particular, are important areas of concern for national states because, besides training the state's human resources and enhancing its innovation and development potential, education has the capacity to create, shape and transmit the so called 'national identity'. Therefore it is understandable why national states are reluctant in transferring their competences in this field to a supranational authority. At the same time, since knowledge is more and more perceived as a global public good, there is an increasing demand for cooperation among intellectuals and scientists coming from different countries. The same tension, between a purely national approach on education policy and a globalised/regionalised one, is also encountered within the EU. Thus, over time, the evolution of the higher education policy in Europe oscillated between intergovernmental cooperation and supranational steering [1]. In the last decade, cooperation on EU level in the field of education and higher education has considerably increased thanks to initiatives such as the Bologna Process, the Lisbon Strategy and, more recently, the Europe 2020 Strategy. The governance

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arrangements that permitted this sort of collaboration between EU Member States are based on the open method of coordination.

Since higher education is a key feature of the Europe 2020 Strategy, it is important to look at its contribution to the Strategy through analysing the governance mode of the actions which have to be undertaken in this field in the next 10 years. Therefore, the purpose of this paper is to demonstrate that the governance of the actions and initiatives to be undertaken within the Europe 2020 Strategy in the field of higher education implies more than the open method of coordination which has been applied to the education policy before the launch of this strategy.

The *theoretical framework* of this paper consists of a short review of the relevant literature on the subject of the open method of coordination in order to identify the main characteristics of this method. The *analysis* is structured in two parts: the first part presents the normative basis of the education policy within the EU, namely the Treaty of Lisbon; the second part, first talks about higher education in the EU in general and afterwards, it analysis the governance mode of the initiatives in the field of higher education after the Lisbon Strategy and within the Europe 2020 Strategy.

1.1. Theoretical framework

The emergence of the open method or coordination (OMC) is directly connected to the EU policy-makers' attempt to tackle the issue of competitiveness. The OMC has been designed as a mean to achieve competitiveness, through finding a long-term balance between economic performance, solidarity, social and environmental protection. It implies a learning process for EU Member States on how to address current economic and societal challenges "in a co-ordinate way while also respecting national diversity" [2].

Thus, the OMC is perceived to be a new mode of governance within the European Union, creating a middle path between the community and the inter-governmental method. It has been formally established in the Lisbon Spring European Council in 2000, in order to help the Lisbon Strategy in reaching its goal of transforming the EU in "*the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion*" [3]. According to the European Council's Presidency Conclusions [4], this new method of coordinating Member States' actions towards achieving EU goals "*involves:*

- *fixing guidelines for the Union combined with specific timetables for achieving the goals which they set in the short, medium and long terms;*
- *establishing, where appropriate, quantitative and qualitative indicators and benchmarks against the best in the world and tailored to the needs of different Member States and sectors as a means of comparing best practice;*
- *translating these European guidelines into national and regional policies by setting specific targets and adopting measures, taking into account national and regional differences;*
- *periodic monitoring, evaluation and peer review organised as mutual learning processes."*

Summarising, Radaelli [5] identified the following main instruments of the OMC:

- Guidelines;
- Benchmarking and sharing of best practices;
- Multi-lateral surveillance;
- Indicators;
- Iterative process;

- Implementation through domestic policy and legislation (this means that no EU legislation is needed).

In order to make the OMC work, a decentralised, participatory and policy-network oriented governance approach ought to be applied, thorough which EU institutions, national, regional and local authorities, the social partners and the civil society are actively involved in policy-making [6]. Responsible for the political impulse, through giving guidance and monitoring the implementation of OMC in its specific fields of action, is the European Council [7], which, within its annual Spring meetings, is assigned to define general orientations for different policy fields and to ensure their implementation at EU and national level [8]. The European Commission plays a key role in coordinating the OMC by presenting proposals for EU guidelines and indicators, facilitating the exchange of best practices and supporting the monitoring and peer review process [9],[10]. The European Parliament is also involved in the delivering of the OMC, regularly receiving reports on the progress towards the common goals [11].

The OMC was designed to make progress possible in politically sensitive areas like employment and social policy, by “avoiding” politicisation [12]. But as the results of OMC’s practice got better, the politicisation within these fields couldn’t be further ignored. Politicisation appeared also due to the instruments used within the OMC: agreeing on a set of common indicators and good practices, acknowledging benchmarks and writing guidelines are all political processes which have an impact on the development model of each Member State [13]. The competition between the Member States is as ferocious under the OMC as it is under the traditional community method [14]. Disputes occur due to the EU leaders’ different interpretations of the EU central goals and the ways to achieve them [15] and of the different beliefs on how the European model of economic and social development should look like [16] – a good example for this is the dispute within the European Council in 2000-2001, when three prime ministers (Blair, Aznar and Berlusconi) wanted to induce to other EU leaders their liberal view on labour market reforms, using the OMC. Through its unique way of functioning, the OMC might be considered a first step towards deeper policy coordination between EU Member States by focusing on common interests and common agreed goals, which would eventually lead to a better integration in these policy fields.

There have been a lot of analysis and debates on the OMC’s implication on EU integration and the main concerns were about assessing its legitimacy as a policy instrument and its effectiveness in enhancing the learning process between EU Member States [17]. Regarding legitimacy, studies [18], [19] have shown that the OMC is more democratic in theory than it is in practice, since the participation of stakeholders, the transparency and the visibility in domestic media and national parliaments of the method are quite limited. When it comes to effectiveness, it is said that OMC enhances different levels of coordination depending on the policy area (the employment policy is an example of effective coordination); an important result of the OMC is the cognitive, ideational convergence [20] that has been achieved in some policy areas. The OMC shouldn’t be analysed in an ‘autistic’ manner; in order to better assess OMC’s performance, it ought to be put in context with other modes of governance [21]. Thus, a much clearer image should be provided in regard to the situations in which the OMC ought to be used and in which the other, new or old, modes of EU governance perform better.

It has been often argued [22][23] that the OMC wasn’t “born” in 2000 at the Lisbon European Council because most of the policies, in which it has been employed, have been under such coordination before the Lisbon Strategy was launched (e.g. the European Employment Strategy, launched in 1997, which was a job-creation strategy based on soft-law instruments such as peer review and benchmarking). However, the Lisbon Strategy was the first to introduce coordination

in areas such as education or business (especially SMEs). Thus, the Lisbon European Council in 2000 is perceived more as the moment when the OMC was formalized and gained a political weight in order to legitimise the existing practices in the field of employment and economic policies and to introduce this new governance approach in other policy domains. Based on the idea that the OMC leads to different outcomes depending on specific policy areas, Radaelli [24] identified three policy categories in which the OMC acts:

- policies in which there is a deliberate attempt to use the OMC as a working method: Broad Economic Guidelines, European Employment Strategy, Social Inclusion and Pensions.
- policies in which EU policy-makers chose to use OMC, but little of its instruments and practices are actually used: Innovation, Education, Information society, Environmental policy, Health care.
- 'OMC in disguise' policies – where EU policy-makers have used OMC instruments and practices, but without any deliberative intention to use the OMC: direct taxation.

Although the OMC is still a 'young' mode of governing EU policies and its results haven't yet been fully materialised, there is a strong belief that the OMC has the necessary instruments to become an effective third way of governance that relies on joint responsibility rather on the transfer of competencies to a supranational level [25].

2. Methodology

The *methodology* used within this paper consists mainly in the study and analysis of documents. For the theoretical background, a series of academic articles and books were selected, which were considered to be relevant for the describing and analysis of the open method of coordination. Official documents of the EU institutions were also consulted, i.e. the Treaty of Lisbon and other documents that establish the framework for the implementation of higher education related issues within the Europe 2020 Strategy and its "Youth on the move" flagship initiative.

3. Analysis

3.1. Education within the Treaty of Lisbon

Education is a policy area where the European level has little competences and which traditionally stays within the competence of national states. According to Art.6 of the Treaty on the Functioning of the European Union within the Lisbon Treaty, education is a policy field where the Union holds the competence to support, coordinate and complement the actions undertaken by the Member States. Following these provisions, Art. 165 states that the EU should encourage the cooperation between Members States in developing a quality educational system and it should only support them in their actions. The limited competences of the EU when it comes to education are shown also by the fact that the European Parliament together with the Council, using an ordinary legislative procedure, can only adopt incentive measures in this field, excluding any harmonisation of the laws and regulations of the Member States (TFEU art.165.4). The Treaty encourages both the EU and the Member States to contribute to enhancing the cooperation with third countries and competent international organisations in the field of education.

3.2. Higher Education

Having a high-skilled labour force and world-known scientists and researchers became an absolute necessity for increasing EU's external competitiveness. Therefore, the people of

Europe need to have access to a higher education system of high quality and this can be achieved through encouraging the cooperation between EU Member States on this issue.

Piattoni [26] identified four aspects of the higher education policy in the EU, which characterize different moments of its evolution:

- the European attempt to create a “high quality” European University (if not a high quality European university system);
- mutual recognition of (vocational training) diplomas and the free movement of skilled workers across Europe;
- Community policies favoring the international mobility of scholars and students (Erasmus and Socrates programs)
- processes such as the Bologna Process and the OMC (Open Method of Coordination) education, aimed at harmonizing higher education systems across and outside the EU.

The most recent attempt to coordinate Member States’ actions in the field of higher education is the Bologna Process (started in 1999), which aims to harmonize the European higher education curricula.

3.2.1. Higher Education after the Lisbon Strategy

Within the Lisbon Strategy’s struggle to attain the goal of EU becoming the most competitive knowledge based society in the world, education had to be taken very seriously into account. In 2000, the Bologna Process coupled with the Strategy and thus borrowed its governance mode, namely the OMC. As a result, the Bologna Process adopted all the main procedures of the OMC [27]:

- periodic meetings for the evaluation of national systems of higher education;
- structured comparisons among these systems based on selected indicators;
- creation of national task-forces to devise ways in which systems can be reformed and best practices introduced;
- submission of periodic progress reports attesting to progress made.

Thus, the harmonisation of higher education curricula within the EU should be achieved through setting periodic deadlines and intermediary goals, but, at the same time, allowing each Member State to progress at its own speed and following its own route/path.

Three common Lisbon objectives in the field of education and training underlie any OMC process in education [28]:

- improving the quality and effectiveness of European education;
- easing access to education throughout Europe;
- opening up national education and training systems to the wider world.

It is said that the full “Lisabonization of the Bologna” [29] has been achieved through the inclusion of the OMC education and of the Bologna and Copenhagen processes (the latter marking the harmonization of vocational training) in the “Education and Training 2010” initiative and through the subordination of education to the Lifelong Learning Programme.

Although the cooperation in the higher education field started as an intergovernmental process, the European Commission gradually increased its support in this policy field due to its informal agenda setting power, manifested through the shaping of the OMC instruments: common objectives, guidelines, indicators and benchmarks [30]. It should be noted that the Commission’s agenda setting power has its limits because the last word in agreeing on common initiatives on

education, in general, and higher education, in particular, still belongs to the Member States, which can easily reject the Commission's proposals. Although, due to the gradual formation of the EU-wide "transnational academic community" [31], there should be an increase in participation of the transnational society in the policy-making process within the higher education domain, such stakeholder-participation is quite poor in practice [32][33]. An explanation for this could be the fact that, in comparison with the European Employment Strategy, the consultation of social partners and other stakeholders isn't mandatory in the field of education.

3.2.2. Higher Education in the Europe 2020 Strategy

Higher education continues to play an important role in the development of the EU society, since one of the five Europe 2020 Strategy goals directly targets the higher education system: by 2020, the rate of 30-34 years old people completing third level education should increase to at least 40% [34]. The integrated guideline no. 9 "Improving the performance of education and training systems at all levels and increasing participation in tertiary education" [35] comes to complement the policy framework in this field. The presence of a Europe 2020 target on higher education and the corresponding integrated guideline are the first clues on the use of the OMC. The Europe 2020 target (at least 40% of 30-34 year olds completing third level education) and the integrated guideline on education were adopted in the European Council meetings of March and June 2010, based on the Commission's proposal and after a preliminary debate and resolution given by the European Parliament. This EU headline target on higher education had to be transposed into a national target by each of the 27 EU Member States within their National Reform Programme, which had to be submitted to the Commission by the end of April 2011, together with the Stability/Convergence Programme.

The importance of higher education for the Europe 2020 Strategy is highlighted also through the fact that one of the "Youth on the Move" Flagship Initiative's aims is to make European higher education more attractive and open to the rest of the world [36]. For achieving this, the Commission [37] sets out some lines of actions which have to be undertaken. First, it reiterates the necessity of proper financing for universities (a total yearly investment of 2% of GDP – both public and private funding) by suggesting a diversification of their funding sources and a better financial management. Second, it encourages the Member States to make efforts to modernise higher education through focusing on implementing the priorities of the Bologna Process and supporting a new agenda for cooperation and reform at EU level. Third, the Commission engages to monitor and set out priorities for quality assurance in higher education by supporting cooperation among stakeholders and institutions. Forth, it intends to present, in 2011, the results of a feasibility study to develop an alternative multi-dimensional global university ranking system, which will take into account the diversity of higher education institutions. Last, but not least, the Commission expresses its intention to release a communication, which will set out the new reinforced agenda for higher education in the EU, focusing on increasing the employability of the graduates, the collaboration between academia and industry, the mobility of students, teachers and researchers, the transparency and quality of study and research information.

The governance procedure used for implementing the Europe 2020 Strategy is described in detail by the European Commission [38] and it is mostly based on the model of OMC. Responsible for the surveillance of the whole process of implementing the Europe 2020 Strategy is the European Council; in its annual Spring meetings, the European Council will provide horizontal policy guidance for the EU as a whole (and maybe also for groups of countries). Thus, in the case of the higher education policy, the European Council will take notice of the progress towards the headline targets (both the EU target and the national targets) and under the flagship initiative, and then provide policy orientations. The main input for the Spring meeting of the

European Council will be the Commission's Annual Growth Survey (presented each January), which will include, alongside assessments and recommendations on macro-economic and fiscal issues, a comprehensive review of the thematic developments in the EU – the progress towards the EU and national headline targets and the stage of evolution of the flagship initiatives. In the case of higher education, it will show the progress towards the EU target of having over 40% 30-34 years old graduates of third level education and towards the national targets set by each Member State; it will also assess to what extent the provisions on higher education have been achieved within the "Youth on the Move" flagship initiative. The Annual Growth Survey will include the priorities of action to be undertaken in each policy field of the structural reform. Another important input for the European Council's meeting is the one provided by the sectoral Councils. Throughout the year, the Council specific formations will examine the progress towards the headline targets (both EU and national) and the flagship initiatives, through providing an appropriate monitoring and peer review. Thus, the Education Council will be responsible for monitoring the progress towards the higher education target of the Europe 2020 Strategy and the actions of the "Youth on the Move" flagship initiative.

In order to ensure an effective surveillance and peer review of the progress in implementing the Europe 2020 Strategy, a comprehensive and effective reporting is needed. Member States, which are directly responsible for policy actions within the Europe 2020 Strategy, will report on their progress, each April, through submitting Stability/Convergence Programmes and National Reform Programmes, which should contain all the necessary elements for country specific and thematic surveillance. In its communication, the Commission [39] draws attention to the importance of involving regional/local authorities, social partners and other stakeholders in the preparation of the two documents, so that the implementation of the reforms included in these documents will benefit from the support and help of all stakeholders. Based on the submitted documents, each June, the Commission will present, for each Member State, country-specific recommendations on fiscal policies and macro-economic issues, but also on thematic issues (including issues related to higher education). The novelty of the governance method consists in the Commission's ability to issue policy warnings and even make sanctions if the recommendations aren't followed up within the provided time-frame. Therefore the Commission is entitled to take drastic measures in case of excessive imbalances procedures [40].

For lending a hand to the achieving of Europe 2020's target on higher education and for supporting the "Youth on the Move" actions related to higher education, the Council of the EU [41] sets a few lines for action, too. It indicates that, for an attractive and effective higher education system, an increase in investment efficiency, together with a modernization of the curricula and a better governance mode is required. Innovation ought to become a central concern for each higher education institution and for the system as a whole. The financing scheme of universities needs to be reformed, through combining a more effective use of current funding with a diversification of funding sources. Better links with the research and the business community should be established and tertiary education institutions should open up to non-traditional learners, by providing adequate incentives, support and guidance.

The Council of the EU [42] sets out the main responsibilities of the Member States and of the Commission in the implementation of the education targets of the Europe 2020 Strategy. The Member States are responsible for assuming specific and action-oriented National Reform Programmes, for taking policy actions according to the national targets, for enhancing cooperation with relevant stakeholders at national level when designing and reporting on the implementation of national employment policies in light of the Integrated Guidelines no. 8 and 9 (the latter guideline targets the increasing of participation in tertiary education), for promoting cooperation between higher education institutions, research centres and business. The

Commission has to strengthen the link between the implementation of the “Education and Training 2020” strategic framework, of the Europe 2020 targets on education and of the relevant “Youth on the Move” actions. It should also encourage the integration of the Europe 2020 targets within the “ET 2020” joint progress reports, acknowledging the fact that those reports provide a deeper insight of Member States’ national education policies. The Commission should provide an analysis of the progress towards the EU headline targets and the “ET 2020” benchmarks for an exchange of good practices within the Education Council. The Commission is made responsible for ensuring the operational coordination of the measures taken under the education OMC and also for assuring the participation of the relevant stakeholders. Last, but not least, it is responsible for providing an analysis, meant to enhance the exchange of good practices, on the topic of linking educational investment with the policy approaches for achieving the Europe 2020 goal on education. Both the Member States and the Commission must work towards strengthening horizontal cooperation and foster the exchange of good practices among Member States on the implementation of National Reform Programmes. Both are asked to contribute to the improvement of the OMC by promoting opportunities for policy learning in the areas of the Europe 2020 Strategy (higher education being one of them), by making more effective use of the outcomes of European cooperation, by increasing transparency of the method and by supporting a more focused collaboration between Member States.

4. Conclusions

The Europe 2020 Strategy has corrected some of the weaknesses of the Lisbon Strategy (for more on the weaknesses of the Lisbon Strategy, see [43]); it now has only 5 - more specific - EU headline goals, the national targets are set by each Member State and an external dimension has been added to the strategy. Although the major problem of the Lisbon Strategy’s failure was considered to be the poor performance of the OMC, the new European strategy rests on the same governance method, but this time it has gone through some changes. The OMC is generally used within policy fields of high strategic importance, which traditionally are of national-state competency and where the EU has little influence - like the case of the higher education policy. Within this paper, a short review of the literature on the OMC has been made, in order to identify the main features of the method. This served as a fundament for the analysis of the OMC related to higher education issues after the Lisbon Strategy and within the Europe 2020 Strategy. Through comparing the OMC in the field of higher education for the two strategies, some important differences within the governance model have been detected. These changes in the governance framework of the strategy are meant to improve the performance of the OMC and, thus, help the Europe 2020 Strategy in achieving its goals.

Unlike the Lisbon Strategy, the new Europe 2020 Strategy has a much better fixed target on higher education (by 2020, the rate of 30-34 years old people completing third level education should increase to at least 40%), which is deeply correlated with the other targets. As a proof of a greater ‘Europeanization’ of the higher education policy, comes the fact that most of the suggestions of the European Commission regarding the targets, actions and integrated guidelines of the Europe 2020 were acknowledged by the European Council in its meetings, thus consolidating the Commission’s role of agenda setter. The increasing role of the European Parliament in the governance of the strategy (having debates and giving resolutions on the main elements of the strategy) also indicates the ‘Europeanization’ of the policies which traditionally and formally lie in the competences of the Member States. Through repeatedly emphasising the need to involve regional/local authorities, social partners and other stakeholders in writing the National Reform Programmes and implementing the adequate reforms in each policy field – in this case in the higher education domain – the Commission is trying to increase the legitimacy of the OMC. The new approach on reporting, based on the simultaneous submission of National

Reform Programmes and Stability/Convergence Programmes, adds more consistency to the OMC because both documents are interpreted within the new EU governance element called the “European Semester”. Through aligning these two documents, a stronger ex-ante dimension of coordination and surveillance (thus, of the OMC) is introduced, allowing the EU to learn from national developments and the Member States to incorporate the EU perspective and guidance into their national policies. Last, but not least, the Europe 2020 Strategy brings along a complex multilateral surveillance system, which consists of: a monitoring on overall progress of the strategy coming from the European Council, a comprehensive assessment on the targets and flagship initiatives made by the Commission through the Annual Growth Survey and a monitoring and peer review of the reforms made in each policy area of the strategy provided by the sectoral Councils.

Based on the brief analysis of the OMC in the field of higher education before the year 2010 and after the launch of the Europe 2020 Strategy, one can conclude that the OMC which governs the Europe 2020 Strategy is more coherent than the OMC used within the Lisbon Strategy. Only time will decide whether the new OMC is more effective than the old OMC, not just in theory, but also in practice.

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INSTITUTIONALIZATION OF STRATEGIC RESPONSIVENESS IN HIGHER EDUCATION

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Abstract

The aims of this paper are to design a model for, of a model for institutionalizing strategic responsiveness at the Romanian higher education system. The starting point of this research is the current state of the Romanian education system which is proving lack...and above too much formalism that demonstrates lack of strategic vision, lack of communication with the external environment and too much formalism, seriously vulnerable to challenge and increasingly turbulent external environment. The strategic responsiveness model proposed is likely to reduce these vulnerabilities, and even provides a “vision of the future”¹ where the higher education sector plays a visible and prominent role in the discourse of society and in same time in and in forging its future technological possibilities and social transformation. In order to make this model to be viable it has to. The condition of this model to be viable is to be framed in a strategic responsiveness space where are developed new types of relationship between universities and their stakeholders and which encourage and facilitates their efforts to engage one another in on-going debate and cooperation.

Key words: strategic responsiveness, dynamic capabilities, strategic responsiveness space, dual management system.

1. The concept of strategic responsiveness in higher education

From the systemic perspective, responsiveness can be defined as the outcome which can be achieved when institutions and institutional relationships are designed in such way that are cognizant and respond appropriately to the legitimate expectations of stakeholders.

The responsiveness approach is not a reaction; it is a planned state of preparedness on which HEIs should aspire. This preparedness is both tactical and strategic, often dealing with issues about which students- customers may not yet be aware.

Responsiveness in higher education refers to the myriad expectations-some tangible other intangible –that are applied to university by stakeholders. Some students, for example, demand a strong institutional commitment to quality teaching. In addition, they want a safe and enjoyable campus environment and the prospect for gainful employment to other opportunities upon graduation. Some students want the institution to be respectful and responsive to broader social and political issues. Politicians and oversight agencies want assurances that educational institutions are contributing to some definition of public good (e.g. economic development) as

¹ a concept devoid of academic rigor and, therefore, difficult to define, but which emphasizes, on the one hand, the force of a clear strategic intent and, on the other hand, the irreplaceable role in achieving this vision of higher education system to meet the legitimate expectations of stakeholders and society, in general

well as complying with law and procedural regulations. Alumni want assurance that the reputation of their alma mater is being advanced so that the value of their degree continues to grow. Special interest groups continuously demand institutional policies and practices that are responsive to their needs. (Kevin Kearns, 1998).

From I. Ansoff and E. J. McDonnell's (1990, p.342) perspective, responsiveness refers to a certain type of organization behavior. From the beginning of the 90's, resource related strategies were elaborated through the concept of distinct capability or core competence. Both core competencies and distinct capability can be thought as advanced-creating resources based on the synergistic combination of knowledge and other resources which create barriers to both imitation and mobility. Igor Ansoff and E. McDonnell (1990, p.270) consider that operational responsiveness can be described by three capability attributes: climate (will to respond); competence (ability to responds) and capacity (volume of response)². Each of these three is determined on one hand by managers and on the other by the organization through which they work. These considerations lead to the following equation:

$$\text{Operational Responsiveness} = f(\text{capabilities}) \quad (1)$$

In our point of view, strategic responsiveness expresses a differentiation and adaptation driven by demand from environment, and from this perspective we are able to examine a variety of strategic organization behaviors for example, whether a higher education institution anticipates or reacts to discontinuities in the environment.

Dynamic capabilities refer to the particular capacity of higher education institution possess to shape, reshape, configure, and reconfigure assets so as to respond to changing technologies and markets. Dynamic capabilities relate to the institution's ability to sense size and adapt, in order to generate and exploit internal and external institution specific competences and address the institution's changing environment³. The shift to capabilities - based planning strategy reflects and recognizes that the challenges that challenges from the environment are becoming increasingly rapid and more diverse. A capabilities-based strategy requires HEI to focus more on how might changing external environment in the future than what might be the current demands. From the previous consideration, strategic responsiveness can be defined by dynamic capabilities, according to equation:

$$\text{Strategic responsiveness} = f(\text{dynamic capabilities}) \quad (2)$$

In the normal resources constrained world, decisions regarding the appropriate combination of capability components are critical to maintain strategic responsiveness. These decisions are especially crucial given the long lead times and considerable expenses involved in making significant changes or establishing new capabilities in these components. Trying to find out the correct mix determining the correct mix to maintain strategic responsiveness, the HEI must determine requirements based on national education strategy, national interests, challenges and threats in the mid-term and long term time frames. What became clear is that successful HEI invest heavily dynamic capabilities to enhance their operations. Not all university -level responses to opportunities and threats are manifestations of dynamic capabilities. As Sidney

² Climate is the management propensity to respond in a particular way, for example to welcome, control or reject change; Competence is the management's ability to respond. For example, to anticipate change in a complex environment, the organization needs a sophisticated environmental surveillance system. Capacity is the volume of work that general management can handle. Its adequacy is related to the type of response used. For example, the number of general managers needed for change controlling management by exception is very much smaller than for vigorous change generating strategic development.

³ This definition is adapted from Teece, 2009, p.89

Winter (2003, p. 991) notes “ad-hoc problem solving” isn’t necessarily a capability. Nor is the adoption of a well-understood and replicable best practice likely to constitute a dynamic capability. Implementing best practices may help a HEI become or remain viable, but best practices which are already widely adopted cannot by themselves enable a HEI to outperform its competitors in a competitive market situation.

2. A Model of Strategic Responsiveness Organization (SRO)

Control system of operations management would not be capable to identify and evaluate new opportunities. The existence of these conflicting issues is an explanation of rejections, inefficiencies and delays occurred when strategic tasks are imposed on the operating capabilities. These inefficiencies will be due not only to cultural/politic rejection and overload, but also to inapplicability of operations management’s skills on strategic work: A possible answer to eliminate those tensions could be institutionalizing strategic responsiveness by design a dual-organization; we call this Responsiveness organization. The structure of this organization is divided into two parts, which are detailed below:

Operational unit, which is focused on the question “Are we doing things right?”- (i.e. quality control) a mechanistic and narrow approach to quality typically (predictably) adopted by external quality assurance agencies (In). The goal is to apply new technological competencies to reduce the cost of production and consequently to educate more students without additional funding.

Strategic unit, which is focused on question “Are we doing the right things?” (i.e. improvement of the quality). The answer for this question has led to a reconsideration of the mission, maybe the identity and the future market for higher education in every sector. In other words, capabilities which define SRO are dynamic capabilities, and that includes operational capabilities necessary for operational unit.

