

Key competences for all: Policy design and implementation in European school education

Study Report

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Key competences for all: Policy design and implementation in European school education

Final Report

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Foreword

We live today in an ever more complex world. Globalisation, climate change and digitalisation are but a few of the multiple challenges that require everyone to develop and update a wide range of skills and competences continually throughout life.

Education and training need to support young people and adults in developing key competences and basic skills. This will help them to successfully navigate this world, address its many challenges and play active roles in shaping a positive future. Member States across the EU have invested in competence-based education and advanced policy initiatives and reforms on both basic skills and key



competences. This is encouraging and needs to be sustained and even further improved. Indeed, the EU has yet to meet its target to reduce underachievement in basic skills to less than 15% and little progress has been made over the past decade.

The European Education Area supports EU Member States' collaboration to build more resilient and inclusive education and training systems. Increasing the level of basic skills and key competences is at the heart of the European Education Area, including as defined in a Council Recommendation adopted in 2018. The Commission will keep supporting Member States in their efforts to advance key competence development.

In this light, I am pleased to present this study on policy reforms for broad key competence development and a better achievement of basic skills. Its wide scope, in-depth analysis of reform processes in diverse Member States and solid research basis provide valuable findings to advance key competence development across the EU. The study provides you with an overview of major reforms in key competence development across all EU Member States. It delves deeper into reform processes in five selected Member States, which are representative of the different education systems across Europe.

The findings are based on experiences and lessons learned in those selected Member States. Policy makers and other education stakeholders are invited to consider those findings and policy pointers in terms of their own country contexts, education systems and key actors involved. This will allow them to develop and adapt strategies appropriate to their own context and the specific challenges they face.

Commissioner Mariya Gabriel European Commissioner for Innovation, Research, Culture, Education and Youth



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Country abbreviations

Country abbreviations	Country
AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czechia
DE	Germany
DK	Denmark
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
HR	Croatia
HU	Hungary
IE	Ireland
IT	Italy
LT	Lithuania
LU	Luxembourg
LV	Latvia
MT	Malta
NL	Netherlands
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia



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1. Introduction and overview

This chapter introduces the study. It describes the main research questions, the conceptual framework which has underpinned the research, and the study methodology.

1.1 Introduction to the report

Young people need a broad set of competences, including basic skills, for many reasons—for their own personal fulfilment and development, to find meaningful employment and to become engaged citizens and lifelong learners. Globalisation, structural changes in the labour market and the rapid development of new technologies require the development and updating of competences throughout life. Young people need to build the resilience and competences to cope with rapid change and to positively shape their present and future lives. Increasing the level of key competences is at the heart of the European Education Area—a space where all young people should receive the best education and training, regardless of their background.

Box 1: Key competences

Competences are defined as a combination of knowledge, skills and attitudes. The eight key competences set out in the 2018 Council Recommendation on key competences for lifelong learning are:

- Literacy competence
- 2. Multilingual competence
- 3. Mathematical competence and competence in science, technology and engineering
- 4. Digital competence
- 5. Personal, social and learning to learn competence
- 6. Citizenship competence
- 7. Entrepreneurship competence
- 8. Cultural awareness and expression competence

The competences are considered as equally important and may be applied in different contexts and combinations. Skills such as critical thinking, problem solving, teamwork, communication and negotiation skills, analytical skills, creativity, and intercultural skills are embedded throughout the key competences.

Source: Council of the European Union¹

The Joint Progress Report of the Council and the European Commission² (2010) recognised the Framework of Key Competences for Lifelong Learning (2006)³ as a contributory factor in increasing the shift towards competence orientation of European teaching and training systems. Subsequent studies highlight progress made in several Member States on

¹ Council of the European Union, Council Recommendation of 22 May 2018 on Key Competences for Lifelong Learning, OJ C 189, 4.6.2018.

² Official Journal of the European Union. (2010). *Joint Report of the Council and the Commission on the implementation of the Education and Training 2010 Work Programme.* Retrieved from: https://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:117:0001:0007:EN:PDF

³ European Commission (2006). *Key competences for lifelong learning: A European reference framework.* Retrieved from: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:394:0010:0018:en:PDF



approaches to both basic skills and key competences.^{4 5} A European Commission Report from 2012⁶ also looked especially at the use of the Reference Framework in school education, concluding that Member States adopted different approaches to guide and support competence-oriented education in schools with some countries having developed national strategies to support competence development at least in some of the key competences identified by the European Framework.

Member States are either adopting specific measures to address the development of competences or implementing overarching national strategies. Overarching strategies often encompass several layers and tackle basic skills and key competence development from different angles. Specific measures, that some Member States opted to focus on, include curriculum revisions, student assessment and early identification of pupils at risk of low performance and consequent tailored education, as well as empowerment and continuing professional development of teachers to ensure they have the skills, materials, and infrastructure to effectively teach key competences and/or basic skills.

This study presents an overview of competence-based policies and initiatives across the EU 27, with a more in-depth study of five case study countries, providing an opportunity for policy learning across countries on reform processes and on building implementation capacities. The policy context and governance conditions of each Member State sets the scene for what is appropriate and achievable.

In all countries and systems, the COVID-19 crisis has been the cause of unprecedented economic and social disruption and the pandemic has had far-reaching consequences for young people's learning and development of their key competences now and in the future. The study also explores the responses that countries have made to this crisis, in terms of policy design and implementation of competence-based approaches in school education.

1.2 Aim and objectives of the study

The overall aim of the study was to gather evidence on effective policy reforms⁷ for broad competence development in school education, including better achievement of basic skills.

The six key objectives are:

 Objective 1: To understand the key features of policy design and implementation of reforms for broad competence development and achievement of basic skills in school education across the EU 27.

⁴ Looney, J. and Michel, A. (2014). *KeyCoNet's Conclusions and Recommendations for Strengthening Key Competence Development in Policy and Practice.* Brussels: European Schoolnet. Retrieved from: http://keyconet.eun.org/c/document_library/get_file?uuid=78469b98-b49c-4e9a-a1ce-501199f7e8b3&groupId=11028

⁵ KeyCoNet. (2014). *Key Competence Development in Europe: Catalogue of Initiatives*. Brussels: European Schoolnet. Retrieved from:

http://keyconet.eun.org/c/document_library/get_file?uuid=e29c058b-01be-4d08-b77c-85925069d007&groupId=11028

⁶ European Commission/EACEA/Eurydice (2012). *Developing Key Competences at School in Europe: Challenges and Opportunities for Policy*. Retrieved from: https://eacea.ec.europa.eu/national-

policies/eurydice/content/developing-key-competences-school-europe-challenges-and-opportunities-policy_en ⁷ For the purpose of this study, policy reforms refer to the design and implementation of effective education policies for the development of key competences by all learners. Reforms in this context may include new initiatives, approaches, and iterative processes to support ongoing improvement.



- Objective 2: To explore systemic conditions and policy reforms to support broad competence development and achievement of basic skills in school education in the EU 27.
- Objective 3: To explore in-depth the policy design and implementation strategies in five Member States that are more advanced in their reform efforts and that, collectively, are representative of different education systems in the EU.
- Objective 4: To explore how related reforms in curriculum, learning approaches and assessment and in teacher and school leader professional development have supported reforms for broad competence development and achievement of basic skills in school education.
- Objective 5: To understand how countries have adapted to changing challenges and circumstances of the COVID-19 pandemic, and in particular, improvements in digital capacities as well as readiness to adapt to distance learning support needs of families guiding their children's learning.
- Objective 6: Through a detailed exploration of objectives one to five, to identify "lessons learned" and provide recommendations for policy makers designing and implementing policy reforms in diverse contexts for the development of broad competences by all learners.

1.3 Change in complex, multi-layer education systems: conceptual framework

The complexity of change in multi-layer, multi-actor education systems is extremely high.⁸ This is particularly important to note as competence-based approaches are in and of themselves complex, requiring schools to adopt new approaches, such as: cross-curricular planning, opportunities for interactive, inquiry-based learning, personalisation of learning with the aim of helping all learners to succeed, and performance-based student assessments that capture students' abilities to address complex problems or assessment of transversal competences.⁹

Implementation in complex systems is neither straightforward nor linear. The challenges around implementing curricular and pedagogical changes, involve changes in professional beliefs, values, and behaviours, including interactions with students, colleagues, and stakeholders. The shift to competences, which encompass knowledge, skills, attitudes, values, and desire, all of which lead to action in a specific domain and context, ¹⁰ may involve fundamental shifts in teacher mindsets and in their approaches to teaching, learning and assessment. The complexity of change in multi-layer, multi-actor education systems is extremely high.

 $[^]g$ Burns, T. & Köster F. (ed) (2016) *Governing Education in a complex world*, OECD Publishing, Paris. Honig, M. (ed.) (2006), *New directions in education policy implementation: confronting complexity*, State University of New York Press, Albany, NY.

Thiesens, H., Hooge, E. and Waslander, S. (2016). "Steering dynamics in complex education systems: An Agenda for Empirical Research", European Journal of Education, Vol. 51, No. 4, pp. 463 - 477.

⁹ Grayson, H. (2014). KeyCoNet's Review of the Literature: A Summary. European SchoolNet, Brussels http://keyconet.eun.org/literature-review

Cedefop (2016). Application of learning outcomes approaches across Europe: a comparative study. Luxembourg: Publications Office. Cedefop reference series; No 105. http://dx.doi.org/10.2801/735711 ¹⁰ Hoskins, B. and Deakin-Crick, R. (2010). Competences for Learning to Learn and Active Citizenship: different currencies or two sides of the same coin? *European Journal of Education*, Vol. 45, No. 1. Pp. 121 – 137.



The **conceptual framework for this study** (Figure 1), which aims to capture the complexity of policy design and implementation of competence-based education, has guided the different stages of the study: the desk research, country mapping, design and implementation of the peer learning programme and the design of this report and the policy recommendations.

The framework is grounded in the need to adopt a systems approach towards the design and implementation of policy reforms for broad competence development, including basic skills, ¹¹ in school education. This will help to achieve a contextualised understanding of the varied educational systems, and policy measures across the EU 27. The study examines the relationship between system inputs, the ways in which these policies and programmes are activated, and how they contribute to the quality of school education in terms of inclusion, equity, and better learning outcomes.

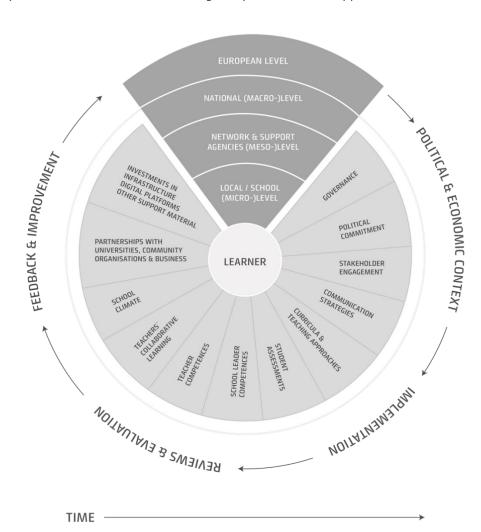


Figure 1: Key elements of reforms introducing competence-based approaches

¹¹ While basic skills are included in key competences, some countries treat them separately to the development of competences. For this reason, basic skills have been identified as reading, mathematics and science for the country mapping.



The **conceptual model** highlights the following key elements:

- The **learner** is at the centre, supporting a constructivist approach, with the learner fully engaged in the learning process (and not a passive receiver of knowledge). ¹² Students may be involved not only in the learning process but also designing the process, assessing outcomes and doing research. Learner voice is also represented in policy design and policy evaluation processes.
- Reform strategies are appropriately adapted to a country's **governance structure**, with countries balancing central steering and local/school-level autonomy.
- The political commitment of key education policy makers, including stakeholders, supports longer-term sustainability of initiatives.
- Ongoing stakeholder engagement in policy design and implementation builds trust and ownership of new initiatives.
- Effective communication with social partners, civil society, school leaders, teachers, students, parents, and other key actors on the aims of curricular reforms is essential. Active communication and engagement with school leaders and teachers is vital in shifting professional beliefs and practices.
- To support curricular changes, new teaching approaches, which include task-based and interdisciplinary approaches, which balance collaborative and individualised learning, and that are teacher- and student-led are needed. They may also involve cross-curricular teaching.¹³
- **New assessments** that capture students' higher-order thinking, ability to demonstrate complex problem-solving and /or to work in teams are more effectively aligned with competence-based approaches. Classroom-based and digital formative assessment can support better tailoring of teaching to meet all students' needs, and student self- and peer-assessment to develop learning-to-learn competence.
- School leaders need competences to lead school-level change and innovation. The cross-curricular and interdisciplinary nature of competences may catalyse whole-school planning and support achievement of learning outcomes.
- **Teacher competence standards and frameworks** need to align with competences and skills they will be expected to help students to develop. ¹⁴ Initial teacher education and continuing professional development should be re-oriented and aligned with revised expectations for teachers.