As Collin (1994) and Winter (2003) note, one element of dynamic capabilities is that they govern the rate of change of operational capabilities.⁴

And more, in this organizational model we refer to capability in terms of the types of generic things that the management needs to do to pursue any policies effectively. A capable management has a relatively high ability to do two kinds of things in particular:

(a) To formulate policies effectively in both political and technical terms, i.e. to find out what important stakeholders want; are made political compromises between different interests so that there is a wide commitment to the paths chosen; to explore the costs and benefits of different options from a technical perspective etc; to work out whether objectives are best achieved by a direct, overt program or by more subtle, incremental 'encouragement'); and generally to come up with policies that are sensible and likely to 'stick'.

(b) To implement policies effectively, i.e. to coordinate different actors and forces; to organize some kind of feedback on program effectiveness etc., a new organizational culture and a new management style.

Our model offers a better positioned than a uniform system to respond to entirely new situations in new, while simultaneously delivering a high degree of institutional stability. The importance of to maintain this stability should not be overlooked. It is a key factor in maintaining significant

⁴ Cited by D. J...Teece in Dynamic capabilities and Strategic Management, Oxford University Press, 2009, p. 88.

elements of the HEI 'brand value' both at home and abroad. Maintaining this stability while encouraging this dynamism will be a challenge for us and for institutions.

At in the center of the responsiveness lays the human aspect. No activity can be carried out effectively if the people involved are not willing to cooperate. In order to do so, they have to be convinced that what they are asked to do is for their own benefit, rather than for another person or group of persons, regardless if would be the stakeholders or customers. Soundness of the proposed construction is ensured by developing a new culture, which, in time, to be able to overcome threats and transform the resistance into active support.

In order to achieve the institutionalizing strategic responsiveness, an organization has to change. This change goes far beyond altering a method or modification of a process. It is, at first, a change in culture that is required; all other major changes will then follow from that. Culture is not a static concept or reality; it evolves with time and changes, often gradually but sometimes noticeably and abruptly. Cultural changes result from a constant feedback whether formal or informal, conscious or unconscious - from the results of the culture.

The importance of the new culture, articulated around transforming the mentality, consists, especially, in its implications upon putting into practice the changing project. In other words, the success of changing the organizational culture depends on the total involvement of the public management, carefully focused on the institution's clients, but also on the public servants.

Entrepreneurial management also plays a critical role in the SRO framework. As Schumpeter notes, "the entrepreneurial function may be and often is filled cooperatively –in many cases, therefore, it is difficult or even impossible to name an individual who acts as the entrepreneur".⁵ The manager/entrepreneur plays a key role in coordination of economic activity, particularly when complementary assets must be assembled. He is likely to have strong skills in working out new business model which define the architecture of new business. The astute performance of this function will help achieve what Porter (1996) calls "strategic fit", not just with internally controlled asset, but with the assets of alliance partners (Teece, 2009, p.106).

3. Strategic Responsiveness Space The concept of strategic responsiveness in higher education

Responsiveness of the higher education sector to student's demands is mentioned as an important part of academic performance control since it refers to the speed and accuracy with which a service provides replies to a request for action or for interactions⁶. The situation in the Romanian system is different as reflected in the Quality Barometer:"when they are considered aims of the system, the resulting image is largely a system centered itself. It is rather the perception of a system whose links with the environment are insufficiently explored and analyzed, the system follows its own logic, coherent but is less involved in society and this rather disconnectedre reveals" (Quality Barometer-2010). To recover this reality, the development of a new type of relationship between university and their stakeholders is necessary.

C. Pollitt and G. Bouckaert stated "the blurring of roles between service providers and service consumers has been paralleled by role shifts within provider organizations" (C. Politt and G.

⁵ Cited by Teece, D. (2009), p. 104.

⁶ According to this definition, speed can refer to the waiting between students' requests and the reply of the university Accuracy means the extent to which the university's response is appropriate to the needs or wishes of the student. Accuracy in higher education system must take into consideration social welfare, equity, equal opportunities

Bouckaert, 1995. p.11). We can see the result of this deep change determined by the principles on which the new type of relationship develops; from the traditional type where the consumer/student was “stopped at the gate of the university” to the new one where he becomes co participant throughout the quality cycle: co-design, co-decision, co-produce and co-evaluation.

In the Romanian higher education system, unfortunately, we notice a relative disposition of the university by their students. Consequently, the general view of students is that the university is not an institution to generate senses or provide directions. Thus, “students appear to be alone and insecure in the face of uncertainty in relation to the type of training they receive in the university” (Quality Barometere-2010, p.22)

The importance towards the actors in the network gives this type of approach.

The characteristic of backtracking *-pull system*. is that it works as network ‘ actors *pull the processes* that occur in the higher education institution towards achieving goals It is a point of view completely different from the traditional strategic approach similar to the push system in on which only the managerial efforts of pushing the processes are intended to lead to goal achievement.

Achievement means giving up old paradigms and acceptance of some innovative approaches in which costumers are, at the same time, co-participants in the innovation of the higher education system they benefit from. Moreover, the new managerial approaches related to strategic responsiveness impose closer attention paid to results. Guskin calls this overall process “outcomes” thinking. Our need is twofold: “to reduce student costs and increase student learning” (1994, p. 25)

Focusing on results expresses the need for the creation of a strategic vision of the expected finality, vision which exceeds the orders of the organization and which takes into consideration, on one hand the fruition of the positive influences from external factors, and on the other hand reduction (elimination) of threats coming from them. Such an approach would lead to ease tensions that currently exist in the Romanian system:” Employers shall adopt a relatively neutral position, there also an important gap between the current levels of skills necessary for, graduates in the minds of employers. In contrast, a substantial majority credited university lecturers or university system with a lot of more confidence in its ability to provide labor market quality graduates.

The images contrast the two types of actors, the academics are much more positive than employers. Solving this tension is crucial for social engagement system higher education, which otherwise risks losing contact with the labor market and cause a significant deterioration of its image in the future” (Quality Barometer-2010, p.15).

Pragmatically, the achievement of such a structure implies overcoming a variety of challenges. On the one hand, are the members of the academic community aware of the importance of commitment? Are they truly motivated to take part in such a structure? On the other hand, how prepared are University representatives to accept co-operation with different categories of stakeholders? At least until now, as result of the foregoing, there is a serious lack of communication between communities, academics and stakeholders, the environment is not only tense but very fragmented.

4. Conclusion

In conclusion, this model of strategic responsiveness will not only eliminate the danger of „homogeneous practices⁷ which have been inhibiting creative solutions and, conversely, have encouraged responses that do not always represent an adequate answer to external demands. In other words, the process has weakened organizational performance” (A.Miroiu, L. Andreescu, 2010, p.90), but it involves creating internal organizational system that supports responds more flexibly to signals from society; leads to a more accessible higher education; it provides students with a larger range of options, and lets HEIs capitalize on their strengths in order to meet the needs and abilities of the students. ” (A.Miroiu, L. Andreescu, 2010, p.92). Institutionalizing the strategic responsiveness allows different universities to decide what (which) part research should play in their mission, and to identify areas where they will seek to demonstrate research strength in the periodic research assessments. Our contribution to “dual support” funding is particularly significant in maintaining institutional flexibility, because it is not tied to specific projects but allows institutions discretion in to decide where and how to develop their research infrastructure. Strategic responsiveness expresses a differentiation and adaptation driven by demand from environment, and from this perspective we are able to examine a variety of strategic organization behaviors for example, whether a higher education institution anticipates or reacts to discontinuities in the environment. The management of this kind of university is able "to work today for tomorrow." In this context, the managerial approach has a twofold focus: (a) to solve current problems and (2) to anticipate problems that will face. By contrast, in the freeze universities, there are positioned managers who "just look carefully where they go, but never at the sky." They are only interested in the present, but completely ignore the future. Such managerial behavior demonstrates lack of strategic vision, and, obviously, the lack of performance. In this new context a high degree of flexibility and adaptability of higher education systems gives the opportunity to meet societal demands in real time, demands which are in constant change. To outline of a new entrepreneurial management context based on results first means the necessity to create new models of inter-relations development between and within institutions. Secondly, there is an imperative demand for structural changes within the universities, in order to maximize efficiency (so that they become compatible with flexible structures – network type) and increase the capability in decision-making through involvement of students/customers and representative interest groups for communities.

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LEARNING OUTCOMES OF THE BACHELOR PROGRAM COMPUTER SCIENCE AT THE TU BERLIN: MAPPING TEACHERS' INTENTIONS TO STUDENTS' SELF-ASSESSMENTS

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Abstract

For about four years the Technische Universität Berlin (TU Berlin) undertakes learning outcome oriented evaluations of study programs on the one hand by asking teachers for the learning outcomes intended to impart in their courses or modules and on the other hand by evaluating students' learning outcomes by asking them for a self assessment along the same catalogue of learning outcomes. The program manager of the Bachelor und Master Program Computer Sciences pioneered this systematic evaluation at his school. The article sketches the underlying method used and presents exemplary results of the comparison between intended and self assessed learning outcomes.

Key words: evaluation, learning outcome, student self-assessment.

1. Introduction

Learning outcomes and competence orientation are some of the keys to modern curriculum design after the declaration from Bologna towards a common European higher education system. The TU Berlin with its strong emphasis on engineering sciences has a vital interest in triggering the shift from input towards output oriented study concepts. Therefore its central unit for Strategic Controlling developed a systematic process of evaluation by comparing learning outcomes as intended by the teachers and learning outcomes as assessed by the students themselves at the end of their study. Doing so, it builds on a method developed at the TU Eindhoven (NL) [1] that analyses competence profiles of study program by evaluating teachers' intended learning outcomes. The Dutch approach has been adapted to the needs of larger German universities and complemented by the evaluation of students' self-assessed competences at the end of their study. This kind of target-performance analysis on learning

outcomes of study programs is offered to all schools of the TU Berlin by the team QS² (QualitätsSicherung Studienprogramme).

The School of Electrical Engineering and Computer Science was one of the pioneers that made use of QS². In 2008 the Bachelor- and Master Program Computer Science was evaluated in respect to the competence profile of the study program as intended by the teachers involved. Two years later the first student cohort finishing their study of the new designed Bachelor Program Computer Science became evaluated. These students were asked to assess themselves according to the intended learning outcomes. The evaluation started at the end of 2009 and has been completed in January 2011. The presented results of students' self-assessment are the results of the first 40 Bachelor students that finished their study in this period of time.

In the following, first the methodological assumptions of ACQA and its increments will be explained, second the results of the competence analysis will be presented as a target-performance approach and finally the approach is going to be assessed in respect to its strengths and weaknesses.

2. Method

2.1. Areas of Competence

The evaluation of learning outcomes is based on the so called "ACQA (Academic Competence Quality Assurance)–Method" developed at the TU Eindhoven (NL) that has been advanced in response to the so called Dublin Descriptors [2]. The approach distinguishes seven areas of competence each of which is subdivided into six to ten learning outcomes. The method can be applied to all academic disciplines. At the same time it considers the specific requirements of the engineering sciences. The relations between the areas of competence are shown in the figure below:

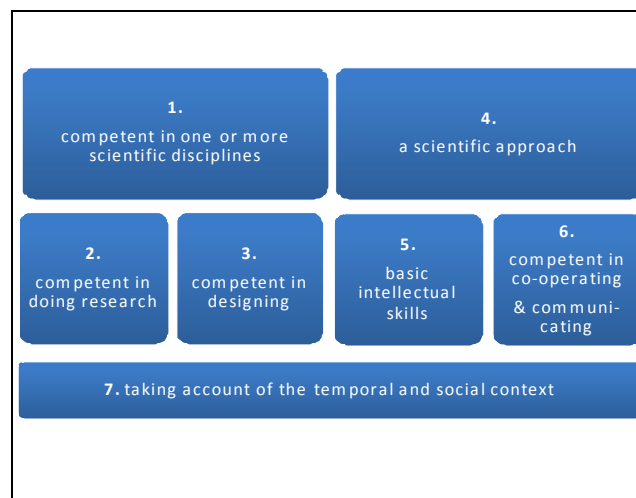


Figure 1. Areas of Competence of a University Graduate (ACQA) [3]

The seven fields of competence may be used to describe competences of a university graduate as well as for the profile of a single course, or for a whole study program.

2.2. Levels of Competence

For the various stakeholders of higher education – as future employers or study program manager – it is of great relevance to know to what depth or on what level learning outcomes are taught. As the providing of ACQA did not meet the needs of TU Berlin, a new and lower threshold approach in evaluation levels of learning outcomes has been sought [4]. Therefore an overview was developed that defines five levels of profoundness for learning outcomes along four underlying criteria: “knowledge & comprehension”, “complexity of the context“, “the extent of self-reliance” and “the extent of self assessment“.

Table 1. Levels of Profoundness for Learning Outcomes

Level 1	Level 2	Level 3	Level 4	Level 5
factual and theoretical basic knowledge	detailed knowledge	application of knowledge dealing with tasks with defined solutions	application of knowledge in complex contexts; broadly defined targets and ambiguous solutions	working at the borderlines of latest theories and research
<i>and/or</i>	<i>and/or</i>	<i>and/or</i>	<i>and/or</i>	<i>and/or</i>
working in a defined context requiring a standardized method	working in a defined context requiring various methods	working in a clear structured context requiring various methods	working in a complex context requiring to choose from a variety of standardized and innovative methods	working in a complex, specialized context requiring to choose from a variety of standardized and innovative methods
<i>and/or</i>	<i>and/or</i>	<i>and/or</i>	<i>and/or</i>	<i>and/or</i>
working under professional guidance	self-reliant organisation of processes within a defined rules of action	self-reliant design and organisation of resources and processes within an open setting	self-reliant design and organisation of resources and processes within an open setting, taking into account social and ethical aspects	self-reliant work at the limits of a domain; great sense of responsibility for oneself and others
<i>and/or</i>	<i>and/or</i>	<i>and/or</i>	<i>and/or</i>	<i>and/or</i>
developing a sense of own strengths and weaknesses	evaluation of the own strengths and weaknesses; confronting critical reactions	development and application of own evaluation criteria; self-evaluation	confident application of own evaluation criteria; confronting and reflecting critical reactions	to be associated with a scientific community; internalized and critical reflection of own and others' work as to its value

The five levels outlined above as a table has been used in all interviews for describing intended levels for single learning outcomes.

3. Evaluation of learning Outcomes in the Bachelor Program Computer Science

The evaluation of learning outcomes of the Bachelor Program Computer Science took place in two steps: first, the intended educational objectives of the teachers involved in the program

became analyzed. Second, the learning outcomes of students at the end of their study were evaluated as self assessments.

3.1. Evaluation of Teachers' Intended Learning Outcomes

The evaluation of educational objectives is based on a survey of those lecturers who are responsible for a course or a module in the study program. They are asked in structured interviews first how the workload is distributed over the seven fields of competence, second on what level of profoundness single learning outcomes are addressed, and third whether or not these competences are systematically assessed. The selection of the courses or modules was agreed between the program director and the **QS²** team. Generally, all compulsory modules are to be included in the evaluation. They are added by a selection of those elective compulsory courses that reflect the choices of the major part of the students. It should be noted that the bachelor thesis and its related learning outcomes has not been included in the evaluation, since there are various teachers responsible for the thesis and the topical subjects of the students' work vary from theoretical to practical approaches. Hence, the standardized questionnaire in use could not grasp the specific academic achievements related to writing a bachelor thesis. That is, the results are an academic profile of the study program not considering students advance by the bachelor thesis.

3.2. Self-Assessment of Learning Outcomes by Students

The aim of the student survey is to confront teachers' intentions with the self assessed learning outcomes of students. Students were asked to assess themselves along the same catalogue of learning outcome items that teachers had to respond to. Students are asked once – at the end of their study – to assess their acquired learning outcomes. More precisely: students were asked while they are in the midst of writing their bachelor thesis – a point in time when they actively reflect their acquired skills and competences. The student survey has been realized as a postal survey. As indicated in the beginning the student survey will be completed at the end of the year. Thus the results presented in the following are based on 40 responses. The response rate is about remarkable 68%, since those students who took part, received a cinema voucher by the School of Electrical Engineering and Computer Science.

4. Results

In the following section results of the evaluation of the Bachelor Program Computer Science are presented. The first radar plot shows the competence profile of the study program indicating a clear focus on disciplinary knowledge (25%) along with research and design competence and intellectual skills.

In evaluating teacher's intended learning outcomes it further was asked whether the teachers not only address but also assess single learning outcomes. The following two examples (out of the seven areas of competences) will illustrate how program managers get a picture to what extent the single learning outcomes are implemented in the teaching of the study program.

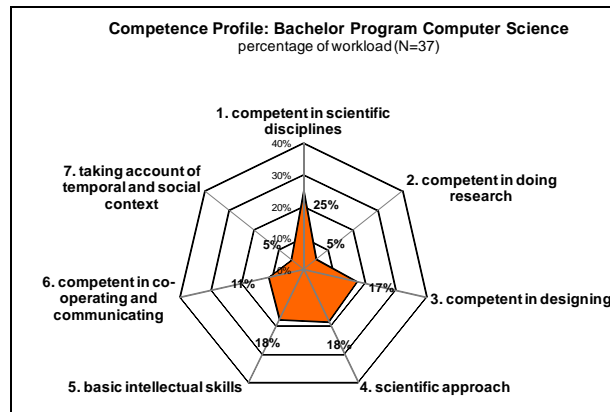


Figure 2. Competence Profile of the Bachelor Program Computer Science

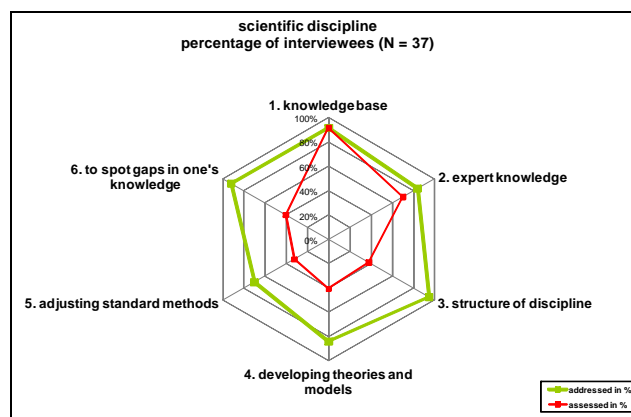


Figure 3. Comparison of addressed and assessed learning outcomes in the area “scientific discipline”

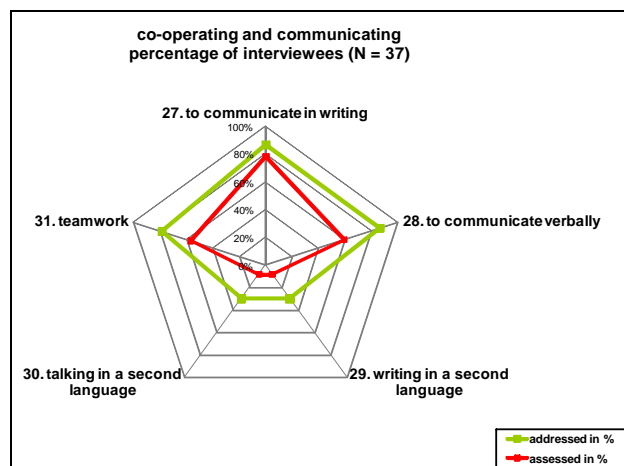


Figure 4. Comparison of addressed and assessed learning outcomes in the area “co-operating and communicating”

The figures above show that not every single learning outcome is systematically addressed and assessed. For example, items conferring to foreign language are often neither addressed nor assessed by teachers. Other items as “spot gaps in one’s own knowledge” (item 6) by teachers

mainly are addressed but rarely assessed. Interpreting these results one has to refer to the stated educational objectives of the study program. There, foreign language in the bachelor program is not stated as a learning outcome. In contrast, the tackling with knowledge gaps is implicitly mentioned. It is now on the program manager together with the faculty to seek for better implementation of those learning outcomes – e.g. either in a didactic or a more conceptual way.

After evaluating students' learning outcomes at the end of their study a comparison between the intended (teachers) and self rated (students) profoundness of learning outcome became realizable. The following charts depict the two different approaches in one figure. Note that the columns of teachers and students in figure 5 to 7 relate to different points in time: students rated their profoundness in achieving learning outcomes while they were writing their bachelor thesis whereas teachers' statements referred to courses of the 2nd and 3rd academic year.

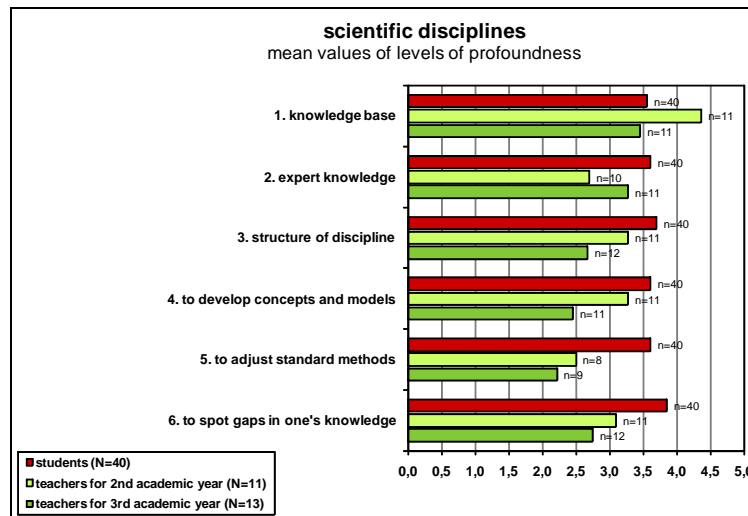


Figure 5. Comparison of mean levels of profoundness of learning outcomes as stated by students at the end of the study and by teachers for courses in the 2nd and 3rd academic year.

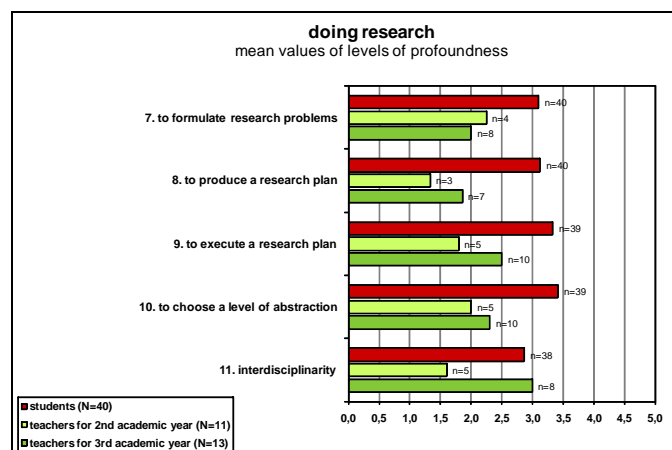


Figure 6. Comparison of mean levels of profoundness of learning outcomes as stated by students at the end of the study and by teachers for courses in the 2nd and 3rd academic year.

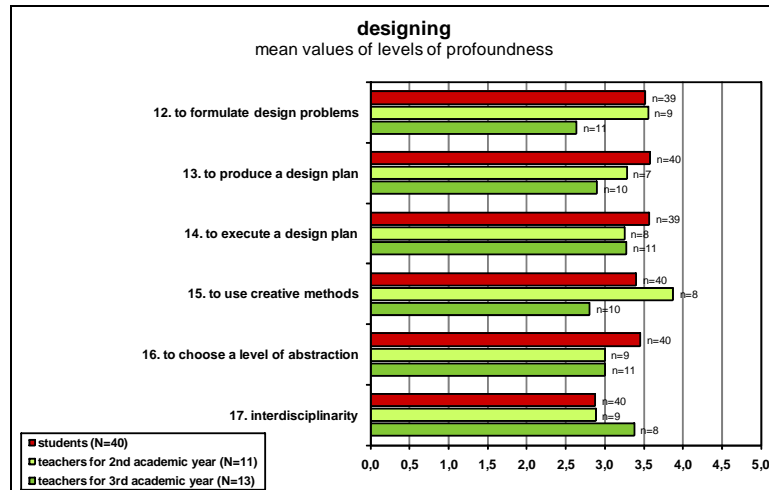


Figure 7. Comparison of mean levels of profoundness of learning outcomes as stated by students at the end of their study and by teachers for courses in the 2nd and 3rd academic year.

A first glance at the figures comparing students' self assessment with teachers' intentions regarding the profoundness of single learning outcomes reveals a very self confident rating of students' own academic achievement. Students rate higher levels of profoundness than their teachers did on average in the second and third year in all areas of competence selected for the discussion in the paper. This applies in particular to the field of "doing research" where students claim to have achieved one to two points more than teachers intended - given the framework of the table of profoundness. As mentioned, the point in time when rating differs for students and teachers. Given the data is validly evaluated the figures suggest that students doing a great jump of academic advance while they work on their bachelor thesis. This applies in particular for the competence area of research. This result underlines the meaning of the bachelor thesis for forming a research competence.

4.1. Validity of Students' Rating

Student self-assessments in general and students' rating in this particular case raise the question whether or not students' statements are valid. There are arguments that the results of the evaluation in question mirror the actual student learning outcomes at the end of the Bachelor Program Computer Science.

Point in time of the student survey

First of all, students received the questionnaire in the midst of the process of writing their bachelor thesis. At the point in time they reflect on their academic advance and identify their own strengths and weaknesses – perhaps for the first time in their study. Hence, the assumption is that students at this stage are capable of rating their own level of profoundness for single learning outcomes.

Statistical evidence

If all answers of students are accumulated statistical computation gives a standard deviation = 21,97. Given the mean of 116, a maximum of 152 and a minimum of 57 the value of the standard deviation indicates a distribution of the responses well around the mean without almost

non outlier. That is that students did respond to the questions in a comparable way. The questions were comprehensible. The figure shown below compares the distribution of the accumulated answers of students with the distribution of the teacher's statements.

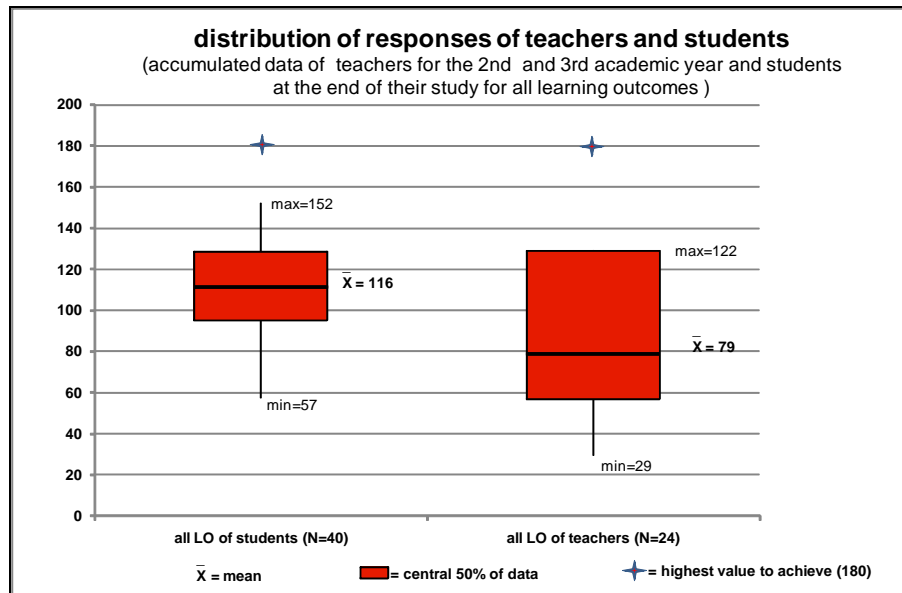


Figure 8. Comparison of the distribution of responses by students and teachers concerning the levels of profoundness of learning outcomes (LO). The individually stated levels became accumulated. Given five levels of profoundness and 35 questions on LO the highest number of points to achieve is 180.

Finally it is to point out that 67% of those students who are at the end of their Computer Science Bachelor Program did respond to this survey. Hence, the analyzed data mirrors the basic population of this cohort of the bachelor students very well.

5. Conclusion

Outcome oriented evaluation has been established at the TU Berlin in the last four years and yields first results as target–performance analysis. One of the main results found for the new set up Bachelor Program Computer Science is the great concordance of student's self rating with the intended learning outcomes of the teachers. The fact that students' rating go beyond teachers' intentions for 2nd and 3rd year courses might be read as a proof for the academic advance students undergo in the process of writing their theses or as student overestimation on their own skills. In that respect the method of evaluation has to be advanced, in order to differentiate between overestimation and actual student academic competences.

Evaluating the method used for reflecting learning outcomes of study programs one has to value the approach a very efficient and holistic one. Meanwhile the QS² team evaluated about 30 study programs at the TU Berlin. On the basis of empirical evidence on learning outcomes the QS² team gave detailed feedback to faculty and program managers. It induced discussions on better ways of transferring educational objectives of the study program into learning outcomes on the level of modules or courses. The fact of using a standardized method in evaluating learning outcomes facilitated that such a great number of programs could be evaluated in short time. The standardization is the basic starting point for mapping teachers' intentions with students' ratings. For further applications a more discipline specific alignment of the items might be suggested in order to generate even more concrete feedback for the program managers.

Last but not least an important side effect of the evaluation process has to be mentioned: by interviewing teachers as well as by asking students regarding learning outcomes the quality of teaching shifts into the focal point of reflection. In that way not only the results but also the process of evaluation triggers the transition from an input toward a more output oriented teaching.

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LEARNING OUTCOMES IN THE MIRROR OF QUALIFICATION FRAMEWORKS

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Abstract

Industry can be regarded as the main customer of a university. Therefore it is essential to ensure that knowledge, skills and competences of graduates correspond to the needs of industrial organizations – potential employers of the university graduates. Nowadays the needs of the industry are reflected in different qualification frameworks that are developed for the purposes of professional certification, standardization and cooperation. Analysis of the correspondence between the learning outcomes of study programs and these frameworks helps to assess the quality of study programs and define their development strategies and tactics. The abovementioned analysis can be enhanced by a software tool that enables linkage between different conceptual structures.

Key words: Learning outcome, conceptual structure, qualification, knowledge management.

1. Introduction

Alignment with industrial needs is usually used as one of the quality characteristics of study programs. However, the assessment of the alignment is often based on individual experiences and subjective judgment of external experts. We propose to use the linkage between learning outcomes and qualification frameworks as a basis of evaluation of the fit between industrial needs and study programs. Learning outcomes (LO) are statements of what a learner is expected to know, understand and/or be able to demonstrate after the completion of a learning process [1]. The notion of a “qualification framework” (QF) in this paper is used as an umbrella term for structured descriptions of knowledge, skills, and competences [2] that can be transferred into or represented by hierarchical conceptual structures such as controlled dictionaries. Many professional organizations develop and issue standards or skill frameworks that list skills, knowledge and competences needed in a particular business area, e.g., European e-Competence framework (e-CF) [3], Skills Framework for Information Age (SFIA) [4], Supply Chain Council’s SCOR People [5], International Institute’s of Business Analysis (IIBA) competency model [6], etc. These frameworks can be used for the analysis of alignment between a curriculum and industry needs as well as for definition of study program development strategies and tactics as more objective information than just subjective individual judgements.

In the proposed approach, to analyze the fit it is necessary to identify which learning outcomes correspond to which knowledge, skills and competences reflected in the frameworks. Taking into consideration the number of concepts included in QFs this task can be very time-consuming and cumbersome if performed manually. IT tools such as LinHS that has been developed for mapping hierarchical conceptual structures [7] can enhance the process of linking LOs to QFs. The mapping or linkage can be established not only between LOs and QFs but also between several QFs. Mappings between QFs can be used for analyzing LOs in “mirrors” of several QFs without actual linking them to more than one framework.

The results obtained from the analysis of alignment should be interpreted with care since for some particular study programs it might be enough to have 50% coverage of all essential competences whereas in some cases almost 100% compliance would be mandatory. That means that every case of analysis should be considered in a particular context that is beyond a pure technical analysis and comparison.

The paper is structured as follows. Related work and background are briefly discussed in Section 2. Section 3 describes the procedures of linking LOs with QFs. In Section 4 we discuss how the obtained linkages can be used for curricula analysis and development. Conclusions are also provided this section. The proposed approach is under evaluation for the Business Informatics study program at Riga Technical University; however, it is not restricted to computer science and information technology curricula only.

2. Related work and background

We consider a university as a subsystem of an educational ecosystem [8]. This ecosystem consists of several interdependent subsystems, namely, *educational institutions* that provide education, *scientific institutions* that influence the content of study courses in line with new scientific findings, *industrial organizations* that seek professionally well educated employees and *administrative bodies* that support and assess educational institutions. In the paper we address educational institutions (via LOs) and industrial organizations (via QFs).

The approach presented in this paper belongs to the field of educational informatics. Educational informatics have emerged recently by bringing together aspects of information science, computing, education, instructional systems technology, and learning sciences; and building on, integrating, and extending these areas of endeavour [9]. Classroom teaching, academic advisement, course development, academic program review and course duplication review can all be categorized as the curriculum development process [10]. One particular case combining educational informatics aspects and the curriculum development process is the curriculum management system in a narrow view meaning the management of courses, but in a broader view meaning the suite of integrated tools used for managing graduate outcomes, content, activities, and assessment in a program [11]. One vivid implementation example is *eMed* – a modular outcome-based curriculum management system including six main tools such as curriculum map, timetable, student portfolio, peer feedback tool, assessment tracking, and results tools [11]. There are other curriculum management systems supporting various aspects of the curriculum such as aligning instructions to curriculum map, individualization for helping teachers to customize the instructions to the needs of students with particular learning needs, collaboration and sharing of best practices, and collaboration with publishers for identification of learning resources [12]. We have identified the lack of a significant component in curriculum management systems, namely, the component for supporting the mapping of LOs to QFs and, thus, developed an approach for the analysis of alignment between LOs and QFs. The approach is applicable only to those QFs which can help orient learning outcomes to specific professional profiles required by both industry and society [13].

The work presented in this paper builds on the authors' research on educational ecosystem [8] and information systems architecture supporting industry-university cooperation [14], [15], [7], [16], [17]. The focus here is on learning outcomes and procedures of establishing the linkage between LOs and QFs.

3. Linking LOs to QFs

In this section we describe the procedural aspects (the process, the tool and variations of linkage) of identifying the correspondence between LO and QF. There are two assumptions behind the description, namely: (1) Each LO of the course is also the LO of the module or study program to which the course belongs to; and (2) Each correspondence between the LO and the element of QF can be represented by a link in the hierarchical conceptual structures linkage tool LinHS.

3.1. The process

LO linkage to QF is a tree-phase process (see Figure 1). In Phase 1, an analysis of a course is conducted based on textual description and LOs of the course. In Phase 2, the correspondence between LOs and the chosen QF is identified by analyzing the QF and choosing particular conceptual elements of QF (knowledge, skills or competences) that correspond to a LO. In Phase 3, the identified linkage is entered into LinHS. Phase 1 and Phase 2 can be conducted in two ways - with or without support of the LinHS. Phase 3 is needed only if the first two phases are done without the support of LinHS, i.e., the information about QF element correspondence to LOs is prepared manually or using tools other than LinHS.

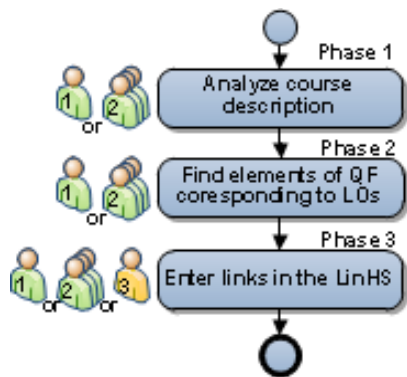


Figure 1. Tree-phase process of course LO linkage to QF

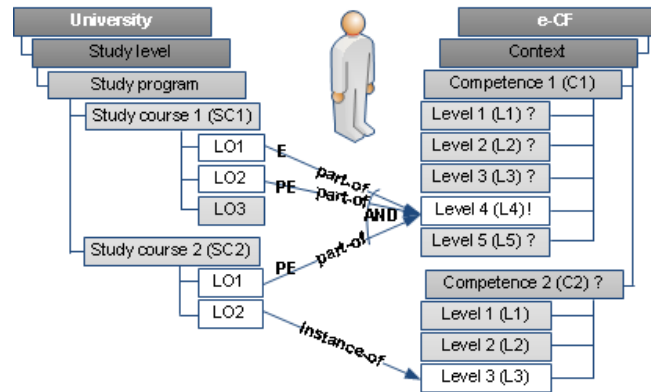


Figure 2. Artificial example illustrating LO linkage to e-CF

There are three scenarios the linkage process can follow: (1) All phases can be conducted by an individual expert (e.g. the instructor for the course - see 1 in Figure 1); (2) All phases can be performed by a group of experts (e.g., instructors responsible for the module the course is part of - see 2 in Figure 1); and (3) The result of the work of the expert or a group of experts is entered in LinHS by a delegated person (see 3 in Figure 1). Phase 1 and Phase 2 can be automated in the way that some recommendations of the respective LO and corresponding elements from the QF are prepared to support and ease the course and QF analysis and linkage.

Activities conducted in Phase 1 include reading and analysis of course description by a person, group, or automatically. Automated course description analysis includes the use of such classification structures [18] as ontologies, taxonomies, and vocabularies and text analysis tools, e.g., General Architecture for Text engineering (GATE) and Apache Unstructured Information Management Applications (UIMA).

Phase 2 is the main phase in the tree-phase process (see Figure 1 and 2). QF is analyzed and corresponding elements are selected and linked to LOs by adding the following descriptive information about the correspondence: 1) Type of relationship (part-of, instance-of); 2) LO significance in order to achieve (obtain) selected knowledge, skill or competence from the QF; and 3) some additional comments. To illustrate the linkage process, European e-Competence Framework (e-CF) is used in Figure 2. Phase 2 is illustrated in Figure 3. Each framework requires particular considerations for appropriate linkage. Using e-CF, before adding the descriptive information, e-CF competence level should be selected (see Activity 2 in Figure 3) by considering the combination of 3 facets (detailed description available in [19]):

- *autonomy* (ranges between “responding to instructions” and “making personal choices”),
- *context complexity* (ranges between “structured - predictable” and “unpredictable - unstructured” situations) and
- *behavior* (ranges between “the ability to apply” and “the ability to conceive”).

QFs are not complete lists of competences, therefore the framework has to be complemented by the list or repository of proposed competences which are relevant in a university context but are not represented by the framework. When during the identification process of corresponding elements of a QF to a particular LO no such elements are found, we can search for the desired competence in the “Proposed competence” repository. If the desired competence is not there it can be added to the repository and then selected. This process is presented graphically in Figure 4.

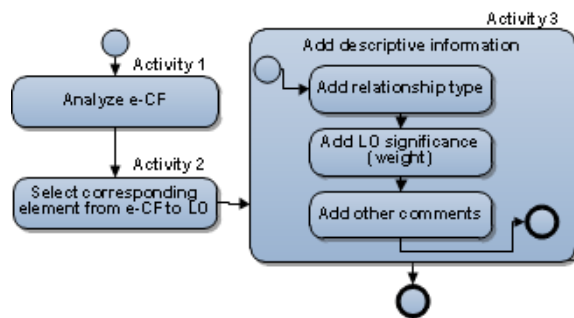


Figure 3. Activities for e-CF element selection and linkage to LO (Phase 2)

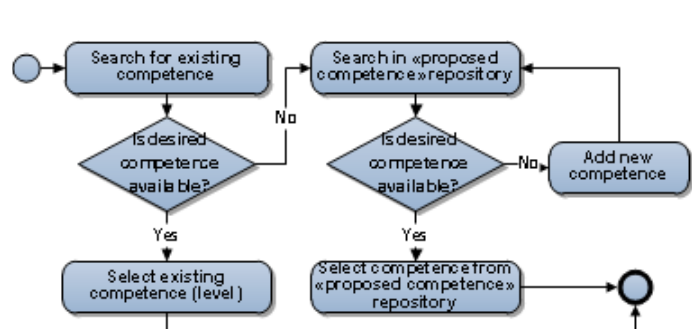


Figure 4. Selecting the element from QF or "Proposed competence" repository

In the selection of a competence level corresponding to a LO, one of the following relationship types should be specified (see Figure 3. "Add relation type" and Figure 2): *Part-of* and *instance-of*. A *part-of* relationship represents the contribution of a particular LO (in terms of skills or knowledge) to a particular competence, i.e., the LO is *part-of* the competence. The "part-of" relation is frequently used when linking a LO to a competence level. This means that multiple LOs should be attained in order to achieve some particular competence level. An *instance-of* relationship is used when the LO is described as a competence (not skill or knowledge) and linked to a specific competence of QF.

When the specification of the relationship type is complete, LO significance with respect to the selected competence level should be assigned (see Figure 3. "Add LO significance" and Figure 2). We use two values of significance, namely, *essential* and *partially-essential*. Weighting is important because it clearly shows how significant the LO is in acquiring a particular competence. A short description (comments) can be added to the link to specify more details about the linkage (see "Add other comments" in Figure 3). These comments (e.g., about considerations why some particular LO is significant to QF competence) are useful when revisiting the linkage due to changes in curricula or due to changes in QFs that periodically occur with new versions of the frameworks.

3.2. The tool

LinHS has been developed for supporting the linkage between hierarchical conceptual structures. It can be used for linking study programs, modules, and courses to QFs as well as for linking different QFs as far as they can be represented by hierarchical conceptual structures.

In our case, LOs are physically represented in the university study program and course management system. In order to make LOs available in LinHS, import procedures have been applied. The LinHS currently supports direct linkage between any two hierarchical structures and the definition of the following relationship description information: (1) node from, (2) node to, and (3) description. Currently the definition of relationship type and significance as proposed in Activity 3 in Figure 3 is not implemented in LinHS.

If we take the study course "Business process management and engineering" as an illustration and find corresponding elements from e-CF, then 1) We identify the LOs of the course; and 2) Search for competences in e-CF. In Figure 5 we have linked the LO "Can develop a business process management model and identify business process support software requirements" to desired competences "A1. IS and Business Strategy Alignment. Level 5" and "A4. Specification

4. Discussion and conclusions

The proposed approach has the following advantages with respect to curriculum management and quality assurance:

- Learning outcomes can be communicated in industry-approved terms.
- The coverage of course, module, and study program LOs is transparent and does not depend on subjective judgment of external experts.
- It facilitates curricula gap analysis with respect to industry needs that, in turn, supports adaptability to customer needs.
- It facilitates discussions with the industry with respect to the latter's knowledge gaps as the university needs to be one step ahead of the industry in acquisition of advanced knowledge.
- The solution provides educational experts from the University and the Industry with a means for analyzing the current situation and defining the existing gaps.
- The university, by using the results of LO alignment analysis, can adapt its curricula and develop appropriate life learning courses to fill the gaps that exist in the competences of its current students and former graduates.
- The LO and QF alignment analysis results can be used in an accreditation process in order to demonstrate whether the study program is relevant for the Industry and/or that it does not overlap with other study programs.

Besides advantages there are also particular challenges in the use of the approach and LinHS. One of such challenges is maintaining the linkages up to date. Practically it can be done only with the support of the tool – otherwise the process is too time-consuming; and even using the tool there are additional problems with identifying the changes in each course and each framework. A further challenge exists: While during the linkage process experts can work together and share their knowledge and opinions, subjectivity can still creep in, e.g., in assigning of link significance - especially if a person with a dominant personality is involved in the process. That means that more effort in the future should be invested in designing the evaluation process and methods. The approach presented in the paper so far is a starting point for developing and maintaining high quality curricula/study programs– starting from their design and finishing with their retirement. The current solution provides a possibility to show the gaps between the university and industry and vice versa, therefore allowing to share knowledge and mutually adapt it. While the technical solution is developed there are still processes that are to be elaborated; e.g., definition of the quality – the contextual interpretation of the results where it would be possible to define the scope of a framework which is relevant for a particular program and to define the level of compliance necessary to get a status of a high quality. Methods for decreasing the room for subjectivity of internal experts and methods for supporting study program through the accreditation, quality assessment and other specific procedures should be developed further.

Acknowledgement

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GOOD PRACTICE IN QUALITY MANAGEMENT: EXTERNAL REVIEWERS WORK AND DECISION-MAKING: CASE OF AKKORK

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Abstract

In the article is described good practice of AKKORK considering work with reviewers. Also are determined the goals and objectives of the Agency concerning work and independence of AKKORK reviewers. It describes the regulations of reviewer candidatures nomination for education audit procedures conduct, principles and criteria of reviewers' recruitment, training and certification. There are considered responsibilities and reviewers' activity regulations during planning and conduct of education audit. There are described principles of reviewers' conclusion drawing and report preparation, recommendations elaboration aimed at the HEI activity improvement and of reviewers' final conclusion drawing.

Key words: reviewers selection, quality assurance, evaluation, responsibilities of reviewers, independence.

1. Introduction

In the work of every agency there are aspects that the agency considers to be of high importance. In the AKKORK these aspects first of all are connected with the reviewers work. In this work there are many criteria such as selection of the reviewers, qualification of the reviewers, training, etc. But one of the most crucial is independence.

The European Standards and Guidelines state in point 3.6., that the QA agencies should be independent to the extent both that they have autonomous responsibility for their operations and that the conclusions and recommendations made in their reports cannot be influenced by third parties such as higher education institutions, ministries or other stakeholders.

In the Guidelines part of this point are mentioned some most important aspects of demonstrating the QA agencies independence.

The questions of independence are very important for the quality assurance sphere. ENQA has conducted several studies in which one of the aspects considered was the issue of QA agencies independence. There are from our point of view two levels of independence derived from the ESG 3.6. One of them is operations level when the agency is not influenced in its operations by any external party. The other one is the conclusions that the agency make towards the HEI audit results and accreditation. In all European countries these questions of independence are solved differently. In this paper we would like to show you how is solved the question of independence regarding the conclusions by Agency for Higher Education Quality Assurance and Career Development (AKKORK).

2. Historical aspect of independence of reviewers

During many years before Russia have signed the Bologna Declaration the only guarantor of the education services quality was the State. Moreover during many years in Soviet times all the Universities that existed were financed by the State so were so-called state universities. They received money anyway were they providing good educational services or not. Of course some type of accreditation procedures were carried out. The Rectors were appointed and dismissed, there were prestige universities and not prestige universities, some ratings were also done, but that was all without mentioning the word accreditation.

For the first time the definition of the term accreditation appeared in the Law on Education text in 1992. The responsible structure for this in Russia is the Federal Service on Supervision and Science in Higher Education. One of the reasons for the Russian Government to be the sole guarantor of the education quality could possibly be the desire to show the public where is the trustful university and where not. During 90s there were many organizations that tried to offer the fraud diplomas. The other reason could be that in Russia in 1990s was approved the system of the state standards in the sphere of education. With time the meaning of the state accreditation has changed. Now the process of the state accreditation (as it is written in the Law on Education) has as aims two things one is to review the quality of the graduates preparation and the other is to prove or to define the status of the HEI. In Russia the HEI could have one of the following status: institute, academy or university. These two aims have nothing in common as the definition of the status of the HEI doesn't comprise any reviews about quality. And visa versa the review of the graduates preparation level does not lead to any status. So this is some sort of a paradox in Russia.

The universities undergo the accreditation procedures once in five years. The accreditation commission is appointed by the state and consists of 4-5 persons. Some are selected reviewers from the universities, some representatives of other interested parties. They come to the university for a review and then send their report to the Federal Service on Supervision in Higher Education and Science. Then the Accreditation Commission of the Federal Service makes a decision.

In 2003 when the RF Minister of Education Vladimir Phillipov has signed the Bologna Declaration Russia began slowly moving towards the implementation of the ESG into practice. Of course there were a strong disagreement and absence of understanding how to change the system of accreditation.

The problems that were faced and are still present during this ESG introduction are the same as everywhere in Europe. They are: the organization of the assessment procedures, the selection of reviewers, the independence of reviewers from different stakeholders and many others.

Before the introduction of ESG there were no such problems as for instance independence of reviewers as the accreditation procedure was very structurized around figures as amount of professors, amount of computers and others. This was one of the reasons for AKKORK to introduce a special reviewers independence proof system. Another reason for this introduction was that the reviewers were not accustomed to being independent. They did not quite understand what it means to be independent and why they should be independent.

3. Case of AKKORK

When AKKORK was created it first of all began to study the European experience in the sphere of QA. Additional attention it paid to the organization of the reviewers work. Taking into consideration the requirements of the ESG regarding the reviewers AKKORK decided to introduce a special system of reviewer's independence proof. AKKORK considers most crucial thing for making independent conclusions to be the recruitment of reviewers, that is why the Agency considers the nomination of offered candidatures very carefully and uses strict criteria for reviewers' selection. As the reviewers teams should be representatives of all the stakeholders the reviewers' candidatures can be proposed by HEIs, education authorities, professional communities, or Agency Advisory Council members. Besides, specialists with relevant qualification and experience can put themselves forward as candidates.

Applicants are considered and approved by the Advisory Council and the leadership of the Agency. The approved reviewers' candidatures are trained to ensure that they have a clear knowledge and understanding of their aims and objectives, the requirements of the Agency and the rules of education review. During the training they are told how to write reviews, what are the criteria to assess the HEI and its programmes.

The nominees, who have successfully passed the training, receive Reviewer Certificates corroborated that they are reviewers of the Agency. The Agency specifies the scope of responsibilities for each reviewer, regularly analyzes the reviewers' performance according to the data obtained during the education review, periodically reconfirms the reviewers' authority and, if needed, uses its right to discharge them.

During their visit the reviewers guarantee that their judgments and conclusions are unbiased and independent by signing the Reviewer Independence Confirmation Form, saying that they will be acting as representatives of the agency and not of their own company. This is the crucial document for the reviewers. AKKORK decided to do it that way due to the reason that the signature means that you agree and understand your responsibilities. These forms are stored in the agency and if there will be known that the reviewer has violated the independence then a reviewer would be withdrawn.

The representative of the Agency (hereinafter referred to as the Representative) coordinates the education audit conduct of the HEI; he/she also consults the HEI on the issues related to the HEI preparation for the reviewers visit. He/she also provides consultations to the reviewers in the course of their preparation the activity in the HEI and if it is necessary in the course of the audit. He/she bears responsibility for independence of reviewers judgments, reliability and preliminary data, gathered by the reviewers, controls over that the information in the report is brief and represented in an accessible form.

In order to ensure consistency and objectiveness of the audit team decisions, AKKORK has developed a mechanism of solving conflicts of interest and disagreements within the audit team.

In order to avoid possible conflicts, the team members are obliged to declare formally to the Agency any matters or circumstances that could influence their ability to serve effectively as the reviewers' team members, they also sign a form which is a formal confirmation of their independence.

The reviewers who will be included into the reviewers' team declare to the Agency in writing any matters that could pose a conflict of interest during their participation in the HEI assessment. The reviewers' declaration about conflict emergence possibility doesn't mean that his/her candidature will be automatically rejected. The Agency may approve the reviewer's candidature if it draws a conclusion that there doesn't exist any conflict.

The HEI may not agree with the preliminary list of reviewers' team members because of the emergence possibility of conflicts of interests with somebody from the reviewers or because the compliance of the reviewers' qualification with the level of the teaching of the program under review is doubtful. In this case the HEI under review submits its notes in writing to the Agency and discuss the case with the representative of the Agency. The final decision on reviewers' team members takes the Agency.

If the existence of a conflict of interest exists or is emerging during the review process, the reviewer reports about it the team Coordinator, who together with the Representative of the Agency will decide on the appropriate measures to be taken.

Possible conflicts may be categorized as personal, professional or polemical.

Personal conflicts could arise when a part or all the members of the reviewers' team maintain personal relationships as well as if such relationships have been established between the reviewers' team members and the governing employees of the Agency. Besides, the resource of the conflicts can be special relationships that bound somebody from the reviewers' team members with any employee from the HEI under review. That is why the Agency avoids having graduates of the HEI under review as members of the reviewers' team.

Professional conflicts could occur:

- if an auditor had been a failed applicant for a position in the HEI under review;
- if there are staff members in the HEI under review who were failed applicants for a position in the Agency;
- if an reviewer was an applicant or prospect for a senior position in the Agency;
- if an reviewer has worked in a HEI that is strongly competing with the HEI under review or in a competing agency.

Polemical conflict could occur if an reviewer is lacking sympathy to the HEI activity policy or to internal approved regulations of the HEI. Besides, a conflict of interest could occur if the Agency staff or reviewers suggest to the HEI under review now to eliminate the drawbacks of the quality control procedure or of documentation preparation that have been identified by the reviewers' team. To avoid such a conflict of interest, the parties shall follow the assessment procedure. The HEI under review is responsible for the submission to the HEI self-assessment and education programs documents, and the reviewers' team is responsible for assessing the quality assurance system basing on the provided documents and gathered evidence in the HEI. When participating in these processes the Agency staff should strictly comply with the job descriptions and the Agency basic documents.

The Agency maintains a record of all the signed Reviewer Independence Confirmation forms. The Agency also registers all cases conflicts of interests and disagreements.

4. Conclusion

The methods of work with reviewers applied in the Agency are constantly reviewed. The Agency studies carefully the new materials concerning the reviewers work which appear on the websites of the European Association for Quality Assurance in Higher Education (ENQA) and leading European agencies. Also Agency has strong procedures of internal quality assurance which it regularly implements to ensure its work quality.

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CONSIDERATIONS ABOUT DIFFERENT FRAMEWORK STANDARDS FOR THE ACCREDITATION OF ENGINEERING PROGRAMS IN TECHNICAL HIGH EDUCATION

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Abstract

Accreditation of study programs or institutional gives formal recognition that the entity is competent to carry out specific activities. In this paper are presents two international framework standards for accreditation, ABET and EUR-ACE, one from United States and another from European Union, with intended purpose to demonstrate the equivalence between the main criteria and the main indicators utilized for quality assessment.

Key words: quality assessment, accreditation, student outcomes.

1. New interest in External Quality Assurance in Technical High Education

One of the reasons for the increasing attention to quality and quality assessment in the entire world is the change in the attitude of governments regarding higher education policy. It means that society requires accountability and quality assurance and governments are willing to grant more institution autonomy, provided quality is assured.

In some cases a threshold quality may be required before a study program an a University can be accredited. After implementation of a new Romanian Educational Low from February 2011, the comparative quality of different programs is sought because the Romanian government wants to know where to allocate money or when relocation is necessary.

Romanian Government is interested in a real Quality Assurance in High Education because it has a constitutional obligation to assure the quality of education and because it is called to account to parliament for the money spent on higher education. For the Government quality Assurance in Educational processes collecting as much data and objective information as

possible with regard to the performance of the higher education institution and as much objective measurement of the quality.

But for the appreciation for quality are necessary a set of performance indicators. In the world there is many national or international Accreditation Body's that use different framework standards and indicators. In this work shall be presented some framework standards from United States and European Union.