¹² Cedefop (2016). Op cit.

¹³ Grayson, H. (2014). *Op cit.*

¹⁴ Gordon, J., Halász, G., Krawczyk., Leney, T., Michel, A., Pepper, D., Putkiewicz, E. and Wiśniewski, J. (2009). Key competences in Europe: Opening doors for lifelong learners across the school curriculum and teacher education. Warsaw: CASE-Center for Social and Economic Research



- Opportunities for teachers' collaborative learning with peers in their schools (micro-level) and in professional networks in and out of schools (meso-level)¹⁵ ¹⁶, can support teachers to adapt new approaches and to innovate.¹⁷
- School climates that are supportive and positive are seen as important for student learning and wellbeing; students' values, beliefs, and opinions and perspectives.¹⁸
- The importance of partnerships with universities (e.g., as partners in action research, supporting teacher competence development in initial and continuing teacher education, evaluation of policy implementation, etc.), as well as community organisations and business are also emphasised.
- The shift to competence-based approaches may also entail investments in infrastructure to allow more interactive, experience-based learning, and new textbooks, digital tools and other learning materials.¹⁹
- Surrounding the figure, both the context and processes vital to policy design and implementation are indicated—beginning with the political and economic context, and continuing with the cycle of implementation, review and evaluation, and feedback and improvement.

The element of time should also be mentioned. Countries vary in their implementation capacity and countries with lower capacities²⁰ may require more time to develop foundations necessary for reforms. To the extent that countries with lower capacities can learn from the accumulated knowledge and lessons learned in other countries, they may be able to accelerate this process. It is important to note that the model is iterative rather than linear, with formative feedback and improvement integrated throughout.

An additional important dimension to note is the impact of exogenous shocks, such **as the current COVID-19 crisis**, which has highlighted even more the need to improve inclusion and fairness in education and the need for policies to adapt rapidly to changing challenges and circumstances. This encompasses not only the need to ensure access to digital infrastructure, but also teachers' digital skills and their readiness to adapt competence-based approaches in the context of emergency remote learning, and to support families in helping young people to continue learning. It also involves measures to equip school and municipal leaders with the necessary knowledge and resources to adopt inclusive "whole

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¹⁵ Cedefop (2016). Op cit.

¹⁶ References to macro-, meso- and micro-levels are adapted from Day, C. (2011) Uncertain Professional Identities: Managing the Emotional Contexts of Teaching. In: Day, C. and Lee, J.C.-K., Eds., New Understandings of Teacher's Work: *Emotions and Educational Change, Springer*, Dordrecht, 45-64. https://doi.org/10.1007/978-94-007-0545-6_4

¹⁷ Duncan-Howell, J. (2010). *Teachers Making Connections: Online Communities as a Source of Professional Learning, British Journal of Educational Technology*, Vol. 41, No. 2, pp. 324-340. Zuidema, L. A. (2012). Making Space for Informal Inquiry as Stance in an Online Induction Network, Journal of *Teacher Education*, Vol. 63, No. 2, pp. 132-146

¹⁸ ET2020 Working Group Schools (2020). External advice to inspire and support schools in developing students' broad competences. Brussels, European Commission.

¹⁹ Looney, J. and Michel, A. (2014). *KeyCoNet's Conclusions and Recommendations for Strengthening Key Competence Development in Policy and Practice: Final Report.* European SchoolNet, Brussels. Available at: http://keyconet.eun.org/recommendations

²⁰ Halász, G. & Michel, A. (2011). Key Competences in Europe: interpretation, policy formulation and implementation. *European Journal of Education*, Vol. 46, No. 3, 2011. Wiley.



school" approaches²¹ towards education in the wake of the disruption caused by the COVID-19 crisis.

The design and implementation of initiatives to introduce competence-based approaches—which are at the heart of this study—depend on strong political commitment of key education policy actors and implementation capacity:²²

- Political commitment refers to the support of key education policy actors as well as the broader group of stakeholders. Leaders may champion competence-based curricular reforms for "21st century learning", or they may resist moves away from more traditional, knowledge-based approaches which have deep roots in their country's context. Indeed, the shift to competence-based education may be particularly challenging as it touches on values and beliefs on the aims and objectives of schooling.²³ Allocation of sufficient resources and support necessary for policy reforms will have an impact on the sustainability or fragility of reforms.
- **Implementation capacities.** Implementation refers to the logic of the policy design, communication, support for capacity building (training and professional development), support for school-level change, considering macro, meso and micro levels. The logic of the implementation strategy also refers to; coherence with related reforms, including teacher and school leader competences aligned with aims and objectives of curricula, new approaches to student assessment and school evaluation, and new ways of working with colleagues in schools as learning organisations and in school networks.²⁴,²⁵

Where both political commitment and implementation capacities are high, implementation is likely (Figure 2). Where political commitment is high, but implementation capacities are low, implementation is possible in the longer term if implementation capacities are developed. If political commitment is obtained in a system with high implementation capacities, implementation is still possible in the relative short term.

²¹ A 'Whole school' approach means that all school actors (school leaders, teaching and non-teaching staff, learners, and families) and external educational and non-educational stakeholders' roles are engaged in supporting learner success. All dimensions of school life are addressed in a coherent way to promote change. See more on the 'whole school approach', for example, in the European Toolkit for Schools, which advocates for a whole school approach to prevent early school leaving.

²² Halász, G. (2019). Designing and implementing teacher policies using competence frameworks as an integrative policy tool, *European Journal of Education* Vol. 54, No. 3, pp. 323-336 https://doi.org/10.1111/ejed.12349

²³ Cochran-Smith, M. (2006). Taking Stock in 2006: Evidence, evidence everywhere. *Journal of Teacher Education*, Vol. 57, No.1, January/February 2006 6-12

²⁴ Grayson, H. (2014). op cit: Gordon et. Al. (2009). op. cit.

²⁵ ET2020 Working Group Schools (2018),). op cit.



Figure 2: Potential for implementation, based on political commitment and implementation capacity

Strong political commitment

Implementation is possible in the longer term if implementation capacities are developed	Implementation is likely to happen
Weak implementation capacity	Strong implementation capacity
Implementation is unlikely	Implementation is possible in the shorter term if political support is obtained

Weak political commitment

Source: Halász and Michel, 2011²⁶

Successful implementation of complex policy initiatives introducing competence-based education requires that systems introduce multiple policy interventions over time. Stagebased-policy-sequencing-approaches take the historical context and broader policy environment into account.²⁷ This approach also requires flexibility, with system- and school-level stakeholders developing the capacity to identify and respond to new and sometimes unanticipated developments.²⁸

The mix of policy measures to introduce initiatives will also vary across countries. They may include a mix of legislation, regulations, centrally organised strategies as well as more flexible approaches such as frameworks, guidelines, and incentives to support local adaptation and learning across networks.²⁹ The best mix of policy measures will depend on the country context, including its education governance model, and may evolve as meso- and micro-level players build capacity to work more autonomously.

1.4 Research questions

The overarching research question was "how can policy reform for broad competence development in school education, and in particular a better achievement of basic skills, be effectively designed and implemented?" Policy reform, in the context of this study, refers to strategies to introduce competence-based education, based on stakeholder aspirations and grounded in evidence of effective practice.

²⁶ Halász, G. and Michel, A. (2011). Op. cit.

²⁷ [12] Ibid.

²⁸ Bucknall, T., Hitch, E. (2018). Connections, Communication and Collaboration in Healthcare's Complex Adaptive Systems. International Journal of Health Policy and Management. Vol. 7, No. 6, pp. 556 – 559. ²⁹ Wilkoszewski, H. and E. Sundby (2014). "Steering from the Centre: New Modes of Governance in Multi-level Education Sys- tems". OECD Education Working Papers, No. 109. Paris, OECD Publishing, https://doi.org/10.1787/5jxswcfs4s5g-en.



A number of subsidiary research questions have been developed with the aim of supporting policy learning across diverse countries. These are grouped under five areas:

- 1. What different approaches are taken to competence development and with what underpinning rationale in different country contexts?
- 2. What is the impact of countries' education governance models on implementing school education reforms?
- 3. How have approaches to policy design/the repertoire of policy tools shaped the implementation of competence-based reforms in schools and classrooms?
- 4. How have approaches to implementation impacted on the success of the reform cycle?
- 5. What has been the impact of COVID-19 on the implementation of competence-based education policy reforms?

The research questions have been addressed through the desk research and country mapping, the deliberations of the peer learning group meetings and through the case studies and country workshops.

1.5 Methodology

The study's methodological approach incorporates desk research across the 27 EU Member States, in-depth analysis of five cases study countries, as well as the organisation, facilitation and reporting of four peer learning workshops and ten country workshops. Each step in the design of the study is built on previous activities combining breadth of coverage through the EU 27-wide desk research and mapping of reforms in school education related to broad competence development (including basic skills) with depth of understanding through the work with the five case study countries. Triangulation of the data supported balanced and well-evidenced final recommendations and guidelines that are relevant to, and adaptable by countries, with very different contexts and implementation capacities.

The main steps of the study were:

1. Defining broad competence development (01/21)

Broad competence development incorporates the development of the key competences set out in Key Competences for Lifelong Learning – A European Reference Framework $(2006)^{30}$ and the revised framework set out in the 2018 Council recommendation³¹. It also allows for broader interpretations and approaches of competence development that may have been taken by Member States. While basic skills are included in key competences, some countries treat them separately to the development of competences. In line with the EU level targets, basic skills comprise reading, mathematics and science. This understanding informed the study's analysis of the EU 27 in the desk research and country mapping.

2. Policy context, literature, and previous studies (01/21 to 03/21)

The research questions, study design and methodology have been informed by a detailed exploration of the European policy context as well as the literature and the various studies and projects that have been undertaken in this field.

³⁰ Initial European Reference Framework for Key Competences in Lifelong Learning. Retrieved from: https://eur-lex.europa.eu/LexUriServ/LexUriServ/do?uri=OJ:L:2006:394:0010:0018:en:PDF

³¹ Revised Framework on Key Competences in Lifelong Learning. Retrieved from: https://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&rid=7



In the *EU policy context*, competence-based approaches were initially limited to vocational education and training (VET) in the 1990s.^{32 33} Later, the 2000 Lisbon Agenda highlighted the importance of the acquisition of key competences to support individuals' wellbeing, social cohesion and to support economic development and competitiveness within the context of globalisation. The agenda placed education and training systems at the core, while also recognising that major changes to curricula and pedagogy would be needed to realise these ambitions.³⁴ Later initiatives and strategies, funded through the European Commission, included policies on learning outcomes and on quality education that supports inclusion, equity and better learning outcomes.

The ET 2020 framework³⁵ has provided opportunities to build best practices in education policy, gather and disseminate knowledge, and advance educational policy reforms at national and regional levels and has provided objectives and benchmarks to guide policy developments. It also enabled participative approaches to policy development through international peer learning opportunities and engagement with stakeholders through expert seminars with researchers and practitioners. The priorities of the new strategic framework (2021-2030)³⁶ to implement the European Education Area will further support work in these areas.

The analysis of *literature reviews, studies*, and *project reports* establishes what has been learned so far about supporting change in school education. The design of the country mapping tools, country workshops and peer learning groups for this study were guided by the findings of the literature and also underpinned how a "policy learning" approach can enhance mutual learning across the selected countries and support the co-creation of guidelines for diverse EU 27 Member States at earlier stages of development.

References to selected relevant studies and literature are included throughout this report, especially in Chapter 4 on the analysis of the findings from the peer learning group and country workshops.

3. Desk research – country mapping (01/21 to 04/21)

A comprehensive EU 27 mapping exercise was conducted to map the main educational structure and governance models across the EU Member States' education systems; providing an overview of school education policy reforms aimed at developing key competences, including basic skills, and eliciting descriptions of selected policy reforms, considered most relevant for the purpose of this study.

There were two main stages to this exercise:

 An initial mapping of policy reforms meeting the selection criteria within each Member State: measures were included on the basis that they were considered by country experts as key policy reforms in compulsory education, and that they were introduced in the last 10-15 years. The experts highlighted the main area(s)

³² OECD. (1994). The Curriculum Redefined: Schooling for the 21st Century. Michigan: OECD

³³ OECD (2007). The Definition and Selection of Competencies: Executive Summary. Retrieved from: https://www.oecd.org/pisa/35070367.pdf

³⁴ Pépin, L. (2011). Education in the Lisbon Strategy: assessment and prospects. *European Journal of Education*, 46(1), 25–35. http://www.jstor.org/stable/41231555

³⁵ This is the strategic framework for European cooperation in education and training (ET 2020) and is a forum which allows Member States to exchange best practices and to learn from each other. Retrieved from: https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-framework_en

³⁶ Council Resolution on a strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021-2030). Retrieved from: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32021G0226(01)



covered by the reform in order to support key competence and basic skills development and described the main objectives, timescale and implementation of the reform.

2. Shortlisting of (up to three) reforms of greatest relevance within each Member State: measures were selected for more in-depth analysis on the basis that they have, for instance, led to systemic change in the way schools and teachers work in the Member States.

4. Selection of the case study countries (04/21)

Several key considerations informed the selection of EU Member States for the in-depth case study country research. It was important to select countries where reforms had been initiated at least ten years prior to the start of the study, as countries where systemic change has been achieved, at least to some extent, can report on their experience and contribute to lessons that can be learned. It was equally important for the selected countries to provide access to a variety of experiences, approaches, and systems, including countries that have approached their reforms in different areas or are at different stages in the sequencing steps of their reform, to highlight diverse dimensions of change processes. It was also important to ensure variety in the type of education systems and governance structures. See Annex A for the selection criteria.

Based on these criteria, **Denmark, Ireland, the Netherlands, Portugal and Slovakia** were selected as case study countries for more in-depth analysis (see Table 1).

Table 1: Case study countries and the focus of their competence-development reforms

Country	Reform
Denmark	"Folkeskolereformen" (The Public School reform, 2014).
Ireland	"Junior Cycle" competence-based reform (2015).
The Netherlands	Different curriculum reforms since 1998.
Portugal	The "Curriculum Reform in Basic and Secondary Education" (2012); "The National Program for Educational Success" (2016); "The Exit profile of students leaving compulsory education" (2017).
Slovakia	"New Education Act No 245/2008".

Governance structures were also an important consideration in the selection of countries. Table 2 sets out a typology grouping countries according to the mix of high, medium and low levels of school autonomy in the use of resources as well as autonomy to shape curriculum and assessment. Some countries have higher levels of autonomy than others in how financial, temporal and human resources, are allocated. Countries where schools



have greater responsibility to define and elaborate their curricula and assessment are defined as having high levels of autonomy in relation to curriculum and assessment.³

Table 2 confirms that the five selected case study countries cover a range of possible governance arrangements.

Table 2: Country groupings according to level of school autonomy

Resource allocation	Curriculum and assessment			
Medium	Medium			
Case study countries: Denmark and Slovakia				
Other countries: BE (NL); BE (FR); DE; EE; FI; LT; PL; SI; SL; ES.				
Low	Medium			
Case study country: Ireland Other countries: AT; FR; IT; MT; RO.				
High	High			
Case study country: Netherlands Other countries: CZ; HU; SE				
High	Low			
Other countries: BU; LU				
Medium	Low			
Case study country: Portugal Other countries: HR; LV				
Low	Low			
Other countries:	CY; GR			

5. Peer learning group workshops (05/21 to 10/21)

As a data collection source for the study, the peer learning group meetings served a double purpose. The meetings were on the one hand a means to gain in-depth insights into the specific policy reform design and implementation processes followed in the five case study countries. At the same time, the meetings served as a cross-country learning forum on policy implementation, from which lessons for the future around the building of implementation capacity and addressing implementation gaps were explored and policy recommendations and guidelines for other countries were co-created.

Peer learning group meetings were designed to support "policy learning" (as opposed to "policy transfer" or "policy borrowing") among the five case study countries. This approach is well suited to supporting mutual learning and knowledge construction in systems where implementation is a "multidimensional and highly contingent process" and is highly context-based.³⁷ A policy learning approach recognises the importance of context, and the

³⁷ Viennet, R. and B. Pont (2017), *Education policy implementation: A literature review and proposed framework*, OECD Education Working Papers, No. 162, OECD Publishing, Paris, https://doi.org/10.1787/fc467a64-en



complexity of policy design and implementation processes in any country. The international exchanges focused on policy learning can support countries to learn more about their own systems and about processes of change, expand their range of policy options, and better anticipate issues that may arise. Policy learning emphasises not only the involvement but also the active engagement of national stakeholders in developing their own policy solutions based on the understanding that there are no valid models to imitate but a wealth of international experience in dealing with similar policy issues in other contexts.³⁸

The peer learning group consisted of two representatives from each of the five case study countries, one member representing the ministry of education and one member representing a stakeholder group or academia (Annex B). In addition, two Commission staff members, external invited experts and six members from the research team have participated and contributed to the meetings.

Peer learning group meetings were designed to reflect on the different phases of a policy reform implementation process, starting with the design of the reform, the initial and mature implementation and the policy evaluation and adaptation phase. The final peer learning meeting was dedicated to the co-creation of policy recommendations and guidelines.

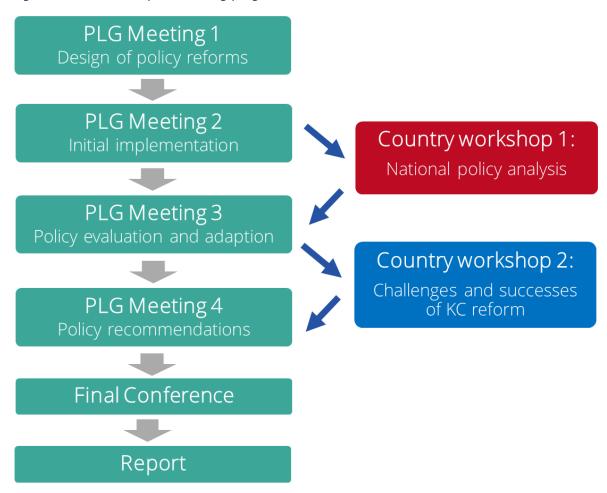
Peer learning events were organised around a set of specific research questions in line with the study research questions.

Figure 3 shows an overview of the peer learning group meeting programme and the link to the two sets of country workshops.

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³⁸ Raffe, D. (2011). *Policy borrowing or policy learning? How (not) to improve education systems.* CES Briefing No. 57, Edinburgh: Centre for Educational Sociology, University of Edinburgh.

Figure 3: Overview of peer learning programme



6. Expert inputs

inputs all four meetings, expert have set the scene, stimulated discussions and enriched the cross-country peer learning. The inputs included comments on the research findings by Prof. Zbigniew Marciniak, Warsaw University; a presentation on experience of policy development and implementation in Wales by Prof. Graham Donaldson, Glasgow University; an expert conversation between Dr Beatriz Pont, OECD and Prof. Kay Livingston, University of Glasgow on effective monitoring and evaluation of education reforms; a presentation on the impact of COVID-19 on the implementation of key competence reforms by Prof. Gábor Halász, ELTE University and a discussion on creating conditions for policy reform implementation between Prof. Melanie Ehren, from the Faculty of Behavioural and Movement Sciences, Educational Studies, VU Amsterdam and Prof. Kay Livingston.

7. Country workshops (06/21 to 09/21)

Two online country workshops were held in each of the five case study countries. Workshops were organised to a common format and tailored slightly for each country taking the very different approaches to the reforms and different stages of implementation in the five countries into account as well as the differences in educational systems and stakeholder landscapes. All countries had representatives from their ministries and from a range of stakeholder groups.



8. Co-creating recommendations with the peer learning group (10/21)

The peer learning programme, and in particular the final peer learning workshop, used a participative and deliberative process resulting in the co-creation of policy guidelines as set out in Chapter 5 of this report. This process provided rich data from authentic voices of key stakeholders in the reform and implementation process, bringing these processes together in a more interactive way.

9. Country case studies (10/21)

Short reports (Annex E) of the experience of the reforms in the five case study countries, based on the country mapping and the country workshops were prepared by the country experts. These, along with the reports of the two country workshops, have contributed to the context and stories of each of the five countries.

10. Final conference (01/22)

An overview of the key findings and the policy recommendations and guidelines were presented to peer learning group members, Commission representatives and ministry and stakeholder representatives from Member States, at a final conference in January 2022. Participants discussed the value of the guidelines for Member States implementing competence-based approaches and agreed that the recommendations would be of great value. In addition, there was much interest in the peer learning process used in this study and a strong interest in using this kind of approach in other European initiatives and studies. Final adjustments were made to the Study Report and the Policy Recommendations and Guidelines as a result of the discussions at the conference.

1.6 Structure of the report

This chapter has presented the overall study aims and methods. The remainder of the report is structured as follows:

Chapter 2 presents a mapping and comparison of Member States' policy measures.

Chapter 3 presents an overview of the five case study countries, setting out the country contexts and descriptions of their recent competence-based reforms.

Chapter 4 presents a summary of the study findings from the peer learning group meetings and country workshops. They highlight change processes in complex, multi-layer and multi-actor education systems.

Chapter 5 presents recommendations and policy guidelines based on lessons learned from research and the peer learning conducted for this study. They can support policy makers in different systems when designing and implementing policy reforms in their own country contexts for the development of key competences, including basic skills, by all learners.



2. Mapping and comparison of policy measures within Member States

This chapter presents the results of the country mapping and comparison of policy measures to support competence-based education across the EU 27. These include the introduction of competence-based curricula and assessment, as well as measures to strengthen teacher capacity, inclusion, structural reform, and school leadership aligned with broad aims for student learning. It also presents an overview of common challenges and enablers and the impact of COVID-19 on competence development measures.

A comprehensive EU 27 mapping exercise provides information on the main educational structures and governance models across the EU Member States' education systems (Annex C) and provides an overview of school education policy reforms aimed at developing key competences, including basic skills (Annex D). The mapping provided descriptions of selected policy reforms, which were deemed to be most relevant for the purpose of this study as they are part of an overall policy mix supporting key competence and basic skills reforms.

Analysis and findings from the mapping exercise included the focus of curriculum reforms and key competence areas addressed, the main implementation challenges and enablers identified, and a summary of findings relating to the study research questions and the implications for the selection of case study countries for further analysis.

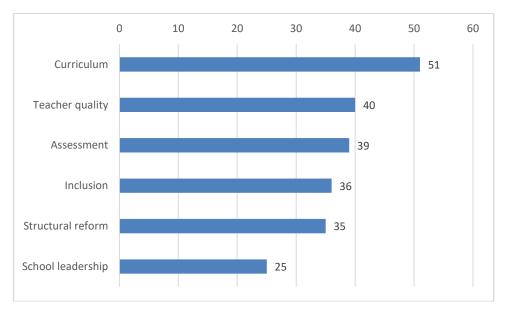
The overview of Member States' policy reforms provided in this chapter informs about the type and range of reforms which support key competence development, including basic skills. While the main focus is on key competences, including basic skills, alignment with related reforms, both in terms of focus and timing, is also useful.

2.1 Overview of policy reforms

2.1.1 The range of reforms

The mapping exercise identified 79 relevant reforms across the EU 27, and as evidenced in Figure 4 (next page) most of the reforms that met the selection criteria focused on curriculum development (51), followed by teacher capacity (40), and assessment (39). It should be noted that the categories presented below are *not mutually exclusive*—individual reforms sometimes focussed on more than one area of the education system and on multiple key competences.

Figure 4: Reform areas (n=79)



Curricular reforms are a main strategy for the development of key competences and basic skills. As illustrated in Figure 5, most reforms focussed on supporting the following key competences: literacy (47), STEM (42), digital (41), and multilingualism (37). With regards to supporting basic skills (Figure 6), most reforms seemed to support all basic skills together (36), rather than focusing separately on specific ones (such as science, reading, and mathematics).