2. Different framework standards for Accreditation

As definition "Accreditation" is a procedure (same of activities) by which an authoritative body gives formal recognition that a entity (study program, University) is competent to carry out specific activities (will meet the required quality standards). Generally speaking, accreditation is a non – governmental, peer- review process that assures the postsecondary education students receive.

Education institutions or study programs volunteer or compulsory to undergo this review periodically to determine if certain criteria are being meet.

As is already mentioned is presented here two framework standards for accreditation: ABET-Accreditation Board for Engineering and Technology, and, EUR-ACE-Framework Standards for the Accreditation of Engineering Programs.

Mentions here some advantages of accreditation:

- Accreditation helps students and their parents to choose quality university study programs.
- Accreditation enables employees to recruit graduates who know they are well-prepared.
- Accreditation is used by registration, licensure, and certification boards to screen applicants.
- Accreditation gives universities a structured mechanism to assess and improve the quality of their study programs.

2.1. Accreditation board for Engineering and Technology

ABET is responsible for the specialized accreditation of educational programs in applied science, competing, engineering and technology. ABET accreditation is assurance that a study programs from an University, meets the quality standards established by the profession for which it prepares its students.

An accredited engineering program must meet the quality standards set by the engineering profession.

Criteria for Accrediting License Engineering Programs are these:

1. Students;
2. Program Educational Objectives;
3. Student Outcomes;
4. Continuous Improvement;
5. Curriculum;
6. Faculty;
7. Facilities;

8. Institutional support.

Criterion 1 Students

Student performance must be evaluated and student progress must be monitored to foster success in attaining student outcomes, thereby enabling graduates to attain educational objectives. The program must have and enforce procedure to assure that students who graduate meet all graduation requirements.

Criterion 2 Program Educational Objectives

The educational study program must have published and documented the main objectives that are consistent with the mission of the university and procedures for periodic review and revision of those.

Criterion 3 Student Outcomes

The study program must have documented student outcome that prepare graduates to attain the program educational objectives. The main student's outcomes are:

- An ability to apply knowledge of mathematics, science, and engineering.
- An ability to design and conduct experiments, as well to analyze and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- An ability to function an multidisciplinary teams
- An ability to identify, formulate, and solve engineering problems
- An understanding of professional and ethical responsibility
- An ability to communicate effectively
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- A recognition of the need for, and an ability to engage in life- long learning
- A knowledge of contemporary issues
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Criterion 4 Continuous Improvement

The study program must use assessment data for regular evaluations and the results must be systematically used to effect continuous improvement of the program.

Criterion 5. Curriculum

The faculty that manages the study program must ensure that the program curriculum devotes adequate attention and time to each component, consistent with the outcomes and objectives of the program

The professional component must include:

- One year – mathematics and basic science;
- One and one half year of engineering science and engineering design;
- A general education component that complements the technical content of the curriculum, and engineering practice.

Criterion 6 Faculty

The faculty staff must be sufficient number and must have the competencies to cover all of the curricular areas of the study program

Criterion 7 Facilities

Classroom, offices, laboratories and associated equipment must be safe and adequate to support attainment of the student adequate, all equipment must be available, accessible and systematically maintained and upgraded

Criterion 8 Institutional support

Institutional support and leadership must be adequate to ensure the quality and continuity of the program.

These criteria are completed by a set of general instructions for preparation of the self-evaluation report.

2.2. EUR-ACE Framework standards for the accreditation of engineering programs

The European accreditation system is based on a set of common European Framework Standards for the accreditation of engineering study programs, that provide a common reference framework which add a European dimension to assist national accreditation procedure and on the other hand provide guidelines to implement accreditation procedures in countries where none is yet in force, in order to guarantee to quality of study programs and facilitate national and trans-national recognition.

2.2.1. Knowledge and Understanding

The underpinning knowledge and understanding of science, mathematics and engineering fundamentals are essential to satisfying the other program outcomes. Graduates should demonstrate their knowledge and understanding of their engineering specialization, and also of the wider context of engineering.

2.2.2. Engineering Analysis

Graduates should be able to solve engineering problems consistent with their level of knowledge and understanding, and which may involve considerations from outside their field of specification. Analysis can include the identification of the problem, clarification of the specification, consideration of possible methods of solution, selection of the most appropriate method, and correct implementation. Graduates should be able use a variety of methods, including mathematical analysis, computational modeling, or practical experiments, and should be able to recognize the importance of societal, health and safety, environmental and commercial constraints.

2.2.3. Engineering Design

Graduates should be able to realize engineering designs consistent with their level of knowledge and understanding, working in cooperation with engineers and non-engineers. The designs may be of devices, processes, methods or artifacts, and the specifications could be wider than technical, including an awareness of societal, health and safety, environmental and commercial considerations.

2.2.4. Investigations

Graduates should be able to use appropriate methods to pursue detailed investigations of technical issues consistent with their level of knowledge and understanding. Investigations may involve literature searches, the design and execution of experiments, the interpretation of data,

and computer simulation. They may require that data bases, codes of practice and safety regulations are consulted.

2.2.5. Engineering Practice

Graduates should be able to apply their knowledge and understanding to developing practical skills for solving problems, conducting investigations, and designing engineering devices and processes. These skills may include the knowledge, use and limitations of materials, computer modeling, engineering processes, equipment, workshop practice, and technical literature and information sources. They should also recognize the wider, non-technical implications of engineering practice, ethical, environmental, commercial and industrial.

2.2.6. Transferable Skills

The skills necessary for the practice of engineering, and which are applicable more widely, should be developed within the program.

2.3. Criteria and Requirements for study program assessment

Each engineering program that follows to be accredited must be consistent with legal national and responds to the following criteria:

- Needs, objective and outcomes
- Educational Process
- Resources and Partnerships
- Assessment of the Educational Process
- Management System

2.3.1. Needs, objective and outcomes

The study program must have established education objectives consistent with the mission of the university and with the needs of the interested parties and program outcomes cover the following items.

2.3.2. Educational process

The educational process must be planed and delivered to ensure the achievement of the program outcomes, and examinations, projects and other assessment methods are designed to evaluate the extent to which students can demonstrate achievement to those.

2.3.3. Resource and Partnership

The faculty that manage the study program must demonstrate that Academic and support staff, facilities, financial resource, are adequate to accomplish the program outcomes and the partnership eighth interested parties contribute to accomplish program outcome, and facilitate the mobility of the students.

2.3.4. Assessment of education process

The students enrolled in the study program must have the right knowledge and attitude to achieve the program outcomes in the expected time, graduates enter an occupation

corresponding to their qualification and stakeholders confirm the achievement of the program's educational objectives.

2.3.5. Management system

Faculty and decision making processes must be adequate to accomplish the program outcomes and must have implemented a quality Assurance system that assure a continual improvement of the program and periodically re-examined of the objectives and educational process.

3. Comparison between ABET and EUR-ACE Framework standards

Comparison between ABET and EUR-ACE Framework standards it's put together the requirements of the ABET and EUR-ACE, table 1.

Table 1 . Comparison between ABET and EUR-ACE

ABET	EUR-ACE
1. Students	1. Needs, objective and outcomes
2. Program Educational Objectives	2. Educational Process
3. Student Outcomes	3. Resources and Partnerships
4. Continuous Improvement	4. Assessment of the Educational Process
5. Curriculum	5. Management System
6. Faculty	
7. Facilities	
8. Institutional support	

The core requirements of the two systems of assessment are student outcomes and continuous improvement

Table 2 . Student outcomes

ABET student outcomes	EUR-ACE student outcomes
• An ability to apply knowledge of mathematics, science, and engineering.	• Knowledge and Understanding
• An ability to design and conduct experiments, as well to analyze and interpret data	• Engineering Analysis
• An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability	• Engineering Design
• An ability to function in multidisciplinary teams	• Investigations
• An ability to identify, formulate, and solve engineering problems	• Engineering Practice
• An understanding of professional and ethical responsibility	• Transferable Skills
• An ability to communicate effectively	
• The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	
• A recognition of the need for, and an ability to engage in life-long learning	

• A knowledge of contemporary issues	
• An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.	

4. Conclusions

Accreditation helps all the interested parties chose quality university study programs. In the same time accreditation gives universities a structured mechanism to assess, evaluate and improve the quality of their study programs. The both systems looking for continuous improvement and for student outcomes and generally speaking on focuse upon the same indicators. The EURACE Framework insists on the differences of student outcomes in the level of First and Second Cycle accredited engineering programs.

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THE IMPORTANCE OF INDICATORS FOR MEASURING PERFORMANCE IN HIGHER EDUCATION

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Abstract

Evaluate teaching is a complex task, because this activity meets multiple objectives that are not all directly and immediately measurable. In an area as easily quantifiable, indicators may not be a pale reflection of reality or, worse still, generate perverse effects have eyes only for some partial indicators in purpose and in imperfect its measure might reduce the quality of education delivered. Although rankings raise questions of method, their comparative nature is an element of transparency and, therefore, understand the meaning of fault classifications, taking account: the producing methodology classification and its motives; the audience; the unit of comparison (schools ranking, ranking by discipline or interdisciplinary classification of degrees, research units, possibly ranking of countries ...); the indicators used and their method of production; selected weights; the significance of differences between institutions and between countries. To examine the fault classification is identifying good practices, that is to say set a framework, by providing answers to questions regarding: the purpose of classification; types of clients; principles determinaters; the unit of comparison; the least bad method of developing a ranking.

Key words: education, indicators, labor market, ranking, strategy.

1. The impact of higher education on the civil society

Ranking aims

Higher education is now one of the keys to competitiveness, quality succeed provider instruments of development. The emergence of international rankings of universities and their tremendous success in the media are a symptom of the growing competition that will deliver the systems and institutions of higher education and research.

The impact of university rankings on actors' behavior is demonstrated by several studies, performed primarily overseas. The rankings are aimed in fact to a diverse audience directly - students, prospective students and their families to help them make their career choices - or indirectly referred - companies hiring young graduates, the state, as well as other donors, in order to optimize the allocation of resources. The universities themselves use it to evaluate their potential partners through trade agreements or double courses, more and more frequent. International comparisons will play an increasing role in the future by contributing to the structuring of international networks.

Higher education in the Lisbon strategy

Largely inspired by the rise of new public management in state reform, and by the impulse of the new method of European governance, especially after the EU summit in Lisbonⁱ, the objectification quantitative performance today is definitely one of the principal dimensions of public policy research and higher education. It is, in particular, in the Community framework for the development indicators has become an essential mode of public action. The "Lisbon strategy" is thus based on the practice of benchmarking, which relies on the inherent virtues of comparison and the search indefinitely "best practices" in order to transform an incentive policy.

The field of higher education and, above all, research is at the heart of this strategy, with the desire to build a "knowledge economy" highly competitive, making possible the growth, investment, job creation etc. Associated indicators are very diverse but converging on the need for an economic business case and specifically market research. Measured in the different countries, these indicators can at least theoretically be reflected at the regional level, even at an even more restricted. They constitute a policy framework and cognitive prégnant, in which elaborated national strategies and, increasingly, regional. The measurement of performance of universities leads to increased bid evaluation criteria "economic" in the context of neo-liberal domination and a vision of ever closer economic efficiency, export market sector and tends to symbolically bring structures and practices of a normative vision after it. Certainly, the pursuit of profit and maximization of "shareholder value" (again without any specific meaning in the context of "public service") are not the stated objectives of the institutions, even in the context of increasing fiscal autonomy.

Other measures "economic" necessary in a much more explicit at the moment are "indirect economic": the employability of students provides information about the ability of a facility to produce human capital, the number of patents indicates that it is efficient in terms of applied research focused on the productive sector, so he actually participates in the knowledge economy, the number of companies created by teachers or former students may give an indication of the contribution of the institution to innovation or economic competitiveness, two central categories of the dominant discourse, however, that raise many problems in measurement. The transmission of "knowledge" (or "competence", according to a sliding more and more common) is difficult to measure directly without the implementation of a system of cognitive tests (eg on the model of the PISA level of secondary education), which does pose many methodological problems, one of the formal procedures for evaluating academic work as teacher is now passing exams and degrees, which is (basically) on the scores of teaching units.

Specifically, the dominant indicator here is the probability of obtaining various degrees (defined as the ratio of the number of graduates enrolled). This indicator is actually difficult to interpret, a higher success rate can also mean a change in the internal standards of evaluation (eg, the introduction of a system of "compensation" for the rating units teaching) a transformation reflecting increased efficiency of the system and an *improvement* of student performance. This structural ambiguity is not affected by the increased objectification quantitative performance.

Types of strategies

Two opposing strategies can indeed theoretically lead to improved performance on this indicator: a more *expansionist* and *lax* in evaluation of knowledge (which would at the same level of access, to make it easier receive credit and degrees), or conversely, a more "selective" and "restrictive" based on the introduction of barriers to entry or policy orientation in higher education more restrictive. The pressure quantitative objectification can lead to behavior "opportunistic" or various avoidance strategies.

Concern the recent rankings in the field of higher education stems from the increasing attention given to this level of education in a context of globalization causing increased competition between countries but also between schools, because that we consider that higher education plays a crucial role for economic development.

The globalization of education is not a residual phenomenon schedule or with respect to the globalization of economies and plays a central role instead. In a context where the advanced economies have no other choice than to remain competitive building a "knowledge economy", according to the terms of the Lisbon strategy, the quality of higher education systems and research becomes a major factor of differentiation is an engine that has the effect of creating comparative advantages propel the national economy instead be a hindrance if the performance is not the expected level.

While consolidation of primary and secondary education is needed catching up, by imitation, for developing countries, higher education is an important factor of economic competitiveness for the most advanced countries, which must direct their efforts towards the innovation.

2. Education indicators proposed by international and national institutions

International standard classification of education

UNESCO created the first international standard classification of education during the 1970s. The current revision, is "an instrument suitable for assembling, compiling and presenting statistics of education both within individual countries and internationally. " The International Standard Classification of Education distinguishes the following levels of education: pre-primary education; primary education or first stage of basic education; first stage of secondary education or second cycle of basic education; second stage of secondary education; post-secondary non tertiary; tertiary education focused on the acquisition of practical skills, technical and professional to direct entry into the labor market; tertiary education to acquire the skills needed to secure access to programs of high quality research; second stage of higher education, leading to an advanced research qualification.

For secondary education, the Ministry of Education in every Member State publishes annual indicators of success through high school based on the results of a national exam, the baccalaureate. These indicators are: the rate of success in the baccalaureate, the rate of access to the baccalaureate, the proportion of graduates among the leavers. These rates are compared to the rates "expected" based on the characteristics of students, thereby highlighting the contributions or the real "value added" of a school, considered the ultimate goal of this level of education. Such an approach is not possible for higher education. If success rates are not without interest, especially for students looking for guidance, they can not however be an evaluation tool. In fact, existing indicators are many, but they are insufficient by themselves. Taken together, they form just a "body of evidence. It is therefore important both that the published indicators are totally transparent, and, secondly, that their exact meaning is not distorted by a media magnifying effect.

Utility of education institutions classification

The institutional and functional (education, industrial policy, competition policy ...) is more favorable to economic growth depending on the degree of development of a country, that is to say according to the weight of technological development. This weight is measured by the ratio of total factor productivity (industrial capital, human capital) in the analysed country and the

United States, considered the most developed system. When the difference is considerable, the country has more interest in adopting a strategy of imitation, based on investment in existing technologies, funding for innovation is proving too costly and a comparatively low cost.

Due to imperfections in the credit market, companies already have in place at this stage, more resources to undertake these investments. A state intervention in their favor, with subsidies, or by limiting competition, is justified because it allows companies to recoup their investments, and the economy to grow further. This protection is no longer justified when it results in creating an annuity in favor of incumbents and prevents new firms, more efficient, to enter the market. The strategy based on investing in existing technologies is a catch-up strategy that can not be continued too long without harming growth, because it is not suitable for innovation. There is a developed threshold at which it becomes desirable to adopt a new strategy based on innovation. Otherwise, the country may be trapped in a "trap" of convergence and not be overtaken by countries that eventually took off later, but then followed a more appropriate strategy.

Research and innovation are more critical to a successful economy, or lack of selection between firms is more costly, so it becomes desirable to encourage the emergence of young companies, with a hand of highly skilled. In this context, the composition of human capital becomes a key to growth. An increase in the stock of skilled labor has a positive impact especially on the latter's economy beneficie advanced technology. Accordingly, there is a threshold beyond which development to stimulate growth, it should emphasize investments in university education. The economic functions of higher education prove the correlation between economic growth and growth in the number of people who hold a diploma.

3. The quality of higher education

Direct and indirect higher education effects on grows

At the same time, the quality of higher education is now considered a major challenge, thus the authoritative officials believe that the university issue is now too important to be left to university. Current theories of growth stress a strict correlation between higher education and economic growth through increased human capital producing increasing returns and positive externalities, eg: if education increases productivity, it also acts as a signal to identify those most gifted or more employable, directing students to the best channels of prestige; the causal link between education and growth is inverse. The higher the general level of skills grows, it becomes more risky not to access to higher education. Jobs previously open to non graduates now require a degree, even though their nature has not fundamentally changed, leading to a phenomenon of over-qualification of the workforce, without direct positive effect on growth. Finally, the increasing number of students increases the number of teachers, usually accompanied by a deterioration in their working conditions and wages, the risk of making the profession less attractive and reduce quality of education.

In consequence, as the focus on the percentage of people accessing a diploma of higher education or the number of years of study may lead to inappropriate public policy. However, one can identify a positive relationship between education and growth in three ways: firstly, the development of education increases productivity in some cases, but in different situations across countries and over time, so that one can not deduce any general rule; on the other hand, several studies show that the development of scientific studies, especially mathematics, is an advantage in developed countries, in the context of booming information technology and communication; finally, the existence of innovative research in cooperation with business is a positive factor for growth.

Higher education is therefore a growth lever to actuate appropriate manner based on predefined qualitative targets. The role of higher education to the economy is accompanied by a strong appeal to this level of education, leading to increased demand. As strong incentives for individual study and according to human capital theory, the decision to pursue is the result of optimizing economic behavior: an individual will study a further year until the expected financial gain from this academic year will be equal to its cost. The social role of higher education is just as important as economic role. Thus, according to studies by the OECD, the benefits of pay associated with a higher level of education have not declined because of the increasing number of students. The advantage afforded by the average wage level relative to a level equal to the second training cycle is over 25% in all OECD countries. Eg, it varies in 2005 from 26% in Denmark to 115% in Hungary. In France, this gain is estimated at 44%, and in United States, 75%. Employment rates are also significantly higher among graduates of higher education, the gap between high school graduates was 9 percentage points on average in OECD (also in 2005).

Economic and social gains produced by higher education

A synthetic way to present these gains is to calculate the internal rate of return on investment in education. The internal rate of return of an additional year of education beyond the secondary level is estimated on the basis of increased earned income after taxes as a result of rising educational attainment, net of costs private studies that have incurred (personal expenses and lost profits). For example, in 2005, the rate has averaged 8.5% in UE15 countries, varying from 5% (Italy) to almost 14% (Ireland). This rate of return depends mainly provides the advantage that additional year of education on the labor market, namely: a higher salary after taxes; greater likelihood of being employed throughout his life.

To a lesser extent, the rate of return is affected by the costs of higher education, namely: a direct cost (fee); an opportunity cost (immediate waiver of a salary).

Higher education can not only train individuals and thus increase the level of qualifications, but it also promotes, through research, accumulation and dissemination of knowledge. It thus enables not only the acquisition of new technologies but also their social diffusion. This level of education thus provides several economic functions: it forms the economic agents, thereby increasing the level of human capital; it helps to develop innovative research, ensuring the dissemination and development of knowledge; regarding higher education and research.

In advance, it can be presented several levels of assessment: at the macro level, we can evaluate the overall performance of a national system of higher education and research (number of graduates, number of patents filed, number of internationally recognized publications, citations etc.). Across the state budget, presented under the framework provided by the Annual Budget Law, performance indicators are calculated for each program referring Research and Higher Education, which leads to distinguish the performance of higher education from those of research institutions, themselves divided by areas of research. At each institution, assessment will focus on the strategy set and the means used to serve that strategy; within each institution, a more detailed assessment may include: training, that is to say an entire curriculum leading to the award of a diploma, or on lessons individually.

Practice fit the national and international rankings of higher education institutions in the landscape of academic evaluation (called, in English, "ranking") appeared in the U.S. thirty years ago. She has developed considerably in recent years with the emergence of international

rankings are much more difficult to achieve because of the heterogeneity of national higher education systems.

The evaluation of higher education is, as education on which they must have a beneficial effect, a good producer of externalities, that is to say positive effects for all economic agents, but not taken Supported by the market and was therefore not subject to monetary valuation. The evaluation has one of the attributes of public goods, namely non-rivalry, since its consumption by an agent does not preclude consumption by another agent for a zero marginal cost.

Conclusions

The future of higher education in both developed and developing countries has stressed the need for identifying the gaps in information and systems to compare with the internal system of higher education development up in the United States. Also, it has indirectly demonstrated the drawbacks of a purely private ownership of this issue and the need for public regulation, in accordance with relevant actors, in seeking to establish a *rule of the game* accepted. If the transparency of information on higher education is problematic in all Member States of the European Union, it is even more so in Romania, since our country has no harmonized information system, to public or private, which would include all relevant information to students, researchers, all the actors from academia as well as companies and governments. This gap creates harmful asymmetric information: at national level, it affects the allocation of resources both human and financial; internationally, it slows the arrival of students and researchers in our country and weakens the visibility of our research. Indicators exist, but they are not currently designed in logic of public information. These indicators are generally not specified by institutions. They relate more to the performance evaluation of the system of higher education and research as a whole and the assessment of individual establishments. This is particularly the case of performance indicators of higher education system of the state budget. The logic of performance must nevertheless be articulated at all levels of making decision, which involves the institutional decline, with possible consequences on public financing. This logic of performance should also be more directly serve citizens. The current deficit of information could be filled by some more centralized control indicators and publish a number of data related to education, research and other aspects of university life, with the focus on hitherto neglected aspects such as the *value added* of institutions and their impact on territorial development.

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MEASURING LEARNING OUTCOMES OF COMPETENCES AND ENGINEERING STUDENT WORKLOAD AS PART OF THE INSTITUTION'S QUALITY SYSTEM

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Abstract

The Internal Quality Assurance System designed at the Universidad Politécnica de Madrid's Facultad de Informática includes strategic goals as the "measurement of the performance of the public higher education system" and the "improvement of teaching and research and the management of higher education institutions". This paper describes partial mechanisms used, as part of a process, to assure the quality of each of the building blocks of the educational programmes, including the objectives of the degree, and the developed competence. In particular, we analyze how, through the Internal Quality Assurance System, students attained overall outcomes to improve the study program and how to measure learning outcomes from a key competence of this program.

Key words: Quality Assurance of Higher Education, learning outcomes, rubrics.

1. The design of the internal quality assurance system from quality policies

Increasing autonomy of Higher Education Institutions is the primary responsibility for quality. It is essential that the development of a European Quality Assurance (QA) dimension accompanies and extends institutional autonomy in order to ensure that QA is not merely window-dressing and a compliance exercise. Quality assurance systems need to be flexible and embrace this diversity in order to ensure that higher education serves effectively society [1].

The quality policies drafted by the Facultad de Informática of Universidad Politécnica de Madrid (figure 1) were developed as part of the work completed over the last two years through participation in the first call of the AUDIT programme, an initiative aimed at providing guidance

for higher education institutions on the design, evaluation and certification of their internal quality assurance system (IQAS). Participation in the programme was considered a great opportunity for institutions to deploy a comprehensive and integral quality system for their activities and management.

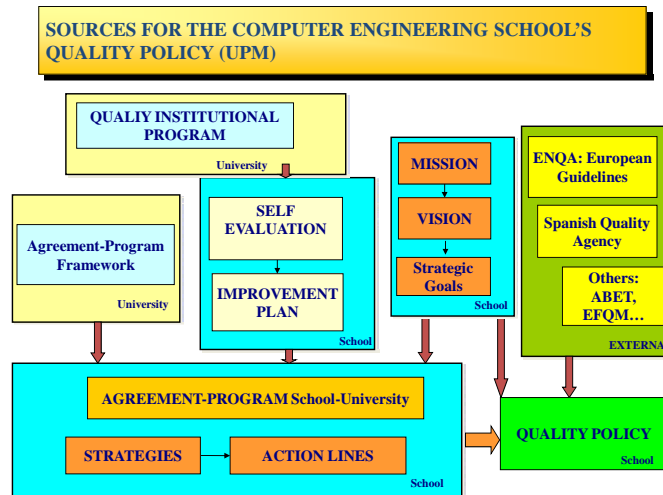


Figure 1. Quality Policy sources for a Spanish engineering school in a public university

Accordingly, the Facultad de Informática has designed a system that should achieve and maintain a set quality level for the services that it offers, and has, more importantly, taken the determination to put into place mechanisms to assure that, in conformance with the developed quality policies, a culture of continuous improvement gradually takes hold.

The IQAS documentation is composed of a Quality Handbook, Processes and Implementing Appendices. The steps taken were briefly as follows:

- First, we diagnosed quality by identifying the currently available evidence and existing procedures.
- At the end of the diagnosis, the Office of the Associate Dean for Quality and Strategic Planning started to develop the Quality Handbook based on the detected opportunities for improvement and weaknesses. From the analysis of the diagnosis, a list of procedures performed at the Facultad de Informática was drawn up.
- Then a preliminary process map was drafted containing the identified procedures. As the design of the IQAS advanced, this map was added to until it covered all the activities carried out at the Facultad de Informática.

The main idea underlying the project was to design an IQAS covering all the Facultad de Informática's activities. Once implemented, this IQAS was to be the basis for deploying genuine process management, designing a process map with the future prospect of deploying a comprehensive Facultad de Informática process management system.

First, all the procedures conforming to the AUDIT Programme directives were added [2]. In the future, we will develop the remainder, including procedures corresponding to quality policies

complying with other Facultad de Informática strategy sources, as well as deploying, reviewing and updating the procedures that are covered in the IQAS in place.

The designed IQAS was completed and then certified by ANECA. We are now in the process of implementing the processes.

The project was led by the Facultad de Informática's Executive Board. All the actions were accompanied by training aimed at making the job of the Facultad de Informática IQAS development stakeholders easier. The UPM's Planning and Evaluation Department, attached to the UPM's Vice Rectorate of Academic Organization and Strategic Planning, provided coordination and guidance.

This paper explains how the Universidad Politécnica de Madrid's Facultad de Informática one of the strategic process (section 2) from the internal quality assurance system with two kind of results: the overall outcomes attained by students to improve the study program (section 4.1) and how to measure learning outcomes from a key competence of this program (section 4.2). The design of the experiment is explained in section 3.

2. An example of key tasks in a strategic process of this Institution: The study targeting subject coordinators

Promoting and assuring the quality of Spanish higher education institutions is an important part of higher education policy, the goals of which include the "measurement of the performance of the public higher education system" and the "improvement of teaching and research and the management of higher education institutions". Higher education institutions should set out to improve the training of their graduates to assure that they are capable of adapting to the demands of both society and the scientific and technological system.

The general procedure for assessing students' learning progress and outcomes in the Internal Quality Assurance System in place at the Universidad Politécnica de Madrid's Facultad de Informática (SGIC-FIUPM) is set out in the Educational programme outcomes measurement and improvement process, PR/ES/2/003.