Figure 5: Curricular reforms supporting key competences (n=79)

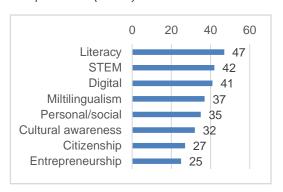
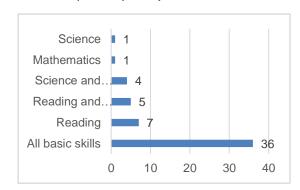


Figure 6: Curricular reforms supporting basic skills development (n=79)



2.1.2 Curriculum and assessment reform

The organisation of curricula and the degree of centralisation or decentralisation of national education systems are important variables to the context within which educational reforms are developed. Many of the EU Member States have strongly centralised systems for both the design of school curricula and the organisation of student assessment. The country mapping showed that curriculum reform in most countries has been accompanied by, to a greater or lesser extent, reform to assessment structures and/or practices. In many EU countries (BG, HR, CY, CZ, DK, FR, EL, HU, LV, LU, RO, SE, SI), the content of curricula is



defined by national government with little room for educational institutions to deviate from them in terms of content, but not necessarily teaching methods. In other cases (AT, EE, IE, IT, LT, MT, PT, SK), national authorities define the core element of curricula that can then be tailored by schools. Finally, in the remaining countries (BE, DE, ES, FI, NL, PL), curriculum design is delegated to regional or local authorities, and, in some cases, individual schools enjoy a certain degree of freedom when it comes to curriculum design. In terms of assessment, teachers have room to develop formative and summative assessment for their classes, but in many cases end-of-school assessment is much more restrictive and further away from teachers.

Many countries have introduced curriculum and assessment reforms to **strengthen key competences**, **including basic skills**.

In **Portugal**, two reforms were implemented in 2016 and 2017: the National Program for Educational Success (2016) and the Exit profile of students leaving compulsory education (2017). These outlined the profile of the student at the end of compulsory education in a generic way, which was complemented by the plan for essential learning (*Aprendizagens Essenciais*) which functions as the main curricular guidance document for planning, designing, and evaluating students' learning and aims to develop the skills areas included in the *Exit Profile of Students Leaving Compulsory Education*. These educational benchmarks have been built to develop specific competences of each knowledge area and transversal competences.

Starting the academic year 2019-2020, the Ministry of Education and Culture in **Cyprus** announced a pilot program for one year in cooperation with the University of Cambridge for the certification of the English language in public schools. The pilot program included on-line screening in September for children of the 7th grade, PET (Preliminary English test) for 9th grade students and IGCSE examination for 12th grade students. ³⁹

In **Ireland**, curriculum and assessment at lower secondary was completely restructured with the introduction of the "Framework for Junior Cycle" (2015),⁴⁰ a competence-based reform introduced in schools on a phased basis from 2015.

In **Spain**, a reform has been implemented to improve competence development among students, compensating for initial disadvantages. The ongoing reform to the Education Act (03/2020) includes a series of measures for the primary level, focusing on strengthening inclusion and expanding the competence framework to encompass transversal skills.

In **Czechia**, on October 1^{st} 2020, an amendment to the Education Act came into force, which, among others, modified the Maturita examination. Pilot testing of a new subject Technology will begin in selected schools. It is aimed at pupils of the second stage of basic education (i.e., lower secondary level) and will be taught one hour per week or as a two-hour lesson within 14 days.⁴¹

³⁹ Eurydice, Cyprus Overview. Retrieved from: https://eacea.ec.europa.eu/national-policies/eurydice/cyprus/national-reforms-school-education_en

⁴⁰ DES. A Framework for Junior Cycle (2015). Available from: https://www.education.ie/en/Publications/Policy-reports/Framework-for-Junior-Cycle-2015.pdf

⁴¹ Eurydice, Czechia Overview. Available at: https://eacea.ec.europa.eu/national-policies/eurydice/content/national-reforms-school-education-17_en



In many European countries there is an emphasis on **developing "soft skills"** in curricular reforms.

In **Bulgaria**, the National Strategy for Lifelong learning was implemented in 2014.⁴² One of the main tasks set out in the Strategy is "to encourage the acquisition of universal key competences such as learning skills, initiative and entrepreneurship, cultural awareness, as well as the so-called "soft skills" such as teamwork skills, decision-making, conflict resolution, etc."

In **Finland**, transversal competences, including soft skills, were introduced to basic education in 2016. National and local steering systems supported these competences in the implementation of the curriculum as well as classroom teaching. Moreover, the transversal competences have been integrated with the aims of the school subjects at the school level, and teachers are aware of this integration.

Because of the structural differences and political exigencies between the educational systems across the Member States, countries have different approaches to basic skills development, either adopting **specific measures** or **implementing overarching national strategies**. These strategies encompass several layers and tackle basic skills development from different angles. Some Member States that have not put in place overarching strategies to tackle basic skills, have opted to focus on specific aspects as: curriculum revisions encompassing all three basic skills (BEfr, CZ, DK, HR, LV, SE, SK); student assessment and early identification of pupils at risk of low performance in relation to basic skills and consequent provision of tailored support to these students (AT, BEfr, CY, DE, EE, FI, FR, PT); or empowerment and continuing professional development of teachers to ensure they have the skills, materials and infrastructure to effectively teach basic skills (DK, EE, EL, IE, FR).

2.1.3 Reforms focused on strengthening teacher capacity

Countries across the EU support the development of key competences, including basic skills, by implementing reforms which improve teacher capacity. As mentioned above, according to the mapping conducted for the purpose of this study, 40 of the 79 reforms analysed aimed to improve teacher capacity to integrate competence-based teaching, learning and assessment in classroom practices.

Sweden has identified the lack of regular training of its teaching workforce as a major challenge. To strengthen educational outcomes in basic skills, new teaching "boost" training programmes were introduced from 2012 onwards for teachers of Mathematics⁴³, reading⁴⁴ and science⁴⁵ for pre-primary level to lower secondary. With training in effective teaching methods organised through collaborative teacher learning, these innovative "boost" programmes have been described as the most significant teacher learning programmes ever developed in Sweden with the research-based programmes representing an investment of more than EUR 28 million.⁴⁶

⁴² Bulgarian National Strategy for Lifelong learning. Available at: https://www.strategy.bg/StrategicDocuments/View.aspx?Id=880

⁴³ Swedish Teacher training programme: (mathematics) https://larportalen.skolverket.se/#/

⁴⁴ Op cit. (reading). https://www.skolverket.se/skolutveckling/kurser-och-utbildningar/laslyftet-i-skolan

⁴⁵ Op cit. (science). https://larportalen.skolverket.se/#/modul/5-las-skriv/F%C3%B6rskola/031-natur-teknik-o-sprakutveckling

de Education Policy Outlook: Sweden, OECD 2017. https://www.oecd-ilibrary.org/sites/84003fa5-en/index.html?itemId=/content/component/84003fa5-en



2.1.4 Reforms focused on strengthening social inclusion

European Member States also use broad competence reforms, and in particular those that emphasise basic skills to render their schools more inclusive. As aforementioned, 36 out of the 79 reforms analysed aimed to increase inclusion within schools.

This is evident in the case of **Belgium.**⁴⁷ In the French community (BEfr), the government adopted the Excellence Pact of Education in 2015, targeting preprimary to lower secondary education. It aims to completely reform the education system of the French Community to improve quality, equity and basic skills. It also seeks to reduce grade repetition, inequity, and high dropout rates (which are specific issues in BEfr). In terms of inclusive education, the reform foresaw several measures to support an inclusive school climate (important under this strand in particular are the anti-segregation, remediation and psycho-social support measures). Additionally, the reform also planned two hours per week of individualised child support beginning in 2019/2020.

Similarly, **Czechia** implemented an Inclusive education reform in 2016, targeting pre-school to upper secondary. The aims of this reform are to educate the maximum number of children with special educational needs (SEN) in mainstream schools instead of in special schools; to reduce discrimination against Roma pupils in the Czech education system; and to provide support to children with SEN in mainstream education. Generally, the reform aims to provide basic skills for all pupils.

2.1.5 Structural measures

The educational landscape varies across EU Member States. There are three main organisational models of primary and lower secondary education (ISCED 49 levels 1 and 2) that can be identified: single structure education, common core curriculum provision, and differentiated lower secondary education. 50 The distribution of EU Member States is also presented in the same report. 51

The **structure of education systems** is a key contextual factor for the implementation of policy reforms. A few countries have introduced reforms to adjust their educational structure.

⁴⁷ Excellence Pact of Education (FR community)

⁴⁸ Pre-primary to upper secondary.

⁴⁹ **ISCED** is the reference international classification for organising education programmes and related qualifications by levels and fields. This study focuses on ISCED 0 (early childhood education), 1 (primary), 2 (lower secondary) and 3 (upper secondary).

⁵⁰ **Single structure education**: this signifies that pupils, throughout the whole of compulsory education, follow a common curriculum providing general education. Additionally, the single structure education also entails no transition between primary and lower secondary education. **Common core curriculum provision**: After completing ISCED 1, pupils progress to ISCED level 2 where they follow the same general common core curriculum. **Differentiated lower secondary education**: After successfully completing primary education, students follow distinct educational pathways or specific types of education, which start either at the beginning or in the course of lower secondary education. At the end of their studies, they receive different certificates. Sourced from European Commission/ EACEA/Eurydice (2020), The Structure of the European Education Systems 2020/21: Schematic Diagrams, available at https://eacea.ec.europa.eu/national-policies/eurydice/content/structure-european-education-systems-202021-schematic-diagrams_en
⁵¹ Ten European countries adopt a 'common core' structure (BEfl, CY, FR, EL, IE, IT, MT PT, RO, ES). Eight Member States have a single structure (BG, HR, DK, EE, FI, PL, SI, SE), four have a differentiated structure (AT, DE, LU, NL), and the rest have common and single (CZ, LV, SK, HU), and common and differentiated (LT).



In **Denmark**, for instance, the reform of primary education (or "Folkeskolereformen")⁵² dating back to 2014 introduced a longer and more active school-day. The number of weekly hours that pupils must be present in school was increased to 30 for the first four classes, to 35 for 4th to 6th class and to 37 for 7th to 9th class.

In **Slovakia**, as of 2021 the government is piloting a replacement of the one-year curriculum with a multiannual curriculum in pre-primary and primary schools.⁵³ The piloting involves approximately 20 schools which are expected to pilot some aspects of the revised national curriculum that is more flexible than the current curriculum in achieving national curriculum standards and allowing space for competence development. The curriculum is not prescribed for each year, but for three cycles (1st to 3rd year, 4th to 5th year, 6th to 9th year).

Some Member States have increased **compulsory school ages**, many with an increased emphasis on early childhood education (ECEC).

Greece, for example, lowered the starting age of compulsory pre-primary school attendance from age 5 to age 4. Pre-primary school (known as Nipiagogeio) is compulsory for 2 years from the age of 4, before children start primary school which runs from the ages of 6 to 12. Secondary education then runs from ages 12 to 18, however education is only compulsory until the age of 15.⁵⁴

Similarly, in **Denmark**, in 2008 the government increased compulsory education (from 9 to 10 years) by enforcing an earlier start to pre-school to support students with challenges and in need of linguistic assistance.

Belgium lowered the age of compulsory education from 6 to 5 years old across the country. More specifically, 5-year-olds need to attend a minimum of 290 half days of school.

As of September 2020, **Bulgaria** reduced the age of compulsory early childhood education from 5 to 4 years old.

France has also rendered ECEC obligatory by lowering the compulsory school age to three, which is the age of start of école maternelle (pre-primary education).

In **Austria**, there is wide agreement that another compulsory year of ECEC for fouryears-olds would be necessary to improve the achievement outcomes of disadvantaged children; beside political reservations by more privileged strata the expenditure for free provision is a main hindrance to that.

2.1.6 School leadership reform

The level of school autonomy varies greatly across the EU. According to the findings of this study, and as demonstrated in Figures 7 and 8, the trend across the EU is that the majority of schools have a medium level of school autonomy in terms of curriculum design and assessment (AT, BEfl, DK, EE, FI, FR, DE IE, IT LT, PL, RO, SK, SI, ES, SE), and resource allocation (BEfl, HR, DK, EE, FI, DE, LV, LT, PL, PT, SK, SI, ES).

⁵² Danish primary education reform. Available at: https://www.skole-foraeldre.dk/artikel/folkeskolereformen-1

⁵³ SPU, Pilot Verification. Available at: https://www.statpedu.sk/sk/svp/pilotne-overovanie/

⁵⁴ Eurydice, Greek Overview. Available at: https://eacea.ec.europa.eu/national-policies/eurydice/content/greece_en



Figure 7: Level of school autonomy in curriculum and assessment (n=27)

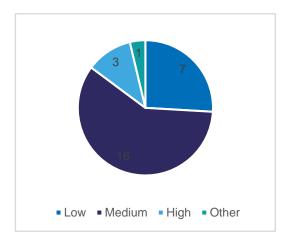
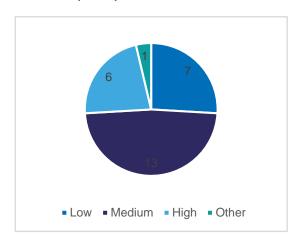


Figure 8: Level of school autonomy in resource allocation (n=27)



Source: developed by researcher based on data sourced from an OECD report.⁵⁵

However, it is important to note that there are nuances: the curriculum may still allow a lot of freedom for teachers to make independent choices (such as designing their own teaching methods and approaches to meet intended learning outcomes), as well as choices concerning assessment.

According to an OECD report dating back to 2011, when school autonomy and accountability are combined in a logical way, they tend to be associated with better student performance, as demonstrated by PISA data.⁵⁶ The country mapping reveals that several countries have introduced reforms to increase school autonomy and to strengthen school leadership, and it is in fact important to note that different modes of school-level and teacher learning are vital to efforts to change classroom practices.

In **the Netherlands** (a country with a high level of school autonomy) as part of the Teacher Agenda (2013-2020),⁵⁷ the role of schools as learning organisations incentivises teachers and school leaders to facilitate a culture of learning.

France, a country with a low level of school autonomy, adopted the CPD Masterplan⁵⁸ for national education staff in 2019 for primary to upper secondary levels. This reform aims to enhance professional development opportunities for all education staff, including teachers and management personnel.

In **Germany**, the government adopted the "School makes you Strong" (Schule macht Stark)⁵⁹ initiative. This initiative aims to provide support to schools in socially challenging situations in both urban and rural areas to better meet their challenges by increasing effective school leadership.

⁵⁵ OECD (2011), School autonomy and accountability: Are they related to student performance? (p.2) Available at https://www.oecd.org/pisa/pisaproducts/pisainfocus/48910490.pdf

⁵⁶ OECD (2011), School autonomy and accountability: Are they related to student performance? Available at https://www.oecd.org/pisa/pisaproducts/pisainfocus/48910490.pdf

⁵⁷ Deleraren Agenda, https://www.delerarenagenda.nl

 $^{^{58}}$ SR CPD Master Plan for national education staff

⁵⁹ German Government (2019). *Schule macht stark.* Gemeinsame Initiative von Bund und Ländern zur Unterstützung von Schulen in sozial schwierigen Lagen. Available at: https://www.bmbf.de/files/Schule%20macht%20stark_Bund-L%c3%a4nder-Vereinbarung.pdf



In **Spain**, the government adopted the Education Act 03/2020 for pre-primary to upper secondary (2020). This major educational reform, approved in November 2020, seeks to amend the Organic Law in force since 2006 and amended in 2013. One of the reform's aims is to upskill the teaching profession to lead curricular and didactic innovation.

2.2 Implementation challenges, enablers and the impact of COVID-19

Analysis of the country reports provided evidence of implementation challenges and enablers. Challenges and enablers are seen in the same stages of the implementation process, such as stakeholder engagement or political support, for example. Where each stage is well approached and given attention, it tends to become an enabler. Where it is overlooked, or paid little attention, it can become a challenge. Initial impacts of COVID-19 on policy reforms were also analysed as part of the desk research.

2.2.1 Implementation challenges

The country mapping presented examples of where implementation processes for competence-based reforms had experienced challenges or interruptions.

1. Weak stakeholder support for the design and implementation and/or a poor communication strategy

School stakeholders, including school leaders, teachers, teacher unions, students and parents, are not adequately engaged with or supported at all stages of the policy reforms or the communication strategy fails to adequately inform stakeholders.

Bulgaria: challenges in the early implementation of its National Strategy for Lifelong Learning (2014 to 2020) are due to underdeveloped mechanisms and lack of participation by all stakeholders leading to a deficit of guidelines and other learning materials. This led to a slow pace of implementation.

Latvia: a key challenge to the implementation of Latvia's Introduction of Competences-Based Curriculum, 2016-2021 has been and remains parents', schools' and teachers' lack of trust in the goals, methods and values of the reform. Some teachers are very sceptical about the new approaches. Schools that have been engaged in the piloting stage tend to be more optimistic about the reform than schools that did not take part at that stage, but upscaling the pilot has been largely unsuccessful.

2. Changing political priorities

Strong political support can be very useful to initiate a review and reform process and ensure that it gets the support and funding for implementation. However, this is often impacted negatively by changes to government and/or education priorities during implementation.

Italy: Since the publication of the Good School Act (2015) three different Ministers of Education from different political backgrounds have overseen the continuity of the reform. Though most of the key measures have remained, the modifications implemented by successive governments have been linked mostly to shifting political motivations, leading a lack of continuity for the system, schools and teachers.



Latvia: The introduction of a competence-based curriculum (2016-2021) has been impacted by changing priorities at political level and ongoing new changes/amendments. Guidelines for the development of education for 2021-2027 themselves still remain in draft form and have not passed in the Parliament due to ongoing debates.

3. Not piloting reforms at the beginning stages misses opportunities for making adaptations and building trust

Countries that skip a piloting stage, or a phased approach (gradual implementation), miss opportunities for testing ideas, building trust and teachers capacity, and communicating the ideas to a broad group of stakeholders.

Malta: The implementation of the Vision for Science Education policy (2011) in Malta, which involved the introduction of a learning outcomes approach to the curriculum has been adversely impacted by a strong reaction from teachers, attributed to fatigue, inadequate preparation and rushed implementation. The ideas in the policy were not piloted before full implementation was attempted.

Slovakia: On the introduction of the "New Education Act (2008)", the actual preparation for the implementation of the reform took only about six months and started without piloting and without adequate preparation of teachers for competence-based education. The short time given to the launch of the reform hindered the development of a systemic support from stakeholders. The need to develop new methodological manuals and to train teachers quickly became apparent and in 2011, new methodological manuals were developed with the support of ESF funds.

4. Limited investment in building teacher capacity

Expectations of changed practices in schools and classrooms will only be successful if school leaders and teachers develop the competences needed to implement the new arrangements. Where investment in building teacher capacity is limited, teachers and schools struggle to implement the new arrangements as envisaged.

Slovenia: In the process of the introduction of the modernised curricula in gymnasiums (as a part of the Modernisation of the Gymnasium Programme project (2008 - 2010)), the main challenges faced were insufficient teacher competences, a lack of school preparedness to introduce innovations in teaching and inadequate ICT equipment. The understanding of the competence-based approach in teaching was limited and teacher professional development on the contents and objectives of the modernised curricula was not sufficient. Many teachers stated that they did not feel adequately competent for developing the learning to learn competence of students.

Czechia: reported that low levels of communication and promotion for its 2007 Curricular Reform have led to teacher hesitancy and misunderstanding. This was further exacerbated by low levels of financial support, including for building teacher capacity, combined with high demands on teachers resulting in resistance to full implementation.



5. Insufficient adaptation of large-scale reforms to local needs

Making an impact at school and classroom level needs time and support to embed new teaching and assessment practices. Teachers need time and support to make meaning out of largescale reforms and to adapt them to their own local needs.

Sweden: The implementation of the 2009 Strategy for entrepreneurship in education and training has been challenging for school leaders as the main responsibility to strategically incorporate entrepreneurship education rests with them. While this can allow for the adaptation of tailored approaches sensitive to context, it also needs to be placed within a framework in which teachers receive sufficient support to keep it from becoming a challenge to implementation. Furthermore, there is a pressure to focus teaching on knowledge acquisition. which is easier to measure than competences.

Ireland: This had an impact on the full implementation of the "Junior Cycle" reform (2015). Schools have adapted to the new national programme at different rates and with different degrees of success. While all schools are following the new programme, some schools and teachers have engaged more with the competence-based learning methodologies than other, so far. Schools are being supported through school self-evaluation and continuing professional development.

6. High levels of school and teacher autonomy

High levels of school and teacher autonomy are an important feature of the education systems in some countries and have very positive aspects. However, decentralization and autonomy can make the design and implementation of national strategies or national level curriculum approaches challenging.

Belgium (Flemish community): A challenge to the 2013 Modernisation of Secondary Education was monitoring its implementation. As a result of the decentralised nature of the Flemish education system, ensuring standard outcomes across all schools was challenging. Autonomy for schools and teachers makes it difficult to assure quality and to monitor progress.

Finland: Decentralisation and autonomy are strongly linked to the Finnish way of interpreting the teacher's professionalism, as well as the status of teachers in Finnish society. It is challenging to establish how autonomous entities should be supported in adopting new strategies or curriculum guidelines. Extra efforts have been made to support teachers and teacher educators in the implementation of transversal competences.

7. Challenges with evaluation or monitoring

Evaluation and monitoring are important features of an overall coherent approach in policy making and where this is absent or not supported there are likely to be impacts on necessary improvements and adaptations of policy.

Slovakia: While a model of school self-evaluation has been introduced, schools have not been supported sufficiently, impacting on the effectiveness of the model and on feedback.



Sweden: It has been difficult to monitor the impact of the 2012 *Innovative inservice teacher training in mathematics ("Matematiklyftet"), reading ("Läslyftet") and science ("Naturvetenskapslyftet")*. Lack of information on the actual impact of the initiative on student learning outcomes overall has monitoring of the initiative too surface level to be useful.

2.2.2 Implementation enablers

Several enablers that support the implementation of competence-based reforms were identified during the country mapping. The areas are very similar to those identified in the section above on challenges, but these become enablers when time and attention are given to them.

1. Strong stakeholder support and involvement in the design, implementation, and quality assurance cycle of reforms.

School stakeholders, including school leaders, teachers, teacher unions, students, and parents, especially need to be included from the design stage all the way through the implementation and evaluation (both formative and summative) stages of policy reforms. Flexibility in the implementation approach in line with local and stakeholders' needs is also important.

Denmark: following persistent criticism from teachers and the conclusions of a final evaluation of the Primary Education Reform of 2014, legislative changes were made in order to better accommodate stakeholder needs.

Finland: introduced integration of transversal competences to the chemistry curriculum for grades 7–9. The preparation process of the core curriculum, including the description of transversal competences, was a collaborative process involving a large panel of experts, including pre-primary classroom teachers and subject teachers, principals, teacher trainers, educational scientists, researchers from different subject areas, and representatives of various stakeholders, designed a draft curriculum.

2. Strong and sustained political support and agreement on the key building blocks of the policy reform.

Strong political support can be very useful to initiate a review and reform process, establish agreement on the key building blocks and ensure that it gets the necessary resources for implementation.

Slovakia: the curriculum reform announced in 2008 took three consecutive governments to materialise into concrete legislation, but there was overall agreement on the importance of moving from an input-based education system towards a system where teachers adopted learning outcomes-based teaching and learning approaches.

Belgium (Flemish community): The political commitment to implement the 'main building blocks' of the reform, announced in 2013, has been very strong, and most of the reforms announced in the 2013 Master Plan have now been implemented. Building this commitment resulted in some changes in the implementation process on the exact focus of the reform, including: (1) the definition of the learning outcomes as part of the curricular reform with greater attention on Dutch language and culture and (2) a new focus on social inclusion.



3. Piloting reforms at the initial stages of policy reform

Piloting in a limited number of schools, to test ideas and allow for changes to the approach at the design stage, and to ensure policy reforms are accompanied by wider communication campaigns provides opportunities to build knowledge of the new policy and trust in the approach taken.

Belgium (Flemish): as part of its introduction of the "Dual Learning" track as a regular and fifth option in secondary education a pilot was launched in 2016. Following the pilot, the dual learning scheme was fully rolled out, accompanied by a major communication campaign, with a dedicated website, encouraging young people, schools, and employers to get involved in apprenticeships in upper secondary education starting in September 2019 (as part of the wider curriculum reform of lower secondary education, described above). Teachers were encouraged to work with pupils to submit their views on what the "school of the future" should look like (with prizes allocated to the most successful ideas).

Ireland: reform of the "Junior Cycle" started with smaller targeted reforms and phased up to full implementation of competence-based approaches over time to allow the system, including schools and teachers, the time and space to manage the changes.

4. Strong initial and continuing professional development of teachers and school leaders.

This relates to ensuring teachers are supported in curriculum and assessment design and implementation aligned with key competence development, including basic skills, and to make sure school leaders are supported and encouraged to take up a leading role in developing and supporting their teaching staff.

Belgium (French): Guidelines published by the by the Ministry of the French Community of Belgium for teachers on how to conduct learning outcomes-based assessments, and guidelines for schools on how to make reasonable adjustments for children with special educational needs.