This process describes the mechanisms used by the Facultad de Informática to assure the quality of each of the building blocks of the educational programmes, including the objectives of the degree, and the developed competences, as well as to properly maintain and remodel its educational offer, and approve, control and review the above programmes and their outcomes.

As part of one of the tasks of this process, the Office of the Associate Dean for Quality and Strategic Planning drafts a report containing the results for each degree offered by the Facultad de Informática. This report is then submitted to the Dean of the Facultad de Informática and the Expert Committee on Degrees.

In view of the volume of data that need to be gathered, the report is, in practice, composed of a series of studies. One of these studies is called the "Student workload study". The purpose of this study is to serve as an instrument of analysis, based on objective data, to help the higher education community to assess the learning progress and outcomes of students enrolled in the 2009/2010 academic year in any first- or second-year subject of the degree of Bachelor in Informatics Engineering taught by the Universidad Politécnica de Madrid.

This study sets out not merely to list the aggregate student grades but also aims to analyse the many factors that can have an impact on student attainment.

3. Methodology of the study:

This study is based on information provided by students in a weekly form, which must be completed online via during the 20 weeks that constituted the first semester of 2010/2011. In the last week a new question was added to form which students were asked about the overall assessment of the various activities of the subjects..

For analysis of second-year course must be remembered that there has been a significant increase respect the number of participating students regarding the study that was conducted in the second semester of 2009/2010.

3.1. Population and participation level:

The study population was composed of first-semester students of the 2009/2010 academic year enrolled in the 10II degree programme. As regards participation, note that the percentage cooperation by weeks ranged from 8% in the first and last week of the semester, mainly explained by the commencement of the registration and examination period, to 32%, reached in week 7 (from 18/10/2010 to 24/10/2010).

In terms of overall participation we can say that 299 students have participated in this assessment, which represents 46.79% of 639 enrolled in the 2010/2011 academic year. Of the 299 participants only 198 students meet the minimum requirements (the form must be completed at least 8 weeks) for the analysis of individual performance.

The percentage of participation valid for the analysis of individual performance (minimum contribution of 8 weeks) compared to total enrollment represents 31%. We can also say that the participation rate valid compared the total number of participants in the study represents 66.22%.

In terms of participation by subjects (the students have completed as mean activity related to the subject during the 20 week study), that this participation is in the range of 65%, for students enrolled in the subject Procesadores de Lenguajes, to 13% of students enrolled in the subject Programación I.

4. Analysis of the results

4.1. The overall outcomes attained by students

The study aims to analyze the overall outcomes attained by students in each subject for which they enrolled, placing the emphasis on aspects such as a comparison between the expected workload in hours set out in the subject learning guides and the actual workload in hours recorded by students for each subject; a comparison between the hours of work planned by students and the actual hours employed; a rating by students of each analyzed subject and, finally, an analysis of the reasons given by students for not completing the weekly activities schedule or failing to attend lectures. Finally, an analysis of student attainment fitted to the model developed by the Office of the Associate Dean for Quality and Strategic Planning is shown. We conclude with a short graphic report on the key aspects of each subject and the educational activities they each contain.

This study contains the following sections related to the overall outcomes of the degree courses:

- **Comparison of the expected workload and actual workload:**One of the key issues to be analyzed is the comparison between the hours that students recorded as having employed to acquire the competences required by each subject with the hours scheduled in the learning guides for each subject. There is no clear trend in all the subjects as to whether the hours spent by students will be fit or not at scheduled times in the tutorials.
- **Comparison of actual workload and workload planned by students themselves:** Planning is a methodical and reasoned decision made in the present with the definite aim of steering the future in the desired direction. Based on this definition, this section aims to analyze the students' ability to work effectively as an individual, organizing and planning their own work, independently or as a member of a team, making arrangements, plans and decisions, negotiating and solving conflicts, entering into relations and adopting a critical and self-critical attitude.

Data to emphasize is that students report us that they spend about 6% more actual hours of pre-planned in a specific subject, and by contrast, in another one planned hours are 10% higher than the recorded hours.

- **Reasons given for not completing scheduled activities and not attending lectures:**A noteworthy factor to be analyzed to explore the failure to meet the planned schedule is to examine the main reasons given by students for not completing the scheduled activities or not attending lectures. According to data supplied by the students themselves, over 15% of students participating in the study confess us to not having completed a scheduled activity or not having attended lectures in every single week of the first semester analyzed (weeks 1 to 3 and week 20 were omitted from the analysis because there were few contributions).

An important characteristic is that for weeks 7, 8 and 9 (second half of October and first week of September) about 50% of students participating in the study admit to having failed a scheduled activity or have not attended school.

Analytical observation of data from this section shows that the poor distribution of the burden of other subjects is the main cause alleged by the students (as in the previous report of this study for the second semester of 2009/2010 academic year) in a percentage exceeding 30% of all the reasons given, followed by poor distribution of tasks of the same subject, representing 22% of all motivations expressed. Comment that within the category "Other" are framed reasons as varied as in sports, entertainment, the proximity of exams, completed ahead of time or fatigue / laziness / boredom.

- **Overall rating by subject (scale 0-40).** A new question was added to the questionnaire of the last survey administered at the end of the term. This new item aimed to have the students rate, on a scale of 1 to 10, the extent to which each scheduled educational activity helped them to achieve the planned learning outcomes, where 0 indicates not at

all helpful and 10 extremely helpful. The rating by subject is the sum of the average ratings for the respective educational activities, taking into account only the average ratings of “theory classes”, “individual independent study and work”, “practical classes” and “individual and group practical assignments”, as they are the activities common to all subjects. Therefore, the maximum rating per subject would, in theory, be 40 points.

- **Overall rating by activity (scale 0-10).** Another point that we considered worth analyzing was the overall student rating of educational activities, that is, the sum of the average scores given by students to each educational activity in the different subjects to discover if any educational activity at the Facultad de Informática has any particular defect. This analysis accounts for the average score given by students over the sum of average scores by educational activity for analyses subjects that have a score for the activity/subject combination in question. We assume that this analysis has weaknesses.

4.2. Measuring learning outcomes. The individual analysis model of student achievement

Weekly data obtained from the students let us contribute to the program assessment through one of its competences: “Ce 53/54: *Ability to work effectively as individuals, organizing and planning their own work independently or as part of a team.*”

Learning outcomes elaborated from this competence were:

- LO1. Check whether the student plans his activity or not.
- LO2. Check if the student takes corrective actions to the deviations between the time spent and planned.
- LO3. Verify the effectiveness of student use of working time.
- LO4. Check the efficiency of students in their use of working time.
- LO5. Value the effort in the time spent.

For the individual analysis of student achievement of this competence are taken into account only those students who have completed at least 8 weekly forms.

To complete the rubric associated to this Learning Outcome we elaborated performance criteria, i.e., specific, measurable statements identifying the performance required to meet the outcome. These are:

- **Work log.** Addresses LO1. The purpose of this calculation is to privilege students who have completed our questionnaire more weeks disproportionately to those who have completed it less frequently. The rating scale is 1 to 10.
- **Corrective actions.** Addresses LO2. The purpose of this calculation knows if corrective measures are taken after doing our questionnaires. By calculating the decrease in the deviation between planned and actual as the semester progresses, students who tend to reduce the gap will have better marks. The results should vary between 0 and 100, but exceptionally this can sometimes be overcome.
- **Performance.** Addresses LO4. The purpose of this calculation is to value the students who actually did better during the academic year. The time spent is measured not only

with respect to efficiency, but their effectiveness to undertake the work. To do this we will use the performance variable that is in the curriculum.

- **Added performance.** Addresses LO4. It assesses how the student has done in terms of its potential. The expected performance is calculated from the performance equation developed by the Quality Unit and takes into account the student previous marks.
- **Test on organization materials.** Covers LO3. It is a test on knowledge based on the materials provided to the student.
- **Efficient use of time.** Addresses LO5. It is intended to measure the result of a pupil as a function of the time she said she used compared to the behavior of her classmates.
- **Effort and dedication.** It covers LO 6. In this section we assess the fact that he spent considerable effort in all subjects. The total number of hours spent will be added and we would calculate the percentile of the student.

All these indicators may have different weights which vary both in terms of its importance. Depending on the year it can be set a different weight so that in the first and second years the effort itself can be more important and as we advance in the degree there is a push for more efficiency in the use of time.

5. Conclusions

Bearing in mind the low level of participation must be said that we must have some caution when analyzing the data and make inferences to the entire study population. Still we have taken steps to improve the quality of the information provided in this report: For example boosting quality data by eliminating data analysis by weeks of those weeks that have a limited number of contributions (barely 10%), which always coincided with the first three weeks, by the process of registration, and the last week of the semester, before the imminent start of the examinations. Regarding the degree of confidence the results we can indicate that we have used formulas to analyze the performance elaborated in previous studies which have provided interesting results. Regarding of truthfulness level we are aware of the possibility of insincerity on input from students, so those contributions distanced significantly from the pattern of his companions, and their own in contributions previous weeks, have been analyzed carefully. Finally comment that has been impossible to relate the students' reasons to the failure to carry out an activity schedule or attend class with the notes of these students by the lack of identification of these students in this question, as these responses are protected by Law 15/1999 Data Protection. We neither have been able to analyze the side effects of excess burden of a subject in one specific subject, as this information could not be extracted from the form used. Perhaps the reformulation of this question is necessary to extract more information for future studies.

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EXPECTATIONS OF STATE, MARKET AND ACADEMIA TO THE AIMS OF EXTERNAL QUALITY ASSURANCE OF HIGHER EDUCATION IN ESTONIA

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Abstract

In this article, the authors show the expectations of stakeholders to the aims of external quality assurance of higher education. The definition of stakeholders is based on Burke's (2005) accountability triangle where the three angles are academia, market and state. Looking for balance among these actors' expectations should be one of the objectives of higher education quality assurance schemes. Since 2010, the external quality assurance system in Estonia is revised. Accreditation of study programmes is replaced by institutional accreditation and external evaluation of study programme groups. This study is based on focus group interviews with representatives of academia, market and state to map their expectations about aims of external quality assurance in Estonia. The findings of this study pose several aims and different quality indicators which should be focused during development of new external quality assurance system in Estonia as well as in other countries using similar models.

Key words: external quality assurance, expectations of stakeholders, accountability, improvement.

1. Introduction

“Responding to state priorities, academic concerns, and market forces offers a challenge, not a choice, for higher education. Colleges and universities – private and public – must serve all but submit to none of these imperatives” (Burke 2005b: 296).

Besides the permanent challenge how to find balance between accountability and improvement, various scholars have started the discussions how to meet simultaneously the expectations of state, professional (academia, also called “academic oligarchy”) and market forces (see e.g., Burke & Associates 2005; Dill & Beerkens 2010). This approach is based on “The Triangle of Coordination” by Burton Clark (1983: 143) which has been transformed to “The Accountability Triangle” (Burke 2005a: 23). Clark suggests that academic quality could potentially be assured by professional self-regulation, which is “enforced” by government oversight, or by the

competitive market to ensure that institutions of higher education provide adequate service to consumers or stakeholders.

In the academic year 2010/2011 there was 6 public universities, 3 private universities and 24 applied higher education institutions in Estonia. There are 69 000 students in total, 74 % of them studying in public universities. As Estonian universities enjoy quite a high level of autonomy then the external quality assurance system is besides funding one of the few instruments enabling public authorities ('state') to influence the developments in the Estonian higher education sector (Vilgats & Heidmets 2011). Estonia is similarly to many other countries in Europe (see Westerheijden et al. 2007; Williams 2009) changing its higher education quality assurance system, replacing the accreditation scheme of study programmes with institutional accreditation (in Europe though the main instrument of institutional assessment is audit) and quality assessment of study programme groups, and aiming to move more towards encouragement of enhancement, however - concurrently keeping the institutions accountable and comparable.

The responsibility to work out principles and regulations for institutional accreditation lies on Estonian Higher Education Quality Agency (EKKA). As the legislator has not defined any objectives for institutional accreditation and quality assurance should always take into account the national context, i.e. it is 'country-sensitive' (Perellon 2007; Whitley 2008; Williams 2009), EKKA decided to survey the main stakeholders (representatives of state, market and higher education institutions) about their expectations to the external quality assurance of institutions and also about their understanding of 'quality'.

Hence, the main question of this study was:

What are the expectations of State, Market and Academia to the aims of external quality assurance of higher education?

The sub-question was:

What are the characteristics of 'quality' of a higher education institution for different stakeholders; are there any differences among them in favoring inputs, process or outputs?

The tasks in order to answer the questions were:

1. *analysis of the theoretical background/literature;*
2. *conducting an inquiry concerning the needs of the state, higher education institutions, and market, using the method of focus group interviews.*

2. Theoretical Framework

The Triangle of Coordination is closely related to the resource dependency theory (see Pfeffer and Salanick 1978) and explains how higher education systems are either dependent on authority (state) or on exchange (market). According to Clark, the two ends of the continuum in managing national higher education systems are state administration and market in their pure forms (1983; see also Whitley 2008). The two wings of state authority and market can be reshaped to a triangular model of state, market, and oligarchical forms of coordination as "academic oligarchy" "is omnipresent and lurking everywhere" (Clark 1983: 142). Each angle of the triangle represents the extreme of one form and a minimum of the other two, and positions within the triangle indicate combinations of the three elements in different degrees. The same triangle of actors bears also on accountability and quality assurance. Joseph Burke (2005a) has slightly modified Clark's triangle of *state authority*, *academic oligarchy*, and *market* and created an Accountability Triangle.

Looking for balance among these actors should be one of the main objectives of higher education quality assurance schemes. When accountability focuses only on state priorities, it may subject higher education to political winds, without taking into account academic concerns or market forces. Emphasizing mostly on academic concerns may cause disregard of public priorities and market needs, and reacting uncritically to market whims can reduce responses to public and academic necessities (Burke 2005b).

Academia, or “*Academic oligarchy*”, i.e. influential persons from various disciplines and institutions (Clark 1983), clearly assumes that only academics themselves can be responsible for defining and applying the rules in order to assure the quality of academic provision, i.e. academic sovereignty (Dill & Beerkens 2010). This is representing the *fitness for purpose* approach.

For the *market* – (potential) students and their families, as well as potential employers of the graduates - it is necessary to achieve effective consumer sovereignty through informed choice of academic provision. Quality assurance practices supporting market model are associated with e.g. rankings by various agencies (ibid).

The *state* – policymakers (Dill & Beerkens 2010) - influences quality assurance through articulation of specific standards for all study fields and/or for higher education degrees as a requirement or benchmark for all higher education institutions (ibid). Thus, *state*’s aim might be to get information whether HEI-s are meeting basic standards, determined by external bodies (Van Damme 2004: 132).

When looking at the tension ‘institutional improvement vs external accountability’, we can state that:

- the aim of *accountability* is 1) to ensure to the funders that the money has been used adequately; 2) to ensure that the core principles of higher education are not being disregarded; 3) to ensure to its (prospective) students that an appropriate educational experience is both promised and delivered; 4) to generate public information that funders can use to aid funding allocation decisions, and prospective students and graduate recruiters can use to inform choice (Harvey & Newton 2007);
- the aim of *improvement* is 1) to align learner-centered activities with policy and practice; 2) to engage students in learning; 3) to engage students in policy-, strategy- and practice-building processes related to the student learning experience; 4) to enable a reflective quality culture to be supported and developed through a framework of staff and student support structures (Davidson 2009).

The quality indicators can be roughly divided into following factors (Van Damme 2004; Westerheijden 2007, modified by authors):

- *input* - e.g. admission requirements, staff numbers and their qualifications, student selectivity rates, staff-student ratios, funding (per student), facilities (per student), number of study programs, planned student qualifications;
- *process* - e.g. a clearly defined strategic mission, institutional purposes and educational objectives, correspondence of educational objectives/learning outcomes to qualification-level descriptors, curriculum and student learning assessment development, programmed and real study duration, study load, student support, the presence of effective internal feedback procedures, student feedback on course delivery, alumni feedback on strong and weak points of the study program from the point of view of their early career;

- *output* – e.g. graduates' knowledge, skills and competences; graduation rates/drop-outs; time to degree; employment rates (in relevant job sectors).

In sum, *input* can be generalized as resources (both human and material/) available at the beginning of a process. *Process* means (inter)action(s) during which input is transferred to output. *Output* can be considered as the result of the process.

According to Pascarella and Terenzini (2005), the areas where faculty members have distinctive expertise and where their time and effort in external peer reviews logically should be concentrated are how the institution's processes of approving academic curricula, evaluating teaching and student learning, and assuring the validity of student assessment are integrated and improved. Thus, we can assume that in the frames of external quality assurance, *academia* prefers to focus on *processes* (e.g. curriculum and student learning assessment development).

For *market*, *reputation* becomes the main 'product' of exchange. Higher education institutions with a higher reputation improve their ability to attract faculty members, students and money (Astin 1985), thus – resources, i.e. *input*. In addition, *outputs* (graduates' employability etc), presented e.g. in various league tables (rankings), are equally important. Dill and Beerken suggest that university rankings are the primary market-oriented instruments for quality assurance (Dill & Beerken 2010). Hence, *market's* main interests related to external quality assurance is supposed to be above-mentioned *inputs* and *outputs*.

The potential focus of *state* is more complicated to define. Governments are responsible for society's development and tax-payers' satisfaction with public investments. Therefore, "dimensions of 'quality' in higher education that interest them in this regard include institutional contributions to economic development in the form of well-prepared graduates, contributions to knowledge consistent with identified state needs, and institutional responsiveness to the needs of the communities in which they are located" (Ewell 2007: 121). This suggestion meets the definition of *outputs*, although *state's* expectation to the aim of external quality assurance – to meet basic standards – suggests that state's interest may also involve *input* (resources) and *processes* (mission, curriculum development, internal quality assurance etc).

3. Methodology

Different definitions of quality aims and principles of resource dependency theory give rise to the following hypotheses concerning the aim of external quality assurance of higher education institutions:

Hypothesis 1. State's aim is to get information whether HEI-s are meeting basic standards, determined by external bodies.

Hypothesis 2. For market (prospective students and employers) the main aim is to get information about the academic provision to make informed choice.

Hypothesis 3. For academia, the most favored aim is 'fitness for purpose' approach.

Based on the theoretical approaches to *input*, *process* and *output* in higher education, the following hypotheses can be defined:

Hypothesis 4. For state, the characteristics of 'quality' of a higher education institution are related to input, process and output.

Hypothesis 5. For market, the characteristics of 'quality' of a higher education institution are related to input and output.

Hypothesis 6. For academia, the characteristics of 'quality' of a higher education institution are related to process.

For testing hypotheses we have chosen focus group interviewing as method for data-collection. Focus groups allow obtain „different perspectives in the same topic, in participants own words“ (Littoseliti 2007: 18). Moreover, unique perspectives can arise from interaction of group participants (Walden 2006).

While defining the sample, we decided to consider as „academia“ rectors of higher education institutions and academic staff with full-time employment. Determining the sample concerning „state“, we decided to set limits and include representatives of government, government offices and local government organizations. Defining sample for „market“, we included entrepreneurs and top executives of public and private firms and high school students. In terms of purpose of study no other limits were necessary. We also interviewed students to get information about their expectations to external quality assessment and their position in accountability triangle.

After selecting potential participants, we sent them an invitation to participate in focus group interview at a particular time and place via e-mail.

There were five focus groups interviews with representatives of „academia“ - one with rectors of higher education institutions (9 participants) and four with teaching staff from different types of institutions (22 participants). Two focus group interviews were conducted with representatives of „state“ (9 participants) – both of them included representatives of ministries and government offices, and leaders of local government (a mayor and a county governor). Five focus group interviews were conducted with representatives of „market“, three of them with entrepreneurs and top executives of public and private firms (16 participants) and two with high school students from different parts of Estonia (10 participants). In addition, there were two focus group interviews with students (11 participants) where the representatives from both universities and applied higher education institutions were present.

Approximate size of a focus group was 5 persons, overall 77 persons were interviewed, and duration of interviews was one hour. Interviews were conducted between October-November 2010 by two interviewers. The interviews with academic staff were conducted by four persons. The main reason for using more than one interviewer was to reduce possibility of impact of interviewer's personal opinion to participants and their answers, i.e. to assure the reliability of the study. The interview plan with background information of the study, interview rules and questions were introduced to all interviewers and by them to all participants.

In every focus group two main questions were asked:

- Which are the characteristics of 'quality' of a higher education institution?
- What should be the aim of external quality assurance of higher education?

Interviewers were not allowed to ask any additional questions, only re-phrase the question when discussion between participants did not start and also in some cases re-phrase the answers asking „Did I understand correctly that ...?“ or „Did you mean ...?“.

All interviews were transcribed. Qualitative content analysis with deductive category application was used for interpretation of interviews.

Finally, the analysis of interviews resulted in categorization of interviewees' perspectives about 'quality' of a higher education institution from the point of system theory (input, process, output). Only the answers that were agreed by all participants in the group were involved into the

analysis of results. Similarities and differences between different stakeholders' opinions about purpose of external quality assessment of higher education were outlined.

4. Results

For the representatives of *academic staff* the quality characteristics about research and development were clearly output-related: research grants, publications, citations. Concerning the study process, the main focus was on input and process: sufficient number of full-time teachers, competitiveness of teachers' salary, condition of infrastructure, transferability of bureaucratic procedures, and existence of analyses (e.g. students' progress) (see Table 1).

According to academic staff the aim of external quality assurance should be first and foremost to support the internal development of an institution, but also to guarantee credibility and comparability with other (foreign) institutions, and to (re)arrange the higher education "landscape" (named mainly by the representatives of public universities) (see Table 2).

Rectors of higher education institutions named the quality characteristics that can be classified as input and output: qualification of students (student candidates) and teaching staff, commitment of teachers, condition of infrastructure, happiness and successfulness of graduates, satisfaction of the market (employers), coherence between strategic objectives and existing means. The aim of external quality assurance should be assessment how an institution has achieved its objectives (i.e. fitness for purpose).

For *students*, quality was understood as qualification of teaching staff and condition of infrastructure (i.e. input), transferability of management, understandable academic policies, possibilities for flexible learning paths, recognition of prior learning, academic climate – collegiality between students and teachers, international involvement (i.e. process), also opportunities for social life (can be classified as input or process).

As the aim of external quality assurance students mentioned the following: to assess whether the institution does what it has promised (i.e. fitness for purpose), to assess whether it responds to expectations of the society, to guarantee credibility and comparability with other (foreign) institutions, to (re)arrange the higher education "landscape" (named mainly by the representatives of public universities), to give feedback what the institution should do for further development.

Employers emphasized the importance of results, i.e. output: what the graduate knows and is able to do, employment of graduates, foreign language skills of graduates. They also named 'reputation', explaining this as admission competition, notoriety of teaching staff, e.g. how many of them have won Nobel prizes (input), and institution's position in league tables (rankings, ratings) (input, output).

According to the employers, the aim of the external quality assurance should be: to inform the stakeholders about the credibility of the institution, to compare the institution with foreign universities/colleges, to (re)arrange the higher education "landscape", to assess meeting of validated standards.

High school students mentioned as characteristics of 'quality' of a higher education institution successfulness of the graduates on the labor market (both nationally and internationally) (i.e. output), good teachers, 'reputation' – explained as notoriety of teaching staff and admission competition (i.e. input), and flexibility of studies, e.g. individual approach to scheduling (process).

The aim of the external quality assurance should be: to assess meeting of validated standards, to compare the institution with other universities/colleges and to inform the stakeholders about the credibility of the institution.

For the representatives of *state* the quality meant reputation, including history and traditions, admission competition, recognition of study programmes, but also how contemporary and interdisciplinary study programmes are, involvement of employers in curriculum development, quality of practical training, institution's ability to prioritize and focus, qualification and commitment of teaching staff, international involvement (input and process), and successfulness of graduates (output).

The aim of the external quality assurance should be to (re)arrange the higher education "landscape", to assure that there is value for money, to assess fitness for purpose and fitness of purpose.

Table 1. Characteristics of quality

	Input	Process	Output
Academia	sufficient number of full-time teachers, competitiveness of teachers' salary, condition of infrastructure, qualification of students and teaching staff, commitment of teachers, coherence between strategic objectives and existing means	transferability of bureaucratic procedures, existence of analyses	research grants, publications, citations, happiness and successfulness of graduates, satisfaction of the market
State	history and traditions, admission competition, recognition of study programmes, interdisciplinary study programmes, qualification and commitment of teaching staff,	involvement of employers in curriculum development, quality of practical training, institution's ability to prioritize and focus, international involvement	successfulness of graduates
Market	admission competition, notoriety of teaching staff, institution's position in league tables	flexibility of studies	graduates' knowledge and skills, employment of graduates, institution's position in league tables
Students	qualification of teaching staff, condition of infrastructure, opportunities for social life	transferability of management, understandable academic policies, flexibility of studies, recognition of prior learning, academic climate, international involvement, opportunities for social life	

Table 2. Aim of external quality assurance

	Aim
Academia	to support the internal development of an institution, to guarantee credibility and comparability with other (foreign) institutions, to (re)arrange the higher education "landscape", to assess how an institution has achieved its objectives
State	to (re)arrange the higher education "landscape", to assure that there is value for money, to assess fitness for purpose and fitness of purpose
Market	to inform the stakeholders about the credibility of the institution, to compare the institution with foreign universities/colleges, to (re)arrange the higher education "landscape", to assess meeting of validated standards
Students	to assess whether the institution does what it has promised, to assess whether it responds to

	expectations of the society, to guarantee credibility and comparability with other (foreign) institutions, to (re)arrange the higher education "landscape", to give feedback what the institution should do for further development
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In sum we can conclude that *market* understands 'quality' of higher education institutions in terms of output (successfulness of graduates) and input (notoriety of teachers and admission competition). For *academia* the emphasis lies mainly on input, less on process and output (research results mentioned by teaching staff, and happiness and successfulness of graduates mentioned by rectors). *State* had the broadest view in valuing *both input, process and output*.

Characteristics repeated by various stakeholders were qualification and commitment of academic staff, admission competition, condition of infrastructure, international involvement, and successfulness of graduates.

Commonly mentioned aims for external quality assurance were to guarantee credibility and comparability with other (foreign) institutions, to (re)arrange the higher education "landscape" (i.e. to decrease the number of institutions). The aims mentioned specifically by *academia* were: to support the internal development of an institution and to assess how an institution has achieved its objectives (i.e. fitness for purpose). Specific for *state* was "to assess whether an institution offers value for money". *Market's* aim was to get information about the credibility of the institution.

5. Discussion

Based on the results we can conclude that the first hypothesis (*State's aim is to get information whether HEI-s are meeting basic standards, determined by external bodies*) was though not supported: state representatives in our study were not mentioning meeting the standards. Surprisingly, meeting the standards was emphasized by *market* – both employers and prospective students named this.

Two other hypotheses (*For market (prospective students and employers) the main aim is to get information about the academic provision to make informed choice. For academia, the most favored aim is 'fitness for purpose' approach*) were fully supported.

Also hypotheses 4 and 5 are supported: state representatives named the characteristics of both input, output and process; employers and high school students favored especially output but mentioned also input.