Denmark: Professional development for teachers, pedagogues and school leaders was strengthened and extra funding was provided for pedagogical research as a support for the ongoing development of teaching methods. A corps of "learning consultants" was introduced to advise municipalities and schools.

5. Sufficient financial, temporal, and human resources are in place for schools and teachers to draw upon.

Financial resources, time and sufficient staffing resources are necessary to support implementation of new practices in schools and classrooms.

The Netherlands: the reforms introduced as part of the Teacher Agenda (2013-2020), include a specific focus on building schools as learning organisations, which are deeply connected and collaborate with other organisations, such as other schools, businesses, NGOs, and wider civil society.

Ireland: schools were allowed to adjust their timetables so that teachers could participate in planning and professional learning on competence-based approaches.



2.2.3 Impact of COVID-19 on policy reforms

Some more specific challenges and opportunities derive from the COVID-19 crisis, and therefore date from 2020 onwards. In some instances, the crisis disrupted reforms that were already underway, but in others it presented new, sometimes unexpected, opportunities.

1. Initial challenges for policy reform because of the COVID-19 pandemic

The rapid shift to online learning due to the COVID-19 pandemic in 2020 resulted in **significant challenges** for students, teachers and schools. A historical **lack of investment in teachers' and schools' digital skills and infrastructure** in some EU Member States, combined with the "digital divide" issues that this presented for municipalities, schools and learners, exacerbated existing inequalities regarding educational access for learners of lower socio-economic status (SES), those of migrant birth, and learners with special educational needs and disabilities (SEND).⁶⁰

In **Hungary**, for example, approximately half of students were prepared to use digital tools with some support with the other 50% experiencing many challenges in using the tools.⁶¹

Teachers found it challenging to continue using competence-based teaching and assessment methods.

In **Czechia**, the pandemic had an impact on the practical teaching and assessment in VET, thereby complicating the implication of the unified assignments reform.

In **Finland**, school closures and the move to remote learning, due to the COVID-19 pandemic, made teachers' application of transversal skills approaches (part of the 2012 Transversal Skills Approaches in Basic Education initiative) more challenging. This was especially because the acquisition of transversal skills requires a lot of activities such as team and project-based work, which could not be quickly replicated in distance learning contexts.

Some countries experienced **delays in implementation of competence-based initiatives.**

In **France**, the pandemic delayed the implementation of the announced reforms to the baccalaureate as part of the School for Trust reform of 2019 and were postponed to 2021.

In **Ireland**, the June 2020 examinations were cancelled, with the work and achievement of third year junior cycle students in 2020 recognised with a state certificate from the Department of Education and Skills instead of the planned "Junior Cycle Portfolio of Achievement", designed to report on a broader range of achievements, based on competences.

⁶⁰ European Commission, Directorate-General for Education, Youth, Sport and Culture, Melstveit Roseme, M., Day, L., Fellows, T., et al., *Enhancing learning through digital tools and practices: how digital technology in compulsory education can help promote inclusion: final report: October 2021*, Publications Office, 2021, https://data.europa.eu/doi/10.2766/365846

⁶¹ Report of the Hungarian State Audit Office on the state of digital education, 2021



2. Initial reports of COVID-19 led innovations

As well as the challenges experienced by Member States, there was also some evidence of competence-related innovations that arose out of the experience of the pandemic.

One of the most important innovations has been **the acceleration of the digital transformation** of European education and training systems.

In **Bulgaria**, the Project "Equal Access to School Education in Times of Crisis" was launched in February 2021, providing technical support to put in place the necessary digital infrastructure to ensure distance learning.

In **Slovakia**, the digital transformation increased pressure on schools to accelerate their own digital transformation, announced as part of the Digital Transformation of Slovakia (2018).

In **Portugal**, the pandemic inspired a more flexible and integrated approach to the implementation of the revised curriculum, in line with local needs.

Many countries adjusted teaching and assessment processes, often leading to more competence-based approaches.

In **Latvia**: Most of the teaching and learning processes were transferred online, and the adoption of new digital or blended methods and approaches was accelerated. However, it should be said that the digital gap between teachers who know how to use digital technologies for teaching and those who have not tried to do so before has been evident.

In **Italy**, the Minister of Education made changes to the organisation of the final State exams held at the end of lower and upper secondary education in March 2021, taking into consideration the challenges schools and students had to face due to the COVID-19 pandemic.

In **Ireland**: Junior Certificate examinations were cancelled in 2020 and 2021 and replaced with competence-based teacher assessments.

A report from **Hungary** reported the effects of COVID-19 as an **"innovation tsunami".** Shocks and crises often generate innovation and COVID-19 innovation dynamics prompted adaptation to pressure on schools and communities, relaxing bureaucratic control, increased use of technology, emergence of new technology products and an explosion of knowledge sharing networks⁶².

As the desk research was conducted in January of 2021, some country experts conducting the country mapping, reported that it was too early to comment on the impact of the pandemic. However, in subsequent discussions, **case study countries highlighted other impacts:**

The COVID-19 disruption had an impact on approaches to teaching, learning and assessment in all countries. Reports from the country workshops provided evidence of teachers collaborating with each other to share practices, developing digital competences, working with learning management platforms, and moving to more formative assessment approaches and provision of feedback.

⁶² Prof. Gabor Hálasz at a presentation to the peer learning group in PLG Meeting 3, on 17 September, 2021.



- All five countries reported that learners also needed support with learning to learn strategies to manage the new online approaches and to deal with different approaches to assessment.
- There was a recognition among country workshop participants that student wellbeing was being impacted by the move to remote learning and there was a rise in awareness of the need to focus on student wellbeing in interactions with students and on the return to classrooms.
- Teachers and school leaders in **Denmark** and **Ireland** reported an increase in collaboration within and between schools, and between schools and ministries.
- Denmark reported that social interactions among the students have been prioritised by schools and teachers after schools returned to face-to-face learning, rather than focusing on addressing potential learning loss. Also, teachers and students have had positive experiences in outdoor classrooms, which may be an initiative to be continued in the future.
- In **Ireland**, the voices of those who opposed the reform prior to the pandemic have been minimised, as the lockdown gave greater recognition and validity to the value of key competences and the idea behind what the Department of Education was trying to do with the reform. Due to the COVID-19 crisis, the Department has worked closely with teachers to find ways to address the challenges. This has been a positive trust exercise.
- The Netherlands, Portugal and Slovakia all highlighted the importance of digital skills during this period. In Portugal, it has been observed that "Digital is not the future, it is the present". The experiences of the pandemic also call for a re-thinking of key competences, which need to also encompass social competences, innovation capacities, etc. Further they found that the pandemic put a light on the importance of the family and how parents were able to help their children with remote learning.



3. Overview of case study country strategies to introduce competence-based education

Further analysis of the five case study countries, Denmark, Ireland, the Netherlands, Portugal and Slovakia, provided deeper insights into the design and implementation of their competence-based education policies. This chapter sets the scene for the analysis by providing an overview of the policy developments in each country and the strategies used.

3.1 The five case study countries⁶³

Denmark

The main rationale for the 2014 reform of primary education in Denmark ("Folkeskolereformenaf 2014") was a wish to address a number of challenges to primary education. First, Danish primary schools (compulsory education, grades 0-9) were increasingly unable to provide students with sufficient basic skills, compared to other comparable countries (based on PISA scores and national policy documents), in particular in Danish language and mathematics.

Second, there was substantial variation in the number of planned lessons per week across the Danish municipalities. This was interpreted as a challenge to ensuring that all children were given equal opportunities to learn to their abilities.

Third, PISA scores from 2000 to 2009 had indicated decreasing motivation, especially in students with a migrant background and students of parents with low levels of education.

Finally, research indicated that the vulnerable groups of students would benefit significantly from variation in the learning activities and across the school-day, from clear and explicit class management, and from a practice-oriented approach to teaching.

The reform followed a number of major changes to primary school education, of which the most important in this context was the Act on Inclusion, which aimed at nearly universal reach, including children with disabilities and additional educational needs into mainstream primary schools. The reform further coincided with a labour conflict between the teachers' union and the municipalities, which ended in 2013 with an intervention from the government. The resulting law abolished existing contractual norms for preparation time and introduced a right and duty of teachers to spend the entire working week of 37 hours at the workplace (school). This measure was met with considerable opposition from teachers.

Ireland

The most significant reform related to competence-based education implemented in Ireland over the last decade was the reform of lower secondary education through the introduction of the "Framework for Junior Cycle" (2015).⁶⁴ It has been introduced to schools on a phased basis and competence development is articulated through the principles underlying the new junior cycle, through the eight key skills (competences) and the 24

⁶³ More detailed accounts of each country case study are provided in Annex E.

⁶⁴ DES. A Framework for Junior Cycle (2015). Available from: https://www.education.ie/en/Publications/Policyreports/Framework-for-Junior-Cycle-2015.pdf



statements of learning. It was an ambitious development targeting changes to curriculum and assessment, with an emphasis on learning outcomes-based curricula, classroom-based assessment, and encouraging more learner-centred teaching and learning approaches. It was supported by significant investment in professional development for teachers and school leaders.

Both international and Irish-specific factors influenced the ideas behind the policy change. Key competences were increasingly a factor in the design of curricula across Europe and there was a sense that Irish curricula were not well aligned with competence-based approaches. At the same time, there was a degree of dissatisfaction with the way in which the predominance of the externally marked state examinations, at lower and upper secondary levels, impacted on the way the curriculum was experienced by students at post-primary level. Preparation for the examinations was seen to narrow the learning experience. Much of the conversation at the time concentrated on senior cycle (upper secondary), but there was also concern about the impact on junior cycle.

This was a multi-layered and complex policy reform, not without its challenges, with stakeholders citing many successes, and lessons learned.

The Netherlands

A series of curriculum reforms have been introduced in the Netherlands since 1998 as well as the key policy development, the "Teachers' Agenda" (2013-2020), which was important for the professionalisation of teachers and school leaders. In 1998 the so-called "second phase" of secondary education was introduced in HAVO (higher general continued education) and VWO (preparatory scientific education). This second phase would start from the fourth year of secondary education and was intended to enable students to learn more intensively and independently from the curriculum and to ensure a better connection between secondary and higher education.

In 2006, 58 core objectives, across seven learning areas, for primary and the first years of secondary education were introduced. The intention of these core objectives was to give teachers and schools more freedom when drawing up learning programmes for students, not to be confined by traditional subject boundaries, and to harmonise primary and secondary education. These headline targets are currently still the frame of reference for teachers and schools to develop curricula, but as they are almost 15 years old, the Ministry launched a revision of the curriculum in 2013. In October 2019, an advisory report was prepared by teachers and school leaders with building blocks for the revision of nine subjects in primary and secondary education (Curriculum.nu). In 2020, a temporary scientific committee was established to advise the government on the curriculum reform.

The ongoing curriculum reforms are taking place in the context of what started with the creation of the Platform on Education 2032 (which functioned from 2014 – 2016), which had a focus on dialogue and is the update and revision of the attainment targets from 2006. Sessions were organised and many stakeholders in the education field were involved in developing the new reforms. The four steps in the process were (i) a national brainstorm; (ii) a dialogue phase, including online sessions on social media, and talks with students, teachers, parents, education professionals and entrepreneurs; (iii) a consultation phase; and (iv) the final advice. These steps are to ensure that everybody who has a stake in the design of education is involved on time. This was followed by It was followed by Curriculum.nu, until 2019. Since then, the Netherlands has entered a new phase of curriculum reform.



Portugal

In 2015 Portugal had one of the highest pupil retention 65 rates in Europe. Moreover, there was a serious problem of low performance and socio-economic inequalities that have persisted over the years. Therefore, there was a need to reflect on what was wrong and to create something that would lead to a democratic and inclusive school.

There were two main reforms implemented in Portugal over the last decade on the area broad competence development in school education:

- (i) The National Programme for Educational Success (2016);
- (ii) The Exit profile of students leaving compulsory education (2017).

The first reform aimed at encouraging schools to think strategically about ways to improve students' learning in the defined competences. The emphasis on the learning of a diverse group of students has also been strengthened in this reform.

The second reform outlined the profile of the student at the end of compulsory education in a generic way, which was complemented by the plan for essential learning (*Aprendizagens Essenciais* – AE). AE functions as the main curricular guidance documents for planning, designing, and evaluating students' learning and aims to develop the skills areas included in the *Exit Profile of Students Leaving Compulsory Education*. These educational benchmarks have been built to develop specific competences of each knowledge area and transversal competences. The two reforms can be considered as complementary to each other.

Slovakia

Before 1989, the curriculum was uniform and developed centrally; school directors primarily focused on the transfer of state policy principles to the educational process. Since 1990, directors of primary and secondary schools have been granted a high degree of autonomy in management and in curriculum development. A new measure, the so-called "10/30 rule" allowed schools to change up to 10% of the lesson allocation for individual subjects and up to 30% of the content originally prescribed by the centralised curriculum. This was a transitional measure that has not been enshrined in legislation.

The National Programme of Education in the Slovak Republic for the next 15 to 20 years, was approved by the government in December 2001. However, two decisions slowed implementation of this planned reform significantly: the government focused on fiscal stability (the principal condition for Slovakia's accession to the EU) under the pressure from Finance Ministry and omitted commitments to increase investment in education. The second decision was not to take part in the first PISA study in 2000.

The poor results of Slovak students in the PISA 2003 study, after the excellent results of 14-year-old pupils in the TIMSS 1995 study, was a big shock for the public. This, along with the inability of political parties to agree on the reforming principles, led to a period of conflict that finally resulted in focusing the reform processes just on the development of new legislation.

The motivation for the reform of the new government appointed in 2006 has been highly political—to adopt the long-awaited "New Education Act" as soon as possible—in the belief that new legislation would be enough to make the reform change happen. The new education minister, who took office in 2006, set a deadline to launch the reform as early

 $^{^{65}}$ In this context retention refers to students who do not qualify for promotion to the next year and are retained at their current level.



as 2008. No substantial investment in school infrastructure, improvement of the learning environment, or teacher retraining to cope with the upcoming changes were planned for prior to launch of the reform.

This same reform was submitted for public discussion in late December 2007. The Education Act 245/2008 Coll. adopted by parliament on 22 May 2008:

- declared the transition from the curriculum design based on input regulation via detailed syllabi to the regulation of outcomes in the sense of the principle: "it is not important what the teacher teaches but what the learner learns"
- initiated support for the development of "competences" of pupils/students and setting content and performance standards related to educational areas and competences
- introduced the decentralisation of the curriculum development based on the creation of national curricula, represented by State educational programmes (StEPs)⁶⁶ for respective ISCED levels of education and followed by autonomously developed School educational programmes (SchEPs).⁶⁷

Following these discussions, the reform was launched in 2008 and was positively perceived by the public, creating a space to discuss the particularities of the reform and its implementation. Although the reform was discussed at the legislative level and there was a broad agreement on the main principles of the school reform, the details of the curricular change were not clear for all stakeholders involved. The short time given to the launch of the reform hindered the development of a systemic support from stakeholders. However, some strong NGOs were active in support of innovations in general education. Some interesting initiatives concerning digital literacy and the involvement of IT businesses and the Digital coalition, that was formed to support the digital transformation of the country are visible. Gradually, other stakeholders including more NGOs and parents' organisations began to actively engage in the discussion of the reform.

In spite of the challenges, the implementation of the reform led to turning point. It offered schools the freedom to adjust their curriculum, and reform-oriented schools gradually took advantage of this. However, most schools have been stunned by this opportunity, as teachers are not used to curriculum development. Often, teachers see their role in the classroom and want to prioritize their time in supporting learners' learning and not on creating or finding suitable teaching/learning materials. Sharing of good practices was however not sufficiently supported as there were no systemic measures (e.g., a dedicated financing scheme) adopted. Nevertheless, there are good practice examples and success stories of innovative schools that can support change in the ongoing second attempt at curricular reform.

Since the 1990s, and also during the implementation of the main reform since 2008, the education sector as a whole has been subject to austerity measures. Long-term underfinancing caused deficiencies that are still visible: equipment of schools lagging behind the state of the art and lack of quality teaching/learning materials suitable to reflect the variety of learners' needs. Although the state strictly requires formal qualifications and subsequent career development for teachers, there isn't enough support available for pedagogical leaders. Moreover, the lack of leadership capacity to lead the reform together with the decreasing attractiveness of the teaching profession might hamper the implementation of future reforms.

⁶⁶ State Educational Programmes

⁶⁷ School Educational Programmes



3.2 Different country contexts

The country workshops and peer learning group meetings demonstrated the complexity of the key competence policy interventions. The reforms discussed in the five countries were **multi-systemic** and often required a **series of coordinated policy actions** to achieve change. They differed in this respect to more conventional reforms to curricula or updating of qualifications frameworks.

1. The reforms were initiated with varying aims and underlying needs in mind.

The rationale behind the competence-based reforms was quite different in each of the five countries.

In **Denmark**, the main rationale for the 2014 reform of primary education was a wish to address some challenges in primary education, including the improvement of basic skills, especially in Danish language; equal opportunities for children to learn to their abilities; improving pupil motivation.

In the case of the **Netherlands**, the 2006 curriculum reforms were motivated because the old curricula were overloaded. Additionally, not enough attention was given to the differences between students (concerning VET and other education alternatives), and there was not enough decision-making space for schools.

In **Portugal**, the dominant view among the participants who took part in the workshop was that the reform was aligned with the broad trend in the development and improvement of the educational system in previous decades and that it contributed positively to consolidate prior improvements.

In **Ireland**, there was a focus on key competence development in the "Junior Cycle" developments (2015) and also a desire to focus on learner-centred learning and assessment in an effort to decrease the impact of the external examinations (from upper-secondary) on the way the curriculum was experienced by students at post-primary level.

Finally, in the case of **Slovakia**, the priority was to prepare the "New Education Act (2008)" that (i) declared the transition from the curriculum design based on input regulation via detailed syllabi to the regulation of outcomes; (ii) initiated support for the development of "competences" of pupils/students and setting content and performance standards related to educational areas and competences; (iii) introduced the decentralisation of the curriculum development based on the creation of national curricula, represented by State educational programmes (StEPs) for respective ISCED levels of education and followed by autonomously developed School educational programmes (SchEPs).

2. Country-specific factors such as political continuity (or lack thereof) and support, and stakeholder engagement have been addressed in different ways.

Levels of political support and continuity is an important factor in the sustainability of competence-based reform.

In **Ireland**, while the government strongly supported the idea of change at lowersecondary school, teachers saw the "Junior Cycle" reform as a radical move in terms of curriculum and assessment and the teacher unions resisted the reform at the



outset, citing the move to classroom-based assessment as too radical. An implementation plan was eventually agreed, and the reforms have since been supported by successive ministers.

In **Portugal**, the 2016-2017 reforms brought back the notion of "competence" to the education policy debate and enjoyed a significant commitment from the government and the Ministry of Education, showing a clear departure from the previous reform undertaken in 2012.

Though the 2008 reform identified key education issues in **Slovakia**, successive governments have continued only partially with the intended implementation process, as there has been insufficient investment in teacher professional learning (including the time needed to take on new approaches).

Other factors that have influenced the implementation process are related to the **resources available** and the **implementation capacities** needed to introduce new approaches to teaching, learning, and assessment.

In **Slovakia** only 14.8% of the total available funds for education were allocated to operation costs, leaving municipalities with a shortage of budget for improving learning conditions.

As for **stakeholder relationships and engagement with meso-level players**, case study countries have indicated different degrees of participation and involvement.

In **Ireland** and **Portugal**, the positive perception of the reforms, evident in the inputs from the broad group of stakeholders at the country workshops, is linked to an authentic engagement of all education actors from the early stages of policy design, including teachers, parents, and students through online and in-person consultations.

Conversely, in **Slovakia** this perception is mitigated by limited planning for implementation and an uneven cooperation between stakeholders.

For the **Netherlands**, the question of facilitating a timely and coordinated involvement of stakeholders, in particular from teachers, turned out to be one of the key challenges in the process.

All five countries pointed out that **more effort could be made to better integrate different stakeholders** in the process, and to redress any power imbalances.

In **Ireland**, teacher unions appeared to have a strong influence over the design and implementation of the reform, whereas individual schools and teachers could have been more involved.

In **Slovakia**, teachers were seen more as the ones in charge of applying the top-down changes, rather than being central to the decision-making.

Moreover, when it comes to students' and parents' involvement, **Ireland**, the **Netherlands**, **Portugal**, **and Slovakia** highlighted the importance of improving the ways in which they are involved in reform processes to truly integrate their perspectives in the process.



4. Lessons learned: Analysis of the Peer Learning Group meetings and country workshops

This chapter sets out the results of the peer learning group meetings and country workshops conducted for this study, as well as research. These focused on change processes in the early stages of policy design and implementation, in developing and deepening competence-based education, in implementation and evaluation to support system- and school-level learning and adaptation and in strategies to adapt competence-based education to address gaps and anticipate future needs.

The conceptual model for this study (chapter 1) highlights the complexity of change in multi-layer, multi-actor education systems. At the policy level, the shift to competence-based education may involve a complex mix of new initiatives (or an overall initiative encompassing multiple changes) introduced over time. At local and school levels, the shift to competence-based education requires school leader and teacher buy-in, and readiness to take on new approaches to teaching, learning and assessment.

The context of change adds an additional element of complexity which needs to be highlighted here. It is important to note that the case study country experiences—which had initiated changes between ten and fifteen years ago—were shaped by the 2008 financial crisis. The context of the ongoing COVID-19 crisis will shape all Member States in their approaches to competence-based education.

Below, themes from the peer learning group meetings and country workshops, each of which involved a mix of policy makers and key stakeholders, are explored. Peer learning group and country workshop participants have reflected on their experiences in introducing complex changes in the early stages of policy design and implementation, in developing and deepening competence-based education, in implementation and evaluation to support system- and school-level learning and adaptation and in strategies.

4.1 Supporting effective policy design and implementation

The overall aims and strategic direction for new education initiatives are set in the earliest stages of policy design and implementation. Values and aspirations for education are given form, and a "theory of change" is set in motion.

Broad stakeholder engagement in policy design, clear communication and change strategies which balance values and evidence-informed approaches, as well as alignment with the context and other education initiatives help establish strong foundations for change.

4.1.1 Stakeholder engagement

Research has found that **effective stakeholder engagement supports accountability, efficiency, and good governance**. ⁶⁸ Broad stakeholder engagement is most effective

⁶⁸ Yetano, A., Royo, S., and Acerete, B. (2010). What Is Driving the Increasing Presence of Citizen Participation Initiatives? *Environment and Planning, Government and Policy*, Vol. 28, N. 5, pp. 783 – 802.



when processes engage different stakeholders, when there is attention to building trust-based relationships, and when the resulting decisions taken at all levels are based on clear and transparent processes.⁶⁹ Structured processes that allow for critical reflection also support stakeholders' shared sense-making and learning.⁷⁰ In addition, timely and coordinated involvement of stakeholders, and in particular, teachers, is necessary.

Dialogue with the whole school community should be ongoing and not limited to one-off consultation. It should make the most of established parent and student forums, alongside targeted and outreach engagement with families experiencing social exclusion. In this way, all key stakeholders are taken on the implementation journey and own the reforms.

Ireland and **Portugal** both **orchestrated processes for stakeholder engagement** when introducing competence-based initiatives. They included school representatives (e.g., school managers and leaders), teachers unions, employers and parents in dialogue on the aims and approaches of proposed changes. Ireland highlighted efforts to gather student input. Through, the "Learner Voice" project, which allowed the time, space and audience for students to express their views in a considered and authentic way. In Portugal, university researchers and teacher educators were engaged throughout the early stages of policy design.

Their experiences point to the need to achieve a **careful balance of different stakeholder viewpoints**. In **Ireland**, for example, the initial proposals, as published by the Minister in 2012, were controversial, with objections and threats of strike action from the teacher unions. It was suggested that this was largely a result of the difficult industrial relations at the time which were linked to the economic crisis. However, these challenges to the change resulted in detailed bilateral discussions between the Department of Education and Skills (DES) and the teacher unions. Eventually, union leaders agreed to the approach, based on the resourcing of dedicated professional time for teachers, and a range of other supports, such as additional teaching resources. Teacher unions thus had a much stronger influence than other stakeholder groups, such as school management bodies, which felt somewhat left out of the process.

While stakeholder engagement will extend the timeline for initial stages of policy design and implementation, it is likely to lead to **greater trust and more sustainable change**.

Both the **Netherlands** and **Slovakia** initially took top-down approaches to design and implementation of competence-based education. In both countries, communication of new initiatives and investments in teacher preparation were limited, which had the effect of changes existing on paper, but having little impact in schools.