What concerns hypothesis 6 - *For academia, the characteristics of 'quality' of a higher education institution are related to process* – then we need to admit that although some processes were mentioned by teaching staff (transferability of bureaucracy and existence of analyses of students' progress), the main emphasis was lied on input and output. Interesting is that top-managers (rectors) of institutions and ordinary teachers (professors) value different aspects: when for rectors, the quality is characterized by qualified and committed staff members and successful graduates, then for teachers, level of salary of academic staff and number of publications belong to the most important characteristics. It was though surprising that out of all focus groups, only academic staff named research outputs as one possible quality characteristic for higher education institutions.

According to the results of interviews, the students are positioned somewhere between market and academia. Their dominating view to the aim of external quality assurance was similar to that

named by the academic staff and rectors – fitness for purpose, but characteristics of quality were rather different: unlike the academic staff or rectors (or also market) the students did not mention the outputs at all. Similarities with potential students were the characteristics of qualified teachers and possibilities for flexible learning paths.

As we can see, an ideal model of external quality assurance should support the internal development of the institution, provide information about the credibility of the institution, and assess whether the institution offers value for money. Thus, both accountability and improvement needs to be supported. According to all stakeholders, the “hidden agenda” is expected to be the optimization of higher education “landscape”. During the external quality assurance, the assessment focus should lie equally on inputs, processes and outputs.

6. Conclusions

Different authors suggest that external quality assurance in higher education should find balance between accountability and improvement, and also among the interests of *state*, *market* and *academia*. Estonia is replacing the curriculum accreditation model with the new quality assurance system: institutional accreditation and quality assessment of study programme groups. In order to get information about the expectations to the new accreditation scheme from the main stakeholders – *state*, *market* and *academia* – Estonian Higher Education Quality Agency conducted a survey using focus group interviews. The representatives of stakeholders were asked to respond to the following questions: Which are the characteristics of „a good university“? What should be the purpose of external quality assessment of higher education? The results suggest that *market* understands ‘quality’ of higher education institutions in terms of output and input. For *academia* the emphasis lies mainly on input, less on process and output. *State* had the broadest view in valuing both input, process and output. Commonly mentioned aims for external quality assurance were to guarantee institutions’ credibility and comparability with other (foreign) institutions, and to optimize the higher education “landscape”. The aims mentioned specifically by academia were: to support the internal development of an institution and to assess how an institution has achieved its objectives. Specific for state was “to assess whether an institution offers value for money”. Market’s aim was to get information about the credibility of the institution. Hence, an ideal model of institutional accreditation in Estonia should support the internal development of the institution, provide information about the credibility of the institution, and assess whether the institution offers value for money. During the accreditation, the assessment focus should lie equally on inputs, processes and outputs.

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AGENTIA ROMANA
DE ASIGURARE A
CALITATII IN
INVATAMANTUL SUPERIOR

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QUALITY ASSURANCE IN INTELLIGENCE HIGHER EDUCATION

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Abstract

Quality assurance in higher education, intelligence gets a great value due to its specificities in Romanian higher education area. Education of Intelligence is characterized by a combination of specific factors psychology, communication and information. Thus, implementation of quality management system aims on the one hand, common elements of quality assurance in higher education, and on the other hand, specific components of national security and military education. Standards for protection of classified information, intelligence education directly applicable standards provide a series of changes in information flows, which is reflected in new methods of implementing quality standards.

Key words: quality assurance, intelligence academic studies, military education.

1. Introduction

In a society full of diversity, ideologies and opinions, higher education means different things to different people. The pluralism of views is quite inevitable and some would opine it should be like that only. Higher education imparts in-depth knowledge and understanding so as to advance the students to new frontiers of knowledge in different walks of life (subject domains). According to [1] there are four predominant concepts of higher education:

- Higher education as the production of qualified human resources. In this view, higher education is seen as a process in which the students are counted as products absorbed in the labor market. Thus, higher education becomes input to the growth and development of business and industry.
- Higher education as training for a research career. In this view, higher education is preparation for qualified scientists and researchers who would continuously develop the frontiers of knowledge. Quality within this viewpoint is more about research publications and transmission of the academic rigor to do quality research
- Higher education as the efficient management of teaching provision. Many strongly believe that teaching is the core of educational institutions. Thus, higher education

institutions focus on efficient management of teaching-learning provisions by improving the quality of teaching, enabling a higher completion rate among the students.

- Higher education as a matter of extending life chances. In this view, higher education is seen as an opportunity to participate in the development process of the individual through a flexible, continuing education mode.

Higher education is generally understood to cover teaching, research and extension. Higher education is the source or feeder system in all walks of life and therefore supplies the much-needed human resources in management, planning, design, teaching and research. Scientific and technological advancement and economic growth of a country are as dependent on the higher education system as they are on the working class. Development of indigenous technology and capabilities in agriculture, food security and other industrial areas are possible because of our world-class higher education infrastructure. Higher education also provides opportunities for life long learning, allowing people to upgrade their knowledge and skills from time to time based on the societal needs.

2. The dimensions of quality in higher education

Quality, as we know so far, was originally developed in the manufacturing industry. In the area of higher education, the adoption of quality control has been superficial and diluted by the exercise of academic freedom [7]. Further, the prevailing culture of universities is often based on individual autonomy, which is zealously guarded [4]. Thus, it is usually difficult to apply the features of quality to higher education considering the fact that quality requires teamwork [6]. However, the quality of higher education is very important for its stakeholders. Notably, providers (funding bodies and the community at large), students, staff and employers of graduates are important [11]. We considered that the quality in higher education can be analyzed from three different perspectives: product (output of the educational institution), software (processes in the educational institution), and service (the activities that have direct impact on student satisfaction).

2.1. A product quality dimensions

Garvin (1987) proposed the following eight dimensions for quality that, as he stated, can define both product and service quality: performance, features, reliability, conformance, durability, serviceability. A common framework for the dimensions of quality in higher education based on Owlia and Aspinwall ([8]) is presented in Table 1.

Table 1. Product quality dimensions in higher education [8]

Dimensions	Definition in higher education
Performance	Primary knowledge/skills required for graduates
Features	Secondary/supplementary knowledge and skills
Reliability	The extent to which knowledge/skills learned is correct, accurate and up to date
Conformance	The degree to which an institutional programme/course meets established standards, plans and promises
Durability	Depth of learning
Serviceability	How well an institution handles customers. complaints?

2.2. The software quality dimensions

The characteristics of software as an intangible product are more consistent with higher education. The software quality dimensions widely used in software engineering are: correctness, reliability, efficiency, integrity, usability, maintainability, testability, expandability, portability, reusability and interoperability [12]. Owlia and Aspinwall ([8]) apply these quality dimensions to higher education, which are given in Table 2.

Table 2. Software quality dimensions in higher education [8]

Dimensions	Definition in higher education
Correctness	The extent to which a programme/course complies with the specified requirements
Reliability	The degree to which knowledge/skills learned is correct, accurate and up to date
Efficiency	The extent to which knowledge/skills learned is applicable to the future career of graduates
Integrity	The extent to which personal information is secure from unauthorized access
Usability	The ease of learning and the degree of communicativeness in the classroom
Maintainability	How well an institution handles customers. complaints?
Testability	How fair examinations represent a subject of study?
Expandability	Flexibility
Portability, reusability and interoperability	The degree to which knowledge/skills learned is applicable to other fields

2.3. The service quality dimensions

The service dimension of quality is probably more akin to the educational processes. Parasuraman et al [10] identified the following dimensions of service quality: reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding the customer, tangibles. Owlia and Aspinwall ([8]) based on a review of service quality dimensions, present a comprehensive list with their interpretations for higher education in Table 3.

Table 3. Service quality dimensions in higher education [8]

Dimensions	Definition in higher education
Reliability	The degree to which education is correct, accurate and up to date. How well an institution keeps its promises? The degree of consistency in educational process.
Responsiveness	Willingness and readiness of staff to help students
Understanding customers	Understanding students and their needs
Access	The extent to which staff are available for guidance and advice
Competence	The theoretical and practical knowledge of staff as well as other presentation skills
Courtesy	Emotive and positive attitude towards students
Communication	How well lecturers and students communicate in the classroom?
Credibility	The degree of trustworthiness of the institution

Security	Confidentiality of information
Tangible	State, sufficiency and availability of equipment and facilities
Performance	Primary knowledge/skills required for students
Completeness	Supplementary knowledge and skills, use of computer
Flexibility	The degree to which knowledge/skills learned is applicable to other fields.
Redress	How well an institution handles customers. complaints and solves problems?

3. A conceptual framework of quality in intelligence higher education

National Intelligence Academy is the military institution of higher education accredited to undertake higher education and university research in fundamental "military science and information", according to legal provisions.

National Intelligence Academy has the following general tasks:

- Build, specialize and improve military intelligence personnel in active and reserve, in accordance with the requirements of the Romanian Intelligence Service and other recipients of national security tasks. Beginning with the 2005-2006 academic year, training officers in the National Intelligence Academy is organized in accordance with the law on the organization of university studies in three cycles, namely undergraduate studies, graduate studies in masters and doctoral studies.
- Organize, with tuition, university masters programs for employees and other public authorities and institutions, NGOs and other legal persons, public or private Romanian and Romanian citizenship for individuals with and domicile in Romania.
- Plans, organizes and conducts scientific research, according to the needs of national security and the improvement of education in fields that are specific.

Educational and scientific research strategy of the National Academy of Intelligence comprises a complex of activities, for:

- preparation activity for students selected for the first function and structures for management information;
- carry out scientific research in areas of national security;
- training and further training for staff working in cooperation with international intelligence structures by acquiring NATO procedures and standards, including language development;
- Master and PhD in fundamental "Military and Information Sciences";
- training of personnel selected from the Romanian Intelligence Service and other governmental agencies and nongovernmental structures to meet the specific responsibilities of management / management skills and expertise in national security;
- development of reference works, the process of preparing the necessary resources to participate in the security effort;
- documentary support, expertise and training in national security, the central structures of the Romanian Intelligence Service, government and nongovernmental;
- develop collaborative relationships with institutions of higher education and scientific research in the country and abroad in order to increase business efficiency and prestige of the Academy;
- design and implementation of logistics own educational process.

The quality of education given by the sum of characteristics of study programs and their providers at the Academy, through which the educational requirements are met Romanian Intelligence Service as the main beneficiary and quality standards. Assessment of quality of education is based on multi examination of curricula and measures established by the National Academy of Intelligence, in order to meet the standards of reference.

Ensuring quality education at the Academy are accomplished by the specific development of all capacities of development, planning and implementation of specific curricula in order to increase confidence of the Romanian Intelligence Service and other beneficiaries in accordance with law, in this, as an organizer and provider of educational services at higher quality standards. Study programs of the National Academy of Intelligence and measures, on-line education, aimed at ensuring the quality of education, which is designed to satisfy the expectations of all categories of beneficiaries and the standards quality. The quality of educational services is a set of characteristics of the study programs of study room of the National Academy of Intelligence, which are direct and indirect beneficiaries met expectations and quality standards requirements.

The quality of educational services provided by the National Intelligence Academy includes an organizational structure and a set of rules (criteria) and principles relating to:

- policies, strategies and quality assurance procedures;
- approval mechanisms, periodic evaluation and monitoring programs of study;
- evaluating students based on criteria, rules or procedures well known and consistently applied;
- ensure quality teaching;
- providing appropriate educational resources to each program of study contained in the education offered in the Academy;
- ensuring access for students / learners to information resources;
- collecting, using and analyzing information in order to ensure effective management of programs of study;
- publication date, impartial and objective information about quality education programs.

Quality assurance is a priority for the National Intelligence Academy. National Intelligence Academy is concerned, continuously improving the quality of education in accordance with applicable standards. National Intelligence Academy is a priority, implementing and maintaining quality management system. In the National Intelligence Academy is implemented quality management system, whose objective is to assess and ensure quality educational services. In accordance with the law, the rector of the Academy is responsible for implementation and operation of quality management system. National Intelligence Academy has always aimed for quality assurance in the following areas: a. Institutional capacity, b. educational effectiveness, c. quality management.

The tools under consideration for quality assurance in the areas referred are:

- a. Institutional capacity: a) institutional structures, b) administrative and managerial equipment; c) human resources.
- b. Educational effectiveness: a) the content of curricula, b) results of graduates, c) scientific research, d) financial activity.
- c. Quality Management: a) strategies and procedures for quality assurance; b) procedures to track the educational process; c) procedures for assessing educational outcomes; d) procedures for periodic evaluation of teaching quality; e) providing access to information sources and / or documentation; f) transparency of public information on the educational

offer of Academy; g) procedures for developing and implementing preventive measures and / or corrective; h) functionality quality education structures, according to law.

Rector is directly responsible for the quality of education in the National Intelligence Academy. Rector, through Commission for evaluation and quality assurance, is responsible for the elaboration of strategies and achievement of quality education in the academy. Rector may delegate powers to another person operative management of the quality management system.

3.1. Organization and quality assurance education

In the National Intelligence Academy, the quality of education is ensured by:

- a. planning and actual expected results of teaching;
- b. monitoring results;
- c. internal assessment results;
- d. An external evaluation of results;
- e. developing and implementing corrective measures.

Coordination of quality assurance is ensured by the Commission for evaluation and quality assurance. In the National Intelligence Academy, Quality Assurance and Evaluation Commission is headed by the rector, who is the person delegated the running of the Academy for the direct coordination of quality management system. Commission on Quality Assurance and Evaluation of the National Intelligence Academy consists of eight members.

Committee Membership includes evaluation and quality assurance in approximately equal numbers:

- a. faculty representatives elected by secret vote by the Senate;
- b. representatives of the students;
- c. representatives and administrative staff;
- d. representatives of the Romanian Intelligence Service (Directorate General for Human Resources Management and Organization, as an employer).

Members of the Commission for evaluation and quality assurance should not perform management functions in the National Intelligence Academy, the duration of activity in the committee, except the person who provides their operational management. Members of the Commission for evaluation and quality assurance can not be part of the evaluation committees established at faculty level.

If, during his term, a member of the Commission is appointed to a leadership position in the Academy, it will be replaced with another person approved by the Senate of the National Intelligence Academy, the President of the Commission proposal for the assessment and quality assurance. Duties of the Commission for evaluation and quality assurance are:

- the development and implementation of all quality assurance procedures in the fields and in accordance with the previous criteria;
- Yearly internal evaluation report of the quality of education and by making available to all beneficiaries or, where appropriate, external evaluator;
- development proposals to further improve the quality of learning;
- cooperation on issues relating to quality assurance, institutions that have responsibilities in the education system;
- verifying the documentation required to obtain accreditation of study programs;
- development of all specific documentation procedures for periodic evaluation of the Academy;

- analyze the effects of measures aimed at ensuring quality and / or improvement, approved by the factors governing the academy.

Proposals for measures to ensure quality and continuous improvement made by the Commission for evaluation and quality assurance, will be submitted for approval by the Rector, the Senate or, as appropriate, to the Senate of the Academy. All documents specific task of ensuring quality of education, the Academy will be managed by the secretary of the commission. Regulation on evaluation and quality assurance in the National Intelligence Academy is adopted by the Senate roll vote. The Regulation entered into force upon adoption by the Senate's National Intelligence Academy. The quality of educational services within the National Intelligence Academy is in accordance with legal provisions. Discharge of duties of individual staff and students / trainees of the National Intelligence Academy have been developed by the Commission for evaluation and quality assurance within 30 days after approval of the Regulation.

In order to implement the Regulation and other documents have been developed to support quality assurance and continuous improvement of educational services in the academy, namely: quality manual, procedures, instructions and the methodologies. Amendments to the assessment and quality assurance by the Senate of the Academy are, at the initiative of at least one third of its members or when it is necessary to update it, in accordance with applicable laws, rules or regulations emerging. After Senate approval of the Academy, it has been put into circulation, the rector's approval. Any amendment and republication of the Regulation shall be subject to Senate approval of the National Intelligence Academy.

3.2. Organizational structure of quality assurance system

The organizational structure of the system of quality educational services consists of: a) management component; b) enforceable component.

Component Management

- Rector of the Academy - is directly responsible for quality assurance, formulates policy and commitment to continual improvement of quality assurance and educational services.
- Senate of the Academy - the highest collective authority of the National Academy of Intelligence, lead, monitor and approve major steps to improve the quality assurance system of educational services. Senate of the Academy - the designated authority to ensure effective management of the process of teaching and research in the Academy, leads, monitors and approves measures to improve operational quality assurance system of educational services except those expressly provide power to the Senate.
- Commission on Quality Assurance and Evaluation - The Senate is appointed by the Academy and is composed of vice (appointed by the rector of the Academy's management of the quality assurance system), teachers, representatives of the students and employers. Duties of the Commission for evaluation and quality assurance foreseen in the Regulation on evaluation and quality assurance in the National Intelligence Academy. In the quality management system, each member of the Commission for evaluation and quality assurance has individual responsibilities.

Enforceable component

- Faculty Dean is responsible for management, monitoring, reviewing and improving the quality of educational services offered by the university.
- Faculty Council shall establish measures for implementing the decisions of the Senate.

- Heads of Departments / Departments responsible for the quality of educational services at the department / departments.
- Teachers are responsible for the quality of training of students / trainees.
- Deputy Commander Academy (logistics) - responsible for ensuring the material base of education.
- The entire Academy staff responsible for the quality they carry out activities in accordance with job or other activity that is involved.

4. Conclusion

Higher education is the backbone of any society. It is the quality of higher education that decides the quality of human resources in a country. Higher education, as we see today, is a complex system facilitating teaching, research, extension and international cooperation and understanding. The intelligence higher education is educational complex process that provides a wide opening to all beneficiaries. Obtaining a culture of high performance security is achieved with special efforts from the National Intelligence Academy, which requires a high quality standard. Standards meet the requirements for protection of classified information will complete the reference information on the quality of education. In this context the existence of a quality standard and certification of the educational process as a whole in terms of both educational product and service is more than necessary.

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THE METAMORPHOSIS OF HIGHER EDUCATION IN THE KNOWLEDGE SOCIETY: FROM ELITE TO MASSIFICATION. CHALLENGES, RISKS, PERSPECTIVES

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Abstract

The traditional university is an institution belonging to the elites and to the elite knowledge. The Knowledge Economy in the era of globalization requires extensive human resources as number, competent and skilled, competitive on the labor market. The process of massification gives access to higher education for larger, more diverse social classes, broadening the recruitment basis for the qualified staff. The Bologna Reform conceptually substantiates the process of higher education massification, placing in the center the inclusive and responsive university. This way the higher education transition occurs from the paradigm of elite to the paradigm of massification, an essential metamorphosis involving the purpose, the mission and its finality. The most important risk of the paradigm shift is that, by massification, the higher education would become mass education, in the metamorphosis massification - mediocrization. But the Economy and the Knowledge Society need globally skilled and competitive human resources. The massification and quality in education and research should not be excluded, but they must be assumed. Within the process of massification of higher education, the university must remain a place of quality, excellence, performance and competitiveness, of innovation and creativity in education, science and research. The elite university in the massified education, from the Knowledge Society and globalization era, constitutes the required formula of the education in XXI century. It is the major challenge addressed by the reform to the higher education.

Key words: elite, massification, access, quality, efficiency, competency, competition, labour market.

1. Introduction. The reform of higher education - an objective necessity

The European higher education is passing now through a transformation process regarding fundamental aspects of it: philosophy and vision, mission, structure, content, the relationship with the labor market. The programmatic reform of higher education, as philosophy and system, begins with the Bologna Declaration (1999) that triggers what is called the Bologna Process. It is a major change in the fundamental coordinates of higher education, driven by the major social

and political changes on the scene of Europe, by the enlargement of the European Union, by the development in geometric progression of knowledge in the same time with the spectacular advances in information technology and communications field, by the worldwide fierce competition among the strongest economies and by the globalization process. The economic argument plays a leading role in these processes and developments at national, European and global levels. By the economic development of the member states, the European Union aspires to become, accordingly to the Lisbon Agenda, the strongest global economy, in direct competition with the U.S. The economic development is based on knowledge. Therefore, within the level of the European Union, there were launched key concepts as Knowledge-based Society and Knowledge-based Economy. Regarded in its essence, this process of change is facing two major challenges: the reform of quality and efficiency, and also a fundamental change concerning the university's mission: the linking of the academic education and the scientific research to the economic environment.

The edification of the Knowledge-based Society in order to achieve a competitive European economy, globally competitive, demands educated and skilled human resources by the highest standards of quality and efficiency, competent in their fields of expertise. Given the size of the changes at national and European level, the today's European society and economy are facing the need for a growing number of qualified and competent individuals in the labor market. The education, the training of future employees in order to acquire skills in various specialties represents the responsibility of higher education. In these terms, a third challenge to higher education is the expansion of its addressability to the social diversified groups, as gender and age, the broadening of the recruitment social basis of the students. Under this issue, another necessity of higher education and university is the expansion and diversification of the educational offer, of the study programs and of the education forms. In this complex process of reforming and adaptation of higher education to meet the challenges of the Knowledge Society, it takes place a cardinal metamorphosis, a fundamental change of paradigm, vision and finality: the massification of higher education.

2. The University, the area of elites and elite knowledge

The University has been conceived as an elite area of education and research, study and creativity, being dedicated, by vocation, to the social elites. Since its inception, the university was an environment of the chosen ones, privileged by the material condition, by the social rank and also by their spiritual condition. The social elites were those supported by a solid material status, they were forming the upper classes of the society, in general belonging to the aristocracy and to the various nobility ranks, aristocratic families from western and central European countries. The first universities of the European Middle Age, beginning with the University of Bologna, were created on the model of the elite and the elitism, being exclusive institutions of knowledge. The access to these institutions was depending on the social and material condition of the young aspirant to higher education. The teachers and students were, in their turn, well defined social and professional categories in terms of identity and their mission, with a privileged status in the society. The most brilliant minds of society, in the beginning being the prelates, formed the academic body. The university was gathering the greatest scholars, scientists, academics, great minds summoned to spread the light of knowledge to the world of disciples, those also having sharp minds, which were meant to continue and develop, through their career and work, the knowledge process. By its universities, the Europe's academic education was, from its crystallization as a system, an exclusive territory, an environment of the elites and elite knowledge, in which the teachers and their followers were proud that they represent, by privilege of the highest knowledge, a higher social and professional class, a sort of aristocracy of spirit. Such a pride of knowledge was motivating a Pico della Mirandola, the most

brilliant and comprehensive mind of the Renaissance, educated at the Universities of Bologna, Ferrara, Padua, Paris, Florence, to say full of pride, challenging: "I know everything and something more!" The space of the elites and of knowledge elite statute of the University has perpetuated throughout history in the academic Europe. In virtue of this tradition, the higher education remained an accessible experience only to the leading groups from the society, with financial strength and a respectable social status, belonging to the upper layers, to the sphere of the aristocracy, or, later, of the bourgeoisie.

As a system and accessibility, the European higher education, built on prestigious universities such as from Bologna, Padua, or as the Sorbonne, Oxford, Cambridge, Uppsala, Salamanca, Prague etc., and developed over the time, was an open area of knowledge. The applicants to the elite experience of knowledge could choose to study in famous universities of Europe, and later from U.S. Also, the European university education, by the way it was designed by its universities, was allowing the students and teachers' mobility from one university to another, to follow the studies that they wanted, in order to specialize in certain areas. The higher education institutions were recognizing the university internships and the experiences developed in other universities in the same country or from abroad and they were assimilating them to the course of the university studies.

Initially, in the University there were studied, with teachers from the elite of every field, fundamental branches of knowledge from the area of sciences, law, humanities, theology, arts. As open space of knowledge since the beginning, the University has grown the interdisciplinary and transdisciplinary approaches, by virtue of the fact that it understood the knowledge universe in a holistic vision and representation, in interdependence, harmony and synergy of different fields of study. The ideal of the classic University was to form *homo universalis*. Over time, with the advancement of knowledge, the area of the educational offer has expanded and diversified. It is a process of intercausality, meaning that, on the one hand, the university as a source of knowledge has contributed to the advancement of society and, on the other hand, this progress has led the university to continuously develop the studies offer.

Higher education remained an elite one even when it began the expansion process of it, of the number of students, of its addressability to diversified social groups. In essence, the demanding criteria selection systems were a way to maintain the traditional status of the university. It should be noted that the status of the university as the area of the elites and of the elite education, of elitist and exclusive environment, ensured and perpetuated its scientific and social prestige and of the higher education as a system during ages.

3. Massification - the new paradigm of higher education

The concept of massification of higher education is a complex one and difficult to grasp in a single definition. If, however, it would be to propose a general definition, we could understand massification as the enlargement process of the university education in three directions: social-human, temporal, educational. At European level, massification develops as a coherent process, built on a new philosophy and vision, towards well defined goals, within the ample reform of the European higher education, initiated by the Bologna Process. But before the massification analysis within the context of the Bologna reform, it is necessary a brief historical overview of the massification process.

Massification - a historic overview

The massification process of higher education began in the second half of the 20th century, generated by the changes in the social area and by the economic developments. In the western area, in Europe and in the U.S., due to the increased need for education, skilled and competent personnel in various fields of economy, on the labor market, the universities began to open up more to the society. Postwar, the massification of higher education is governed by the principle of access and of social equity.

After 1990, the Romanian higher education is entering in a new phase of its development. New public and private institutions of higher education appear, a fact that leads to an unprecedented expansion of the education system in Romania. It should be noted that the phenomenon of private higher education has an exceptional dynamics, by the emergence of many private universities. In this context, the Romanian higher education massification process meets an impetuous progression by the increasing of the institutional offer, even beyond the limits of the social need. The massification of the higher education has two coordinates: the social addressability of education and the studies programs diversification. It takes place a great opening of the social access, but a decrease in the quality of the educational offer, within the conditions of the increase in geometric progression of the number of universities. The university inflation, the fierce competition among higher education institutions, while some of them abandon the quality standards and any academic requirement, represent a blow to the principle of elitism and to the elitist status of the university, by virtue of its European tradition.

Massification of higher education within the Bologna Process

The Bologna reform aims to the reforming of higher education and scientific research in the idea of their efficiency by increasing quality, performance, competitiveness, the ability to train skills, to encourage innovation and creativity. From the perspective of this process, higher education is seen as a support of the Knowledge-based Economy and Society, within the global competition. Within this reforming framework, massification represents an extensive process that opens the access of broader social categories to higher education, thereby increasing its addressability, extends the educational process from the duration point of view during the active existence and substantially diversifies the offer and the forms of education. The paradigm shift brought by the Bologna Process is the transformation of higher education in a framework of developing skills and competences in order to qualify the future graduates for the labor market. The national economic systems and the economy of the United Europe need competent and qualified people, having a work capacity formed to the most demanding standards of exigency and efficiency.

From the Bologna Reform perspective, the idea and the massification process are associated with a number of concepts, spread at the level of the field policies under EUA (European University Association): inclusive and responsive universities, access and equity, the social dimension of education, positive discrimination, gender equality, access of women, of minorities and immigrants, lifelong learning, academic mobility, credit transfer (ECTS), the Diploma Supplement, the internationalization of the studies, efficiency and pragmatism in education. The major themes of the European debate regarding the policy reform, within the EUA conferences, comprise explicitly or implicitly the idea of massification: Europe's universities beyond 2010 – diversity with a common purpose; The Governance of European Universities post 2010 – Mission Diversity, Autonomy and Accountability; The Governance of European Universities post 2010 – Enhancing Institutional Mission and Profiles; Inclusive and responsive universities – ensuring Europe's competitiveness; Facing Global Challenges: European strategies for Europe's universities; Internationalisation beyond Europe's frontiers: enhancing attractiveness through

global Partnership and Cooperation; Investing Today in Talent for Tomorrow. The UNESCO Regional Forum for higher education from Bucharest (2009) Access, Value, Quality and Competitiveness and the World Conference of UNESCO from Paris (2009) New Dynamics of Higher Education and Research for societal change and development considered the higher education massification among the priority topics.

3.2.1. Massification on the social-human coordinate

An essential coordinate of the higher education massification is the social-human coordinate. Within this context, higher education opens to society, towards ever broader and diversified social categories. The process aims to the broadening of the social access to the higher education experience, the increase of the social addressability of higher education.

Massification based on the social-human coordinate is substantiated on a philosophy and vision that place the university in the heart of society, as its core institution, area of training, knowledge and qualification. The university, the emblematic institution of higher education, has the mission to educate, train and qualify competent and professionalized personnel for the Knowledge-based Society and Economy. The developments from the European Union scene and worldwide, the fierce global economic competition have created a new dynamic of the development of EU member states economies. The advance of technology, especially of ITC, has accelerated unprecedently the pace of economic and social change. Under these conditions, the strong and competitive economies base on the competent and qualified workforce. The training of human resources is the responsibility of higher education that thereby has to keep the pace with the labor market, economic and social environment demands. The stake of the higher education reform is represented by the transformation of HEIs in academic areas of quality, excellence, performance, competitiveness, innovation and creativity in education and research, with vocation towards the labor market.

The Knowledge-based Economy needs not only quality human resources, but also extensive ones from numerical point of view, to cover the requirements and needs of various branches of activity. By the Bologna Process, higher education has entered in a new phase of its addressability extension towards the society. In concrete terms, this horizontal extension is achieved by applying some humanist principles: equal access, social equity, gender equality, women's access, positive discrimination. By this philosophy, higher education has also opened to social categories that, traditionally, had no access to the university studies, towards the disadvantaged groups, the vulnerable communities, including from the rural areas, to minorities, immigrants, etc. In order to diversify and numerically increase the target audience, HEIs within the Bologna Process are undergoing a significant metamorphosis: they become inclusive and responsive universities. Such a transformation concerns the very mission of the universities which thereby are opening to the society and become more receptive, on the one hand, to the needs of the economic environments and, on the other hand, to the needs to train, qualify and professionalize of the society. The massification based on the social-human coordinate aims therefore to the increasing of the social access to higher education by the creation of an increased social basis from numerical point of view, qualified, competent and professionalized, to support the Knowledge-based Economy.

3.2.2. Massification on the temporal coordinate

The process of higher education massification is performed also by the extension of its addressability beyond certain traditional temporal borders. Until this change of vision and mission, the university studies experience was regarding a certain age of the formation, after

which the integration of graduates in their careers was following. The Bologna reform overcomes the temporal barriers of higher education, by the expansion and diversification of the educational offer of HEIs for all the age categories of the active population. A crucial concept of this philosophy is lifelong learning, which substantiates and develops, at the European Higher Education Area (EHEA) level, a first order necessity of the individual, of the society and economy: the need for lifelong learning. This need is manifested in the context of the economic and social evolutions, of the technological and economic progress, the continuing need for skilled human resources. Unprecedented social and economic dynamics requires the qualification and retraining necessity, the job change, the reorientation, the professional retraining, the reprofessionalization, the specialization and super-specialization etc. In this process, higher education has a pivotal role, as an area of continuing education, qualification and professionalization of the human resources. Therefore, HEIs must meet the requirements of the economy and society by a studies offer that can open the possibility of continuous training for all the active age groups on the labor market. This institutional feedback is achieved by the diversification of the studies programs, the adaptation of the training offer to the needs of a target-audience more numerous and more diversified.

European Universities' Charter on Lifelong Learning, a fundamental document of the reform policies within the Bologna Process, published under the auspices of EUA in 2008, identifies a series of action strategies for universities (embedding concepts of widening access and lifelong learning in their institutional strategies; providing education and learning to a diversified student population; adapting study programmes to ensure that they are designed to widen participation and attract returning adult learners etc.). All these action directions form the development framework of the new vision of higher education, which, by the lifelong learning concept and process, promotes learning as a continuous process during the entire life. The expanding of education and training within HEIs based on the temporal coordinate, along the active existence of the target audience, an extended and diversified audience, is representing an essential element of higher education massification process.

3.2.3. Massification on the educational coordinate

Higher education massification involves significant changes at the level of the content of the study programs and of the development forms of the educational process. Regarding the study programs, the Bologna Process has generated major changes of the university training period by the reorganization of it in the three cycles: Bachelor's Degree, Masters's Degree and PhD Degree. The meaning of this reorganization is to make the education process efficient, by a logical and coherent execution of the study cycles, by assuming some different missions for each of them, to transform it into a pragmatic experience, related to reality and the labor market, advanced and competitive. Bologna studies structure is a pyramidal one: the base is formed by the Bachelor cycle, followed by the specialization by Master and the elite experience of the doctoral studies, a form of super-specialization and excellence research. The massification process acts mainly at Bachelor level and, to a degree, at the Master level. In this spirit, HEIs have diversified the programs of study, by approaching new specializations required by the economy and the labor market. The European Qualifications Framework and the National Qualifications Framework for Higher Education in Romania provides a suggestive picture of the specializations diversification and, by those, of the fields of study. The coverage of knowledge through the study programs has expanded, tending to be a comprehensive one, so as Bachelor and Master cycle to become a major area of training, of acquisition of skills and competencies in order to qualify the graduates and to introduce them into the labor market. One can speak thus, at this level, about the curriculum massification of higher education, as its reaction mode to the challenges and the necessities of the Knowledge-based Economy. Also to the curriculum

massification are subsumed the inter and transdisciplinary approaches within the process of teaching / learning, and Bologna tools such as: the academic mobility, the transferable credits, the Diploma Supplement and also the internationalization of studies. It must be also underlined that in the area of curriculum and educational massification enter also the studies, training, qualification or new specialization, postgraduate programs, that can be assimilated to the lifelong learning process, new programs, atypical, if they are reported to the university offer tradition, but still held under the auspices of the university.

Massification also concerns the development forms of the education process. In the same time with the conceptual and system openings achieved by the Bologna Process and with the substantial contribution of the technological progress, HEIs have diversified the education forms, the teaching-learning modes within the educational process. Thus, as an alternative to day learning, the distance learning has developed, being a form of education by which higher education expands its addressability towards new social, professional and age categories, facilitating their access to the academic training experience. As a support for distance learning, there have been created the e-learning platforms that are facilitating the access of the students to the training process, thereby being an exceptionally utility tool within massification. Another development modality of the educational process is represented by the online education, which also plays a leading role in increasing access to higher education.

An institution of massification: the inclusive and responsive university

Within the process of higher education massification, the university is undergoing a metamorphosis regarding its mission and objectives: from an elite institution, it becomes one of the extended access, that opens its doors to broader and more diversified categories of students. The university, as we have seen, opens both its real doors and virtual doors, descending from its elitist sphere to the reality, towards all the social categories, towards nontraditional publics, including the disadvantaged, vulnerable, minority groups, etc. Therefore, in the European Higher Education Area (EHEA) it is increasingly used the concept of Open University, that takes benefit of all the ITC gains, of e-learning and online support to address the public. In the same spirit, at the level of the EUA policies, within the Bologna Process, there has emerged a new institutional profile of the university, a new university, with a changed mission, adapted to the today's requirements of the Knowledge Society: the inclusive and responsive university, which integrates in the massification paradigm of higher education. It is the university that includes in its space increasingly large and diversified categories of students, meaning the university of the extended and open access, and, in the same time, the university directly connected to the reality, that receives the social, economic, technological challenges, the challenges of the education, research, science and knowledge evolution and responds to those by adapting and adjusting the educational offer, the studies, training, qualification programs, etc. Within the context of this institutional change, it can be taken into account a wider metamorphosis, at conceptual and even nominal level, that has in the center the pivotal institution of the higher education: the translation from university to unidiversity, that expresses the change of paradigm and mission of HEIs. In other terms, the university becomes, following the process of massification of higher education, an area of academic diversity from many points of view: social, educational, cultural, mental, studies programs, specializations, skills, qualifications, research programs, professional courses, etc. This transformation takes place taking into account the idea that a larger and different population must have access to the university studies, a national and international target audience, in order that the academic offer to extend nationally and across borders, in the context of the internationalization of studies, based on a tough competition on all levels.

By the vision promoted by the Bologna reform, higher education affirms its support role of the Knowledge-based Economy and Society, as an engine of the sustainable development that offers a new definition to the mission of the universities in the third millennium.

4. Massification: openings, benefits, risks

In the context of the metamorphosis that higher education is passing through the Bologna reform, the passage from the elite's model to the massification's paradigm, it is important to analyze which are the openings and the benefits it brings to the academic education and to the scientific research, on the one hand, but also the risks involved by such a change, on the other hand. It must also be seen, in the broader picture of this transformation, if and to what extent the massification affects the meaning and the mission of the university, the way they were established in the higher education tradition, that has in the center the university as an elite institution and a place for elites.

Massification - from university "literacy" to specialization

The massification process, by its three major instances discussed above, presents a number of openings and benefits for higher education and its target audience. The benefits generated by the massification can be classified into three main categories: social, educational, economic.

The social benefits are generated by the fact that the massification process broadens the access to higher education towards more diversified groups of the society, including here also those non-traditional, the communities and the disadvantaged, vulnerable, minority groups etc. This way it occurs a democratization of the access to the experience of the academic studies, including by the positive discrimination, a transformation that involves a series of values and moral principles, in the spirit of the new humanism that defines or should define the today's age of globalizing Europe and world. The fact that, based on a new education philosophy, the universities are opening their doors, using also the support of technology, represents, in terms of these values, an act of social justice that has historical dimension. In this spirit, each individual has access to academic education and opportunities to qualify and professionalize for a future career, to develop his or her potential. Massification creates the setting for comprehensive university "literacy" and for specialization by the developing of skills and competences required for the qualification in the labor market.

Regarding the educational benefits by massification, in the vision and shape promoted by the Bologna Process, the university education records a series of innovations and openings as a process and system. Under the conditions of the increase of addressability and of the broadening of the social access, higher education is developing at the level of the structure and of the content. It can be taken into account a diversification and expansion of the curriculum, developed on the structures of the Bologna studies, along the three cycles, but also in the setting of the lifelong learning process, that includes a variety of educational shapes and offers. The logic of this development in relation to the increasing of the social access is a simple one: to meet the needs of a diversity of students, the university, as a place of education and research, as a pole of knowledge, must continuously expand, diversify and adapt its studies programs and the educational offer, in a permanent feedback process to the requirements of a rapidly changing society. This curriculum development and diversification is a beneficial phenomenon for the training process and, in general, for the act of knowledge. Also within the reform, built on the paradigm of massification, by the restructuring of the studies, by the curriculum expansion and diversification, by the interdisciplinary and transdisciplinary approaches, the higher education is opening more to knowledge, in a new, comprehensive approach.

Massification of higher education also generates a number of economic benefits, under the philosophy that supports the Bologna reform. According to it, academic education has as a fundamental purpose the training of the skills and the competencies of the students, for the qualification and the professional introduction of the graduates into the labor market. Higher education is, in this view, a source of competent and qualified personnel for the economic environment. By massification, by the social implications of this process, the expansion and the diversification of the university audience lead to a numerical increase of the qualified personnel for the labor market, to the broadening of the recruitment base of the human resources and of the talents for various fields and specializations. Higher education, through the inclusive and responsive universities, becomes thereby the support of the Knowledge-based Economy and Society, the engine of the sustainable development. Massification makes higher education more flexible and receptive to social and economic needs, brings it closer to reality, develops the vital relationship between the university and the labor market, places the university in the heart of society, as an institution with the doors open to all, a space of education, of scientific research, but also of training, qualification, specialization for the professions from the labor market. It is obvious that a personnel qualified according to the higher education standards will conduct a quality professional activity, obtain the results and the performances desired by the employer, increase business efficiency and competitiveness in the field, in an economic area defined by competition, governed by a desire for domination and supremacy of the competitors. The massified higher education, in this philosophy terms, thereby brings major benefits to the economy that is being built by help of knowledge, provides a durable, sustainable and dynamic development.

The risks of massification

Massification of higher education also carries a series of risks. This refers to important risks that threaten to impair the essence and the mission of the university education. The transition from the elite's paradigm to the education massification's paradigm generates risks in the field of the quality and efficiency of the studies.

Massification of quality and the risk of mediocrization

By definition, if we go back to the origins and to its history of almost a millennium, the university is a privileged domain, belonging to the elites, and not to the many. The concept itself of higher education expresses the idea of a superior level of approaching knowledge, associated to quality and excellence in education and research. By massification, as we have seen, the education expands its addressability and access towards various categories from social, material, mental, cultural, spiritual, ethnical point of view etc. The university opens its doors, it becomes the inclusive and responsive university, the open university of the Knowledge's Society and Economy. In the original and traditional design of the elitist conception, represented in a pyramidal structure, higher education, seen as the space of elite, is occupying the upper part of it. In the massification model the ratio is reversed, the focus descending from the top to the base of the pyramid.

This revolutionary paradigm shift is launching a series of important challenges to the quality of university education. First, the widening of access to universities associates with the flexibilization of the selection processes for admission, their formalization or even cancellation. The university audience is no longer the result of a rigorous selection, often harsh, but the result of the open access. Therefore, it is a heterogeneous audience, from different backgrounds, having different levels of education and knowledge. The diversity may have implications on the

level of approach of the teaching-learning process, on the criteria used in evaluation. This way, there is the risk of lowering the standards and criteria within the tendency to adapt the education and training act to the diversity of the audience, a tendency, ultimately, of homogenization of knowledge. There is also the danger that the university adapts itself, accordingly to its new target audience, adjust its curricula according to the students' knowledge level, instead of imposing high standards of approach for the academic education. Massification of higher education brings the idea of compromise with regard to the approaches level from the instructive-educational process and the quality of the studies. The risk of lowering the higher education towards an average level is one that should be taken into account. From the condition of average higher education, which reflects a contradiction in terms, but at the same time a real danger, to the mediocre education, there is only one step. It is a risk - the risk of mediocrization through massification - and a compromise in the tendency of higher education and of the university to address to more and more diverse and extended social categories. In this context, massification of higher education may involve such a severe phenomenon as massification of quality. Another risk associated with it, and even causally linked to massification of quality, is represented by the massification of the didactic staff. This latter risk appears on the background of the higher education massification, in all the forms and coordinates discussed above, of the expansion and diversification of the target audience, when also the need for academics increases. The massification at the teaching staff level can appear under the conditions of relaxation and relativization of the access standards in the academic career, and particularly threatens the new appeared HEIs, especially in the private education. Massification of quality represents a major threat, the most important in the order of severity that threatens higher education within the massification process.

The institutional inflation, massification and the quality crisis in Romanian higher education

All the risks generated by massification at European level are also available for Romanian higher education, noting that they act in a context defined by aggravating circumstances.

Given the conditions of its development, the dynamics of the system after 1990 has led to the proliferation of the number of public and private universities and to an unprecedented diversity of them. The proliferation of HEIs, both state and private, of the programs and study offers generated a hard competition, not always positive, at the system level, in the rush of the universities for students. The strong arguments, that some of them brought before the audience, were the resigning to any principle and mechanism of selection for the admission, small fees and low standards within the instructive-educational process, waiving the exigency. The liberalization of access, the abandoning of exigency, the decrease of quality gained momentum also on the background of the diversification of the forms of university education, namely by the developing of the distance learning and of the territorial centers. The lowering of the standards by some HEIs also forced the other universities to open themselves to such compromises, to liberalize the admission examination or even abandon it, to provide tuition fee education, generating a sort of chain reaction. It is a compromise with the quality of higher education, with the university's mission and status. In the space of Romanian higher education, the tax has become an instrument of massification. In other words, the universities have widely opened their doors to the public, towards all the social categories, the only condition for access being, in some cases, the tax payment. Massification understood as such leads to the mediocrization of higher education, to its transformation into mass education. In these circumstances, the university becomes a formal space, having the purpose and mission changed.

Under the conditions of a defining phenomenon for the Romanian university system, associated to massification, the institutional inflation, higher education is facing several risks: the lowering of the instructive-educational process, the massification of quality, the massification of the didactic staff, the superficial and inefficient training. Massification as mediocrization represents a threat hanging over higher education in Romania. These risks do not apply to the entire Romanian university system and to all the HEIs. There are prestigious universities in Romania, consecrated by time and tradition, as well as newer ones, public and private, developing quality, performance and excellence in education and research.

5. The model of elite in the massification context: a challenge for higher education

The opening to the society through massification of higher education represents a beneficial process from social point of view. But, beyond the social and economic advantages of this opening, the university should not be open to compromises regarding the quality of the studies. But there is a risk of the open access, a risk that the universities should consider and avoid. The open access, based on humanistic principles and values - belonging to the new contemporary humanism - should not mean unlimited access, uncontrolled and uncensored access by any criterion. There cannot be made quality, efficient and competitive education without some exigency criteria within the educational process. The institutional quality depends directly on the quality and performances of the educational process. The university must not fall into mediocrity. At the same time, massification of higher education must not determine its transformation into mass education. The very notion of higher education reflects a value judgment, an axiological ranking, by definition, in a pyramidal structure, in the elite area.

Quality, efficiency and performance - the sustainable model of the higher education development in the era of massification and globalization

The university bears the institutional memory of its academic tradition: memory of elite. Today, in Europe and in the world, the universities are classified into several categories. In the Romanian university education area, the National Education Law provides the classification of universities into three categories: education, research and education, advanced research and education. It is a classification governed by axiological criteria, but also pragmatic, in the name of efficiency and competitiveness, that takes into account the capacity of the institutions to produce quality and performance in education, to develop excellence in the scientific research. Such a ranking regarding the HEIs favors the returning of the university to the idea of elite space and elite knowledge, of the higher education framework in the genuine meaning of the word, of the cutting-edge research, an environment of great ideas, of creativity and innovation, as there were the major universities in history.

How can be prevented the risk of mediocrization through massification? By open access, but through a continuous selection process, throughout the studies, by rigorous evaluation and selection criteria. The ranking of the universities is a useful and necessary process that rearranges the universities in an axiological order, gives massification a constructive purpose, or tries to eliminate the risk of mediocrization. By ranking, the open access to education is provided by the education universities, which form the broadest support of massification. The access to the higher stages involves a selection process of the students, according to their knowledge level and capacity.

The ranking should be regarded from two perspectives: the one of the HEIs and the one of the audience composed of students. Fundamentally, the classification of universities into three categories represents a certification and a consecration of the vocation and of their institutional

capacity to produce quality and performance in education and research. On the other hand, the ranking of the universities determines a selection, a restructuring in the diversified audience through massification of higher education. It takes place a process of harmonization, restructuring and reordering of higher education from the double perspective of HEIs and of the students. It can be the solution by which massification can develop itself, until a certain level, without compromising the quality, mission, status and image of higher education. At the same time, through ranking, higher education maintains and develops its role of academic education and elite research space.

The Bologna reform proposes the paradigm shift in higher education through the reform of quality. The quality of education represents the foundation of this change, the support of a metamorphosis essential for the efficiency of higher education in the Knowledge Society and in the global competition among the world economies. In this process, the European and national agencies for quality assurance in Higher Education – in Romania, ARACIS – have a key mission, of paramount importance. In the context of massification, the chance of higher education is represented by quality in education, performance in scientific research, creativity and innovation at the level of both areas of education. Quality is the model by which the university can maintain, adapt and develop its elite status of space of elites and elite knowledge, achieve the objectives of its new mission, of first order in the edification of the Knowledge Society and Economy. Massification of higher education must be developed around the quality model as a conceptual core of the new paradigm. In this way, HEIs do not betray their vocation and the original meaning of their existence, they maintain their status of higher education, higher also in axiological sense, i.e. belonging to the elite education, training, research, and create all the prerequisites to achieve their mission objectives in the spirit of efficiency, performance and competitiveness.

The future of higher education from the European perspective: The Declaration of Aarhus

The EUA Conference in Aarhus (Denmark, April 2011), Investing Today in Talent for Tomorrow, ended with The Declaration of Aarhus, a document that identifies the priorities and coordinates of the European higher education reform in the following period until 2020. All these directions are conceived within the Bologna reform and the massification process. The first direction is Widening access and increasing capacity to respond to the needs of more diverse student populations, a priority that synthesizes, from the access and institutional perspectives, the massification philosophy and process. This indicates that the massification process remains one of the Bologna reform priorities, with its fundamental elements: the broadening of the social access to a more diversified audience, the transformation of HEIs in inclusive and responsive universities to meet the continuous needs and challenges of the society and economy in the age of Knowledge.

Conclusions

From the Medieval University to the Global University

If the medieval university, beginning with Bologna, is one of the elite in the double meaning: the one of the social elite and the one of the elite knowledge, the postmodern university or the global university is a massified one. The massification process, seen in all its social, human, educational complexity, is a necessary and unavoidable one in the age of Knowledge-based Economy. Its necessity consists in the fact that the today's world needs more than ever, in all areas of activity, skilled human resources at the highest standards of competence and in a larger number. The development of economy, the competition on European and global level

need increasingly larger, competent, specialized and efficient human forces. In the context of the Knowledge-based Society and of globalization, massification of higher education is, at the same time, an inevitable process. Academic education and scientific research, under a close connection with the labor market and the Knowledge Economy, can no longer be limited as addressability to an elite audience. The today's developments require the entire society to have access to education in all its forms, developed through the process of massification.

The necessary and inevitable character of massification of higher education must not diminish the essential role of quality and excellence in education and research. On the contrary, though, conceptually, the elite education and the massified education seem notions in complete contradiction, the two terms must act synergistically in the edification of the new paradigm of education from today and tomorrow. In other words, the elite and the massification do not exclude each other, but require, as complementary terms, as two instances of a big complexity phenomenon, with outstanding stake: higher education. It is true that the knowledge-based Economy needs a base as expanded as possible of qualified human resources, a mission that today goes to the massification process. But equally true is that in order to be qualified, competent and competitive, the human resources need quality education. The institution that must ensure this training is the university. Within these data, the university must remain an institution of quality, excellence, performance and competitiveness of the academic education and scientific research, an elite institution in terms of knowledge. The viable model of the university's existence in the XXI century, in the knowledge society and in the world of globalization, is the one of the elite. The university of the Knowledge Society is an Elite University, within a massified higher education. The difference is that the meaning of the elite concept transfers from the social area in the knowledge area. Despite the paradoxical combination of terms, this way we can speak about the elite University, inclusive and responsive, as a pillar of the massified higher education, open to all human areas and categories of the society. The only chance of existence of the University in the era of globalization, under the conditions of an unprecedented competition, often by all means, the only chance of edification of the Knowledge-based Economy and Society is represented by the quality education and training, using all the scientific results of the cutting-edge research, a process possible only in an elite knowledge space.

Within these data, the metamorphosis of higher education in the Knowledge Society and in the age of globalization is not a paradoxical and contradictory one, as it might seem. It affirms a new model, possible and necessary: the massified higher education, following high quality and exigency standards, developed in a reformed society, adapted to the challenges and needs of today's society and economy, globally competitive. It is the only chance for the higher education to maintain its status and prestige; it is also the university's only chance to carry on its mission and vocation, at the highest standards, in continuing its great elitist and academic tradition. It is a tough challenge, but not an impossible one, pleading for a new model of university, in a new setting, to support the knowledge-based development of the globalized world.

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STRUCTURE OF THE ROMANIAN UNIVERSITY TECHNICAL EDUCATION SYSTEM AND THE BOLOGNA PROCESS

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Abstract

The paper presents a critical study on the contents of the classified list of domains and specializations in higher education, the fundamental field of "Engineering Sciences", compared with the proposed structure of the "Bologna" process,, in regard to their number, duplication, overlaps and inappropriate names, their influence on the superior engineering skill names, conclusions and proposals. One of the first steps of the reform in higher education should be focussed on its content. An expression of an education system is defined by the structure of the classified list of fields and specializations. Within the fundamental domain of "Engineering Sciences", the classified list of Bachelor areas and specializations comprises 27 university degree studies domains, with a table of over 177 specializations and studies programs. We believe in the need of taking a serious decision (even of political nature and assumption) in order to reconsider the much too large and artificial structure of the current university studies classified list.

Key words: technical education system, Bologna process, engineering science, specialty domains.

1. Introduction

The reform processes initiated by the Bologna procedure are serious challenges through the design and implementation of policies in higher education. The reorganization of university studies on the three levels (bachelor, master and doctorate) in order to differentiate the superior qualification (skill) levels, implies the rethinking of domains and specializations in higher education, so that the direct link between skills, the level of education and the market workforce requirements be achieved. Moreover, the shortening of the university degree stage to (3-4) years, during which the graduate only acquires general skills, basic for the chosen field of study, calls for the reduction of the fields and specializations number, while the specific professional skills focused on certain new advanced technologies applied in industry should be transferred towards master studies. General skills provided by the bachelor degree may be applied to different contexts and occupations, as they are based on the general knowledge acquired, also

called "key" knowledge, "kernel" knowledge that guarantee the transfer of the bachelor degree holder from a specialization field to another, as well as the possibility of further training, within specific and complementary narrower specialization, by means of master studies.

Engineering is a profession that can be built through a gradual training with disciplines presented in a logical sense. The fundamental and the area disciplines should provide the basis of the overall technical knowledge required for an engineer. The specialized disciplines will provide the relevant specialization of the study program and will complete the accomplishing of skills and abilities specific of a certain engineering specialization. Thus, we consider that one of the first steps of the reform in higher education should be focussed on its contents. An expression of an education system is defined by the structure of the classified list of fields and specializations.

A bird's eye look on the classified list of Bachelor degree fields and specializations, presented every year in government decisions, awake the curiosity for a further structure analysis of the university education in Romania in comparison with the implemented systems according to the "Bologna" process.

Despite the reports presented more or less regularly by the public authorities and various politicians in regard to the structural form of the higher education system, one may notice the extremely high number of domains and university degree specializations, which seems to be growing every year.

2. Parallel: The educational system in Romania – the "Bologna" Process

Figure 1 shows the structure of technical university long cycle studies (5 +1 years), which worked before the "Bologna" process. Specialized engineers were formed as a result of the five years' study, after which they had the possibility of deepening their specialization in the second cycle of "Postgraduate" study, with the duration of one year.

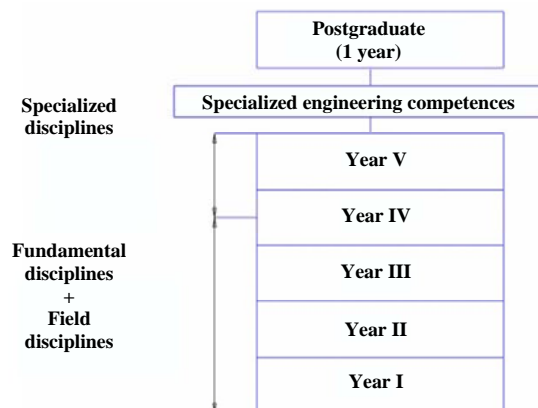


Figure 1. Structure of long-term higher technical education (prior to the implementation of the Bologna system)

Figure 2 shows the structure of the study cycles according to the "Bologna" process. "The first cycle, bachelor, based on three years of studies, provides the training of an engineer with overall technical knowledge obtained from fundamental and area disciplines.

The specialized engineer is formed in the second stage, of the Master, sized for a period of two years of study. It can be seen that the "Bologna" system represents a restructured and improved

3. Discussion on the classified list of fields and bachelor technical specializations

Fields with relatively high number of study programs (specializations):

- Chemical engineering: 15 study programs;
- Civil engineering: 10 study programs;
- Electrical engineering: 7 study programs;
- Industrial engineering: 12 study programs;
- Automotive engineering: 5 study programs;
- Mechanical engineering: 13 study programs;
- Environmental engineering: 7 study programs;
- Engineering and Management: 9 study programs;
- Applied Engineering Sciences: 9 study programs;

The last 10 years have witnessed various attempts to reduce this number. The resulting effect was just the opposite, meaning that every year brought the appearance of still other specialisations in the classified list, as a result of various hidden agendas.

The analysis of the filed names also reveals annoying overlaps and duplications regarding the alleged contents of fields and specializations.

The particular fundamental field of "Științe inginerești / Engineering Sciences" comprises no less than 27 areas of university degree studies, as compared to the 22 that existed when the Government Decision was issued with regard to the organization of university degrees, no.88 / 02.11.2005, together with a list of over 175 specializations, respectively study programmes (compared to 126 in 2004), and the number continued growing every year, following more or less relevant reasons.

In most fields that exceed (3-4) study programs, one may notice duplications and content overlapping. There are specializations/study programs in a field which have similar names in other fields.

Examples:

- Știința și ingineria materialelor oxidice și nanostructurale / The science and engineering of oxidic and nanostructural materials (in „Inginerie chimică / Chemical Engineering”) – Știința materialelor / Material science (in „Ingineria materialelor / Materials Engineering”);
- Inginerie sanitară și protecția mediului / Sanitary Engineering and Environmental Protection (in "Inginerie civilă / Civil Engineering") – Inginerie și protecția mediului / Engineering and environmental protection (in "Ingineria mediului / Environmental Engineering");
- Nanotehnologii și sisteme neconvenționale / Nanotechnologies and unconventional systems (in "Inginerie industrială / Industrial Engineering") – Mecanică fină și nanotehnologii / Fine Mechanics and Nanotechnologies (the field of "Inginerie mecanică / Mechanical Engineering"), Microelectronică, optoelectronică și nanotehnologii / Microelectronics, optoelectronics and nanotechnologies (the field of "Inginerie electronică și telecomunicații / Electronics and Telecommunications Engineering").

In these areas of specialization there are names that imply the overlapping content.

Examples:

- In the field of "Inginerie industrială / Industrial Engineering" there are, among other specializations, "Tehnologia și designul produselor textile / Technology and design of textile products" and "Tehnologia tricotajelor și confecțiilor / Technology of clothing and knitting products".
- In "Ingineria mediului / Environmental Engineering" there are the specializations "Ingineria și protecția mediului în industrie / Engineering and environmental protection in industry" and "Ingineria și protecția mediului în industria chimică și petrochimică / Engineering and environmental protection in chemical and petrochemical industry".
- In the field of "Inginerie navală și navigație / Naval Engineering and Navigation" with specializations "Sisteme și echipamente navale / Naval systems and equipment", "Navigație, hidrografie și echipamente navale / Navigation, hydrography and naval equipment".

The large number of specializations within the same field seriously narrows the program contents and the skills acquired by the graduate.

Examples:

- Almost all specializations in the field of "Inginerie civilă / Civil Engineering";
- Specializations in the field of "Inginerie mecanică / Mechanical Engineering";
- Specializations in the field of "Ingineria mediului / Environmental Engineering"
- Ingineria sistemelor de energii regenerabile / The engineering of renewable energy systems (field of "Inginerie industrială / Industrial engineering");
- Ingineria securității în industrie / The engineering of industry security (field "Inginerie industrială / Industrial engineering");
- Chimie militară / Military Chemistry (field of "Inginerie chimică / Chemical Engineering");
- Extracte naturale alimentare / Natural food extracts (field of "Inginerie chimică / Chemical Engineering");
- Tehnologie chimică textilă / Textile Chemical Technology (field of "Inginerie chimică / Chemical engineering").

With an economic system based on competition and the constant changing of the work market requirements and needs, we believe that society needs professionals (at least in engineering) with such general knowledge and professional skills that should enable them to relatively easily and quickly acquire other knowledge, depending on the market demands.

There are bachelor study programs, which, at least in terms of the contents implied by the title, require knowledge and skills of industrial production engineering. For instance, the specialization "Inginerie și managementul calității / Engineering and quality management" within the field of

"Inginerie industrială / Industrial engineering" requires basic engineering training for the manufacturing of goods and industrial products, in order to understand the complexity of issues as quality assurance and quality assurance management. What is quality management about? The answer is: about the obtained product and its manufacturing process, which are some engineering knowledge that a student can not acquire in the same time with those about the quality management involved in the product manufacturing.

Moreover, it is not possible or reasonable to apply engineering training given by other specializations within the same field (e.g. specializations of a technological nature), simultaneously with quality management.

Quality management covers even the product manufacturing engineering. One may find yet many other examples that stand for the abnormalities of the classified list in question. In other words, one cannot become a good quality manager if only trained *a priori* in the field of manufacturing product technologies which implies quality; it means to already be a professional engineer.

The specialization of "Logistică industrială / Industrial Logistics", which has been added to the classified list this year, provides auxiliary skills related to industrial production. Therefore, in this case, too, the specialization is narrow and requires basic engineering knowledge about industrial production technologies.

Similar considerations may be expressed in the case of some specializations in "Ingineria mediului / Environmental engineering" fields as: the program - "Ingineria și protecția mediului în industrie / Engineering and environmental protection in industry" and "Ingineria și protecția mediului în agricultură / Engineering and environmental protection in agriculture", "Ingineria și protecția mediului în industria chimică și petrochimică / Engineering and environmental protection in chemical and petrochemical industry".

Before approaching such programs it is absolutely necessary to have acquired productive technologies from the industrial and agricultural field - objectives and scopes of some study programs from other areas. In other words, before tackling with environmental issues in industry and agriculture, one must be a professional in a field with industrial technological, respectively agricultural profile.

Another case with similar consequences is the specialization of "Ingineria sistemelor de energii regenerabile / Renewable energy systems engineering" (field of "Inginerie industrială / Industrial engineering"). Only an energetical engineer can be involved in such a program, possibly at the master level.

Another paradoxical situation is the name of certain study programs that consists of two narrow specializations (e.g. "Inginerie sanitară și protecția mediului / Sanitary engineering and environmental protection). We mention that the sanitary engineering is misplaced here because there is a complex domain full of engineering content called "Ingineria instalațiilor / Sanitation engineering". Also, the field of "Ingineria mediului / Environmental Engineering" has its specialization with programs of study in the field of environmental protection.

In some areas there are specializations with the same name as the area (e.g. Inginerie mecanică / Mechanical Engineering - specialized in Inginerie mecanică / Mechanical Engineering, Ingineria mediului / Environmental Engineering - Specialization Ingineria mediului / Environmental Engineering, Inginerie chimică / Chemical Engineering – Inginerie chimică / Chemical Engineering specialization). In these situations, the following question comes naturally: What is the purpose and contents of other specializations within the same domain?

One may say that most engineering specializations have a ridiculously narrow content. In some cases, the specialization names could be assimilated, without much exaggeration, at the most with names of study subjects for the respective field.

We mention that the presentation of the inappropriateness of the content of the classified list of fields and specializations may easily continue with other examples and approaches.

From a different point of view, we cannot but wonder what the qualifications classified list will look like? Will there be a qualification assigned to each specialisation?

How will this classified list of qualifications be compatible with the one of the EU countries? We add that the classification of fields and specializations hereby analyzed is totally different and more complicated than such classified lists belonging to other countries with more developed higher education systems that stand on clear principles that provide outstanding academic training, which allows the graduate to be mobile within the work market.

4. Conclusions and proposals

The expertise acquired in the activity of production, research, engineering training within the higher education system, the activities of designing and constructing the curricula within academic units that we are managing, as well as our activity as ARACIS expert evaluators, allow us to state with assumed responsibility that, in the current list of fields and specializations there have been introduced new areas and specializations in order to ensure some personal and group interests for providing additional didactic positions and some names have rather followed image "shots" for potential candidates or those who advise them (using the terms like nanotechnologies, quality, ecology, management, environment), sometimes leading to names that are at least questionable from the scientific point of view, for example "Mecanică fină și nanotehnologii / Fine Mechanics and Nanotechnology" in the Inginerie mecanică / Mechanical Engineering domain, "Ingineria securității în industrie / The Engineering of industry security" - in the "Inginerie industrială / Industrial Engineering" domain.

We believe in the need of taking a serious decision (even of political nature and assumption) in order to reconsider the much too large and artificial structure of the current university studies classified list.

This measure could be initiated by the ministry leadership by consulting the Rectors Council and by appointing a committee that should consist in true specialists, experts in the superior training engineering process, in the needs of the work market, without any personal or group interests, inconsistent with a true education reform.

Such a team made of commissions focused on groups of complementary domains would inspire themselves from documents and classified lists applied in the EU countries with more developed high education systems. The effect of this action might be the establishment of a classified list of fields and specializations compatible with the higher qualifications applicable in the EU. Another effect would be a substantial reduction of the public spending.

Preventing the conclusions of the previously proposed approach, we daresay that the number of fields at this level should be reduced, as there are exaggerations and duplications at this level, too. Thus, we propose the analysis of the opportunity of taking as a model the lists of classified fields and specialisations applied in EU Member states with more developed higher education

systems. The specialisations comprised in the current classified list that pass the reviewing process could become steps to take in order to create real future masters programs.

We believe that any higher education reform process must start from its very background, i.e. from the structure of the classified list of fields and specialisations.

An even more radical approach (which the authors agree with) can start from abolishing the current specializations and eliminating them from the list. The subjects package which outline „the basic elements of the specialization” in the first stage of the university cycle would be reduced to a maximum of 30 credit points which should have, within the field of study, the nature of an „optional modulus”. Thus, it becomes a study direction – name used in the late 90’s – which will be mentioned afterwards in the Diploma Supplement.

Therefore, the conditions would be met in order to provide a more solid engineering training, and –also an important aspect- there could be more rigorously outlined the master curricula which provide further study.

The absolutely inappropriate situation requires the self-referral of the ARACIS standing committees which were able to observe the real situation of the system, during the performed assessment process. We wonder how there can be respected the criterion that a study program should vary by the curriculum content with more than 20 % compared with other similar programs, if it includes in most cases over five specializations?

Unfortunately, the situation from the above technical higher education is not a singular case. A fugitive content scroll of other fundamental areas and the analysis of titles and specializations shows a more than worrying situation.

We may now draw a synthetic conclusion.

The lack of a coherent procedure for the creation and endorsement of new curricula at the ministry level has led over the years to a huge classified list of specializations, dominated by overlapping and duplication, with titles that lead to a ridiculously narrow content (which may be easily approached within master programs or even within a subject of study) or which can be labelled as having mainly an advertising message.

The necessary measures – we allow ourselves to suggest some in this paper - are badly needed and must be urgently applied. We have already reached the second series of bachelor degree in the technical field and the negative effects are clear especially with regard to the master degree programs that seem to be out of control.

We think it is necessary to make a broader study more developed even by a POSDRU project, the results of which would lead to a new system of bachelor programs designing in the whole higher education system in Romania. We consider this issue a real chapter of the education reform in the university field.

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NEW PERSPECTIVES AND CHALLENGES OF THE ACADEMIC LIFE IN ROMANIA WITHIN THE CONTEXT OF THE GLOBALIZATION OF THE EUROPEAN HIGHER EDUCATION

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Abstract

The aim of this paper is to describe how the academic life in Romania became a part of the “European Area of Higher Education”, being influenced by three main points, adopted after the fall of the communist regime: the Bologna process, the Romanian Agency for Quality Assurance in Higher Education (ARACIS) and the New Law of Education. The main objective of all these projects was to enhance the performance of the Romanian Higher Education system. Thus, according to this natural evolution, we can observe an increase in the quality level of the academic competition and a growth regarding the diversity of the students and of their learning needs.

Key words: European Higher Education, Bologna, quality, law.

1. The Higher Education in Romania within the European framework

Higher education in Romania is considered a public good and should contribute to increasing its relevance as a public responsibility and thus increase trust. It is linked to the improvement of individuals and society as a whole within the European Union and promotes the values of discovery and knowledge earned through research, scholarship and creative activity. By offering educational programs, the higher education system contributes to the preparation of their graduates for productive and active live as citizens and members of society. The quality assurance and accreditation processes are expected to further promote and assert this role of higher education and to provide assurance to the public at large, and particularly to students and employers. Higher education in Romania is offered both by public and private higher education institutions, which include universities, academies and colleges organized in special departments. The academic year goes from October 1st to September 30th. The new legislation of

June 2004 (law nr. 288/2004) stipulated the reorganization of university studies into three cycles (Bachelor, Master and Doctoral).

Romania signed the Bologna Declaration in 1999. Various steps have been taken by individual universities, towards implementing the Bologna Declaration. In 2004, once specific legislation was passed, nation-wide measures towards the implementation of Bologna Process were taken by all the Higher Educational Institutions in our country. In 2010, Romania took over the Bologna Secretariat, as Romania will organize in 2012 the European Higher Education Area/ Bologna Process Ministerial Conference of the ministers responsible with the Higher Education and the Third Bologna Policy Forum in Bucharest.

At the European level, in the context of the Bologna Process implementation, Romanian higher education has positive feedback and a good image. According to the Bologna Process Stocktaking Report (prepared for the Ministerial Conference in Leuven, 2009), our country has achieved a grade of “excellent performance” for 8 out of the 12 indicators measuring the degree of implementation of the Bologna Process, among the quality indicators with the most assurance in higher education. Thus, both the international external evaluations of the Romanian Agency for Quality Assurance in Higher Education (ARACIS), and the fact the agency obtained full membership in the European Association for Quality Assurance in Higher Education (ENQA), and particularly in the exclusive European Quality Assurance Register (EQAR), were highly appreciated. The image of Romania at the European level in terms of formal implementation of the Bologna Principles is not, however, exclusively positive. In this regard, one weakness is represented by the delays in the implementation of the national qualifications framework in higher education. However, we should keep in mind that this issue is not only Romania's; it is somewhat general in Europe. Furthermore, upon the proposal of the Council of Europe through CDESR – the Steering Committee for Higher Education and Research, the deadline for approval (self-certification) of the national qualifications framework has been extended until 2012 in most of the 46 countries of the Bologna Process.

In general, the current positive information in the European context on the implementation of the Bologna Process in Romania should be treated restrictively and each time on comparative basis. Progress in the implementation of the Bologna Process is not an exclusive feature of Romania, but rather a general dominant feature of the national systems integrated in the process. As regards the higher education future, challenging that Romania will manage from a national and especially European perspective, we should mention: the completion of the National Qualifications Framework in Higher Education; the external evaluation of all higher education institutions in accordance with the European quality standards; improved access to education for disadvantaged and underrepresented groups (poor, rural); increased European competitiveness of Romanian universities and more foreign students from the European and international areas.

The actual evaluation methodology takes into account, through the way it is built, the underlining of the institutional diversity in the Romanian system of higher education. The premise taken as reference is the following: a higher education system with a high degree of institutional diversity is expected:

- to satisfy the needs of larger categories of students;
- to offer opportunities of academic and social mobility;
- to satisfy the requirements of a large extent of specialised labour markets;
- to promote the value of a democratic society.

The institutional diversity takes multiple forms and it shows clearly at different levels, depending on: the disciplinary and professional specialisation (comprehensive or specialised universities), property form (public or private universities), the history of recognition, the dimension measured by the number of students or studies programmes etc. A problem of interest for the candidates towards student life, for the employers, for the public authorities responsible for the higher education and for the public, in general, refers to the information availability about institutional differences from the system and about the differences between the studies programmes quality. Among the factors which generate the academic diversification in the higher education we mention: the financing instruments, the criteria of quality assurance and of accrediting, and the value profile of the university professors and of the direct beneficiaries of the education services.

In the process of globalisation, Stephen Vincent-Lancrin ("Building Future Scenarios for Universities and Higher Education: an International Approach", *Policy Futures in Education*, vol. 2, 2004, pp. 245-262) suggests six possible scenarios for the future of higher education:

1. a traditionalist scenario, which stops or slows down the movement towards mass education, marketisation, use of ICT and adult education
2. an embrace-change scenario, bringing in private funding under the control of the higher education institutions
3. a market-driven scenario, in which organisations look for some specialized niches, developing international partnership and use of ICT for distance learning
4. a lifelong learning scenario, with some universities certifying courses and other traditional functions move to the private sector
5. a learner-led scenario, in which learners design their *cursus* and select courses from a global network of universities and industrial partners
6. an informal learning scenario, in which formal higher education is shrinking and eventually disappearing.

2. Status and criteria of quality in the Romanian Higher Education

In building a foundation for discussions about academic quality, we begin by considering a set of contexts. We should admit from the outset that there are multiple perspectives on academic quality, all depending on the contexts taken as reference. A multi-horizon context of quality evaluation in higher education is, after all, a subjective one, even if based on objective data. This subjectivity must be understood in terms of perceptions of different categories of stakeholders on education in general, and on the academic quality of Higher Education study programs in particular. We also considered, of course, an objective contextual horizon, defined in terms related to general demographics and to higher education demographics, in particular, and to the public funding of universities. We also combine external and internal references, objective data and subjective variations in the perceptions of different categories of persons interested or directly involved in higher education.

The incentive policy is considered fundamental in stimulating its quality and a relevant research. The main characteristics are:

- Transparency (explicit rules)
- Bottom-up approach
- Evaluation by peers
- Assessment of the peers themselves

The Romanian Agency for Quality Assurance in Higher Education (known by the acronym ARACIS, which stands for *Agentia Română de Asigurare a Calității în Învățământul Superior*)

is an autonomous public institution, of national interest, having a legal personality and its own income and expenditure budget. The mission of ARACIS is to assure the achievement of the public interest through quality standards in the realization of study programs and in the awarding of qualification in higher education, and through supporting the continuous enhancement of quality management in line with the principles and objectives of the Bologna Process. In realizing this mission, ARACIS takes as reference the framework provided by four principles which underline its work: cooperation, information and transparency, European visibility and quality. The key activities of ARACIS are the following: setting standards, identifying performance indicators and benchmarks that would contribute to the development of institutional quality culture and accreditation of higher education institutions and study programs; delivering services to academic communities that contribute to quality improvement and raising quality standards; providing such information which would assure the public (including students) that study programs and institutions have quality assurance mechanisms and procedures in place and are either at the level or above and acceptable threshold level of quality.

This agency started to function in 2005 (by the Government Emergency Ordinance nr. 75/2005 Regarding Quality Assurance in Education), and in 2006 the Romanian Parliament adopted the final Ordinance which became the Law nr. 87/2006. The mentioned law provides the framework regarding quality assurance in education as a whole, while also referring specifically to quality assurance and accreditation in higher education. The law was drafted and approved in accordance with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (Bergen, 2005), adopted by the ministers responsible for higher education from the Bologna countries. This new context was meant to change the paradigm of higher education expansion. In order to have a unitary and comprehensive approach to quality, the Law provides a general framework that is valid for the university education. Accreditation is considered part of the procedure of quality assurance which follows from provisional authorization in order to progressively assure compliance with the minimum demands of quality enhancement. A „national qualification framework” is in progress and it has not yet been finalized. With the framework finalized, it is expected that the period of learning to institutionally operate with it in terms of curriculum design and implementation may take a while.

In accordance with its mission and the legal provisions, The Romanian Agency for Quality Assurance in Higher Education periodically draws up methodology for external evaluation and standards of reference and list of performance indicators for various types of programmes and higher education providers and evaluates, according to the standards and methodology approved by Government decisions, on demand or on its own initiative and proposes the authorisation, respectively accreditation of faculties and study programmes. A difficult task following an external evaluation proved to be that of formulating the final judgment with regard to external confidence in institutional quality. The Methodology proposed three levels of confidence for institutional evaluation: high degree of confidence, limited degree of confidence and lack of confidence.

The Agency is lead by a Council of 15 members, with high academic and moral status, holding teaching positions in the higher education system. In the same time, ARACIS elaborated a Code of Professional Ethics, applicable to its experts and Council, in order to establish a no-conflict-of-interest mechanism. The Code includes a minimal set of principles, values and rules of conduct, which must be regarded as referential for the activities of institutional quality self-assessment and external quality assessment and in the activities of accreditation of the institutions in the domain of higher education. At the present time, there are 26 evaluators registered in the theological domain of The Romanian Agency for Quality Assurance in Higher Education, the real

key-element in the various assessment processes, all of them professors in different fields of theological studies. Since 2009, ARACIS became full member of the European Association for Quality Assurance in Higher Education (ENQA) and was also recently accepted in, and is thus now listed in the European Quality Assurance Register for Higher Education (EQAR).

Here are some interesting data regarding the contextual framework of the Romanian higher education, based on Quality Barometer of The Romanian Agency for Quality Assurance in Higher Education for 2009. This Barometer proposes an analysis of the state of quality in the higher education as a system:

Research seems unattractive for many universities especially for financial reasons: the incomes generated by research do not supplement the budgetary allocations in the same manner as the fees paid by students, and have a lesser effect on the individual incomes of researchers. For this reason, recently accredited higher education institutions out of a total of 85 have obtained more than half of the public money allocated for research (51.14%), and 3 universities (i.e.: Babes-Bolyai University in Cluj-Napoca, Bucharest Polytechnic University, University of Bucharest) have won almost one third of the funds. In addition, about 20% of the Romanian universities have collected more than 90% of the research funds through competition (ARACIS, Quality Barometer - 2009).

The annual reproduction of underfunding in higher education, despite the increase in absolute levels of the funds allocated to universities, has the following direct effects: deterioration of physical assets; low level of equipment of laboratories and classrooms; lack of specialized administrative structures to support university management; lack of information resources or lack of additional resources required to ensure quality. Given such underfunding, quality assurance in universities is under question. Maintaining high quality standards and implementing internal systems of quality evaluation and monitoring require additional financial efforts and public resources, in parallel with a diversification of funding sources, including private sources.

The hierarchy of universities on the basis of the research funds received is associated with the distribution of the number of articles indexed in international databases. Thus, 16 universities that are among the top 20, according to the number of ISI indexed articles criterion, are also among the top 20 universities as regards the obtained research funds. And the top 3 universities that have obtained the largest research funds also stand in the top 3 for ISI indexed articles, with a total of 38% of the articles. ISI publication activities revolve around a small group of universities: universities provide over 50% of the total number of ISI indexed articles. Moreover, only 20 universities provide over 90% of the ISI indexed articles.

The lack of research incentives and the under-funding of public education programs have trapped universities in the logic of survival in which emphasis is rather laid on the communication of knowledge - teaching, than the production of knowledge - research. On the other hand, it should be mentioned that if no answer is provided to questions like: for whom and for what is the research carried out, who commands it, who pays and who uses it, beyond the number of published articles, the mentioned negative effects will get worse. According to some academics, the grouping of the research projects and funds between a relatively small numbers of universities is also a consequence of the uncertainties associated with the social standing of university research, and also of the fact that the universities with good performance in scientific research are published in journals with visibility.

The Romanian universities not only do they miss in being listed among the best higher education institutions in the European or global ratings, but they are also missing from the top 5 study destinations for students of any European country. An exception is the Republic of Moldova, an understandable situation, given the Romanian policy of providing special study places for Moldovan citizens. The figures on foreign students choosing the Romanian higher education system is still low compared with European countries - in such hierarchy, Romania stands on a backward position. The number of foreign students who choose the Romanian higher education system is still low compared to the European countries - in such hierarchy, Romania stands on a low position.

Romania and Bulgaria have the lowest rates of participation in training programs and professional development of employees among all European countries (1.3% versus 29.2% - Denmark, the highest value recorded in Europe). As regards the quality assurance mechanisms, there is a gap between the national external system of quality assurance, positively evaluated at the European level, and the universities' capacity to implement mechanisms of quality assurance and improvement. Romania follows the aging and population decline global trends reported in Europe and worldwide. Beside the overall diminution of the Romanian school population, higher education has undergone an intense mystification process after 1990. The large number of students in nowadays university brings about confusion and anonymity, and it is not unusual for seminars and lectures to be often overcrowded.

Furthermore, the Quality Barometer of The Romanian Agency for Quality Assurance in Higher Education for 2010 indicated that students are unfortunately atomized to a great extent, having relatively few value yardsticks within the society and that they are rather transcendental. The data seem to suggest that the university does not accomplish yet its mission of civic, scientific and social education, limiting itself to being an authority granting academic certification. An important conclusion, based on the empirical evidence gathered from the subjective and objective data is that the current quality assurance standards, procedures and methodologies have engendered the premises but have so far failed to determine the creation of local cultures of quality in all universities. Many universities do not employ internal evaluation as a management instrument in current quality enhancement activities. Internal evaluation does not fulfil, in most of the cases, a function in quality assurance, which remain a centralized function, playing only an auxiliary role in the organisation and remaining external to the operational area, to the technical teaching and learning process. The data collected through qualitative methods for this *Barometer* suggest that we don't have a student-centred university, but rather a university concerned mainly with its financial survival in a hostile environment, an institution which is self-centred and keen to benefit from the critical survival resources.

3. The New Romanian Law of Education

The new Law of Education, adopted on the 5th of May 2011, was based on the strategy "Education and Research for the Knowledge Society", elaborated on the basis of the National Pact (2008). The present law is also the result of a significant number of consultations with the stakeholders (Rectors' Conference, students and trade unions', associations, employers, NGOs etc.). The application methodologies are to be designed and launched during 2011, while different parts of the Law of Education will be applicable as of 2012-2013.

There were some reasons providing the background for the drafting of the new education law: the necessity of increasing the research and the quality of the education system, the uniformity of university missions, the uniform funding, and the uniformity of human resource policies. Therefore, the main objectives of the new law are the following:

- Increased autonomy and public responsibility
- Diversification and classification of Higher Education Institutions in three groups: education universities, education and research universities and research-intensive universities
- Concentration of resources
- Entrepreneurial universities
- Human resources policy reform
- Status of teaching personnel
- Lifelong learning mechanisms (non-formal and informal learning).
- The students become a central part of the educational process and they are considered partners of the Higher Education Institutions and equal members of the academic community
- The development of University Consortia, which will have a role in better concentrating resources and subsequently creating critical mass.

The evaluation methodology is the tool by which is achieved the ranking of the academical studies programmes and also the universities' classification in three categories: universities focused on education, universities of education and scientific research or universities of education and artistic creation, universities of advanced research and education. Thus, the evaluation methodology allows the two results mentioned above to be based on a system of interest criteria and of some standards and indicators. Taking into account both the good practices from the European and international level, regarding the ranking and classification systems and the national experience in the field, the evaluation methodology considers the following:

- A context of diversification of the higher education institutions and academical studies programmes
- A more consistent and transparent data basis and information regarding the universities and their studies programmes
- An informative and evaluative support for the improvement of the universities and academical studies programmes
- The enhancing of the higher education public financing efficiency in the European context.

The evaluation of the academic studies programmes is achieved depending on the studies field, on the basis of the real results associated with the following evaluation criteria: the development of performance in scientific research, the development of learning focused on student, the development of the institutional relations with the external background and the development of the student services. To each evaluation criterion a set of references standards is associated and to each standard a set of performance indicators is associated.

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