More recently, both **Slovakia** and the **Netherlands** have made significant efforts to engage stakeholders in revisions to the design and implementation of competence-based approaches. In Slovakia, for example, schools that have made progress in implementing competence-based approaches now have a more visible role in sharing their own experiences with other schools. Case study participants observe that these

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⁶⁹ European Commission (2019). Stakeholder Engagement in Quality Assurance Processes: Interim Report by the Education and Training 2020 Working Group Schools (April). http://www.schooleducationgateway.eu
⁷⁰ Gregory, A.J., Atkins, J.P., Midgley, G., Hodgson, A.M. (2020). Stakeholder identification and engagement in problem structuring interventions. *European Journal of Operational Research*. Vol. 283, No. 1, pp. 321 – 340. https://doi.org/10.1016/j.ejor.2019.10.044

⁷¹ Flynn, P. (2017). *The Learner Voice Research Study*. Dublin: NCCA. Retrieved from: https://ncca.ie/media/3442/16539-ncca-the-learner-voice-research-study-v2.pdf



efforts might be further bolstered by greater cooperation with the Ministry of Education, universities, parent associations, and meso-level organisations such as education non-profits. Student views on the relevance of new curricula for "real life" and on shifts in academic requirements also need to be considered.

In the **Netherlands**, recent initiatives to strengthen competence-based education are now based on a "co-creation" with significant teacher and education organisations' involvement. Participants from the Netherlands suggested that this approach might be further strengthened if dialogue and debate is structured around a more unified "Dutch vision" for education. They found that one of the biggest challenges in the early stages of policy design is to secure agreement on the purposes of change and have the nature of that understood.⁷²

Guidelines developed by the European Commission highlight the importance of communication and trust-building to effective stakeholder engagement (Box 2). The need to build capacity for and to improve stakeholder engagement over time is also noted.

Box 2: Achieving meaningful stakeholder engagement

Dialogue and engagement are most effective when:

- 1. There is a clear focus on improving all children's and young people's learning and well-being.
- 2. There is a clear and shared understanding of quality education.
- 3. All voices are heard.
- 4. Expectations for stakeholder engagement and roles and responsibilities are clear.
- 5. Differences are managed constructively.
- 6. There is support to build capacity for effective engagement.
- 7. Stakeholder selection and engagement processes are transparent.
- 8. There is a clear framework for engagement, and different methodologies are used to gather representative input.
- 9. The appropriate time, human and financial resources are allocated.
- 10. Processes are evaluated and improved over time-

Source: European Commission⁷³

4.1.2 Communication strategies

In the early stages of policy design and implementation, it is necessary to develop a comprehensive and consistent communication strategy to support dialogue and debate, and to raise awareness of new policies more widely. Communication should be pitched appropriately for different stakeholder groups. For example, references to "reform" may alienate school leaders and teachers, as the term communicates that those prior approaches have been wrong. Messages that highlight the need to enrich approaches to better fit the changing needs in society are more widely accepted.

Clarity on the purposes of proposed changes can help to avoid mixed messages (both verbal and non-verbal). For example, **Denmark** emphasised that in the early stages

 $^{^{72}}$ Donaldson, G. (2021). Experience of policy development and implementation in Wales. Peer Learning Group, 25 June

⁷³ European Commission (2019). Stakeholder Engagement in Quality Assurance Processes: Interim Report by the Education and Training 2020 Working Group Schools (April). http://www.schooleducationgateway.eus

of planning, ambitious changes to introduce competence-based education were seen as being at odds with the reality of teachers' working conditions, and concerns regarding requirements to increase teaching hours, as well as mainstreaming of special education students without appropriate support. Too many big reforms contributed to teachers' sense of overload. School-level stakeholders also noted the importance of ensuring that communication plans should clearly convey implications of new approaches for the reality of practice. In **Portugal**, teachers and other school stakeholders observed an overload of new initiatives, which were not always coherent with each other. A lag in attention to developing assessments that measure student competences (and not just knowledge) may also undermine change.

It is important to adjust language and communication approaches for different stakeholder groups. Some parent groups, for example, may struggle with the acronyms and "education speak" that are often part of the documentation that surrounds curriculum reform. Participants from **Ireland** stressed the importance of information to parents being designed to cater for and be cognisant of the diverse parent body, including variations in language competences and levels of home-school communication. It may take time to shift parents' focus from preparation for national examinations (which have implications for their children's opportunities to access higher education) as the primary objective of education toward aims for "broad competence development" as suggested by participants from **Portugal.**

Participants from **Slovakia** observed that, for teachers, language related to competence-based approaches or new curricular standards need to be clearly communicated, and teachers need time and opportunities to explore and experiment with new concepts.

For those who will be implementing changes, it is important to consider how the communication strategy—including communication across and engagement with schools and teacher networks—will be used as a tool to support collaborative policy design and influence deep changes in attitudes and behaviours that contribute to the school culture and classroom practice.¹¹

4.1.3 The logic of the policy design

Effective policy design brings together stakeholder aspirations for education and evidence-informed strategies. All case study countries note that they referred to international evidence, including the results of international student assessments to communicate the need for change, and to shape the policy design itself. In **Ireland**, international and national research on good practices were also used to develop the evidence base.

The "theory of change", or logic, of the policy design and implementation needs to be clear, coherent, and complete, but also with enough flexibility to accommodate adaptations based on information from feedback loops. Changes to curricula, new approaches to teaching and assessment, initial and continuing teacher development, school infrastructure, partnerships with community organisations, are all part of an overall policy logic and cannot be implemented selectively.⁷⁴

Teacher perceptions on the overall coherence of and support for different initiatives are essential to take-up in schools. Participants from **Portugal** pointed out that

⁷⁴ Donaldson, G. (2021). Experience of policy development and implementation in Wales. Peer Learning Group, 25 June



teachers perceive that new initiatives are introduced in a fragmented way and initiatives that are specifically focused on competence-based education tend to be overly focused on test results. These perceptions may dampen enthusiasm for change within schools. Participants from **Denmark** suggested that stakeholders should be fully engaged in discussions on the logic of the policy design, which may help to ensure a broad consensus on the assumptions underlying change strategies.

Case study countries also highlighted the importance of balancing academic research with contextualised insights provided by school leaders, teachers, parents and carers, and learners. Indeed, teachers are likely to ignore research that does not take the reality of classroom practice into account. Participants from the Netherlands, suggested, for example, that subject-matter experts should also have more visible roles during policy design processes, as they are trusted by teachers. Participants from Ireland highlighted the importance of ensuring that university stakeholders are engaged from the earliest stages of policy design and implementation.

Both **Ireland** and **Portugal** piloted new initiatives prior to introducing changes across the system. This is an opportunity for bottom-up learning and development as well as trust building. In **Portugal**, in 2016 the Ministry launched a pilot including 130 schools to test new initiatives. Pilot schools were monitored; they also had the opportunity to exchange their experiences in a series of webinars (including the 'students' voice 2016' event). The pilots were evaluated, and improvements suggested. In **Ireland**, a network of 48 schools supported the design phase of the "Junior Cycle" reform. Various elements of the "Framework for Junior Cycle", including key skills (competences), were piloted in the network schools. These schools worked on various aspects of the reform with a view to exploring fully the opportunities and implications of the reform for schools, as well as the types of supports other schools might require during implementation.

4.2 Developing and deepening practice

Effective strategies to develop and deepen competence-based education over time are needed at both system- and school-levels. At the system level, an appropriate mix of policy measures needs to be developed to both steer changes throughout the system and to influence changes at the local and school levels. The right balance—avoiding high levels of prescription or, alternatively, low levels of support and guidance—is matched to the country context and capacities of those implementing changes at local and school levels.

The element of time also needs to be considered. Stage-based, or policy sequencing, approaches allow systems/schools to develop their implementation capacities, and to adapt strategies appropriately.

4.2.1 The policy mix: balancing hard and soft policy measures

Countries increasingly use a combination of *hard* and *soft* policy measures to achieve objectives in complex education systems. *Hard* policy measures are more rigorous and prescriptive (e.g., legislation, regulations, sanctions, centrally organised implementation). *Soft* policy measures provide schools and other local actors with the flexibility to adapt policies to their own context, and to deal with uncertainty and complexity (e.g., frameworks, guidelines, incentives, school development focused on improvement, locally



organised implementation, support for school and teacher networks, professional learning communities).⁷⁵

Hard policy measures allow central governments to steer the direction of policy reforms and are aimed to assure the equity and the same quality standards of provision across schools and regions. Softer measures can be more effective in building trust and ensuring sustainability, as many actors are involved in policy design and implementation in complex education systems. Softer policy measures also allow systems to moderate the different interests and values, resources and power dynamics.⁷⁶

The appropriate mix of hard and soft policy measures will depend on the country context including the historical context and broader policy environment. Countries that have been more used to central control may need to consider several issues when integrating softer measures. For example, they may need to give attention to building trust and developing more participatory cultures. Development of strong lines of communication between central and local levels (vertical relationships) as well as support for school and teacher networks (horizontal networks) are also important. Indeed, case study countries highlighted that communication on the purposes of the reform to build support and trust from educators was perhaps the most important soft measure. They noted that it has also been important to allow sufficient time for teacher professional learning and planning. Rapid and radical changes may undermine teacher confidence and agency and support for reforms.

As an example, **Slovakia** pointed out the need to ensure that new curricular guidelines provided sufficient structure and appropriate materials. With insufficient guidance and communication on the aims of reforms, teachers referred to the model school curriculum or online exemplars and made only slight modifications within their own classes. Teachers frequently reverted to traditional teaching methods, as their efficacy for integrating new competence-based approaches was low.

The **Netherlands** pointed out that a lack of clarity on student learning goals is likely to lead to an over-reliance on textbooks (which are not necessarily aligned with new learning aims).

Over time, countries may shift the balance of hard and soft measures to support greater school autonomy and flexibility, although continued attention to careful alignment of measures is needed.

4.2.2 School-level change

Support for schools as learning organisations helps them to build their capacity to introduce change. The school as a learning organisation model supports school and teacher autonomy but also sees them as empowered within their broader systems. There is a focus on improving pedagogical and organisational practices through networking, collaborative research, and training.⁷⁹ This approach supports a "culture of learning and ownership" of

⁷⁵ Wilkoszewski, H. and E. Sundby (2014). *Steering from the Centre: New Modes of Governance in Multi-level Education Systems*. OECD Education Working Papers, No. 109. Paris, OECD Publishing, https://doi.org/10.1787/5jxswcfs4s5g-en.
⁷⁶ Ibid.

⁷⁷ European Commission (2018). *Study on supporting school innovation across Europe*. Luxembourg: Publications Office of the European Union, DOI: 10.2766/466312

⁷⁸ Halász, G. (2019), op cit.
⁷⁹ European Commission (2018). European Ideas for Better Learning: The governance of school education systems. Produced by the Education and Training 2020 Working Group Schools. Brussels European Commission. http://www.schooleducationgateway.eu.



changes. Stage-based approaches at the school-level take the specific school context and needs for professional learning and capacity-building in the near- and longer- terms into account.

The school leader plays a pivotal role in guiding school-level change. Participants from **Ireland** noted that building capacity among school leaders for leading change is challenging and is often not part of their initial preparation for leadership roles. To address this gap, the Centre for School Leadership⁸⁰ was established. While there was some delay in getting leadership supports in place, mainly due to the impact of industrial action by teachers at the early stages of the reform, the principal network (NAPD) and some of the school management bodies engaged external contributors to work with their members on education reform to support change. More recently, the model of "associates" who are practicing teachers and school leaders who support others provides a more grounded building of capacity in the system.

In **Denmark**, both municipal- and school-level leaders manage the implementation process. School leaders need to act as champions for new approaches and ensure that teachers are involved and are supported in building their own competences as they integrate new approaches to teaching, learning and assessment. The national level has also provided support to schools by making learning consultants available for both teachers and school leaders.

Case study countries pointed to evidence of change since new competence-based education initiatives were introduced. For example, in **Ireland**, teacher representatives participating in the country workshop pointed to a significant change of culture in schools, particularly regarding collaboration, peer-to-peer learning and teacher leadership. A "Teach meet" approach to professional development has facilitated whole staff sharing of skills/ideas/knowledge and has worked very well with everyone from newly qualified teachers to the senior leadership teams making presentations to staff. Other teachers in the workshop referred to the move away from a reliance on textbooks that would have been a key feature of the previous approaches. Teachers become more confident in developing their own approaches and resources as they develop their own competences. They say relationships between teachers and between teachers and students have become more positive. Student engagement has improved.

Participants from **Portugal** highlighted evidence of sustainability of reforms. Although in 2012, the term "competence" was erased from the curricula, schools never dropped that notion, and new practices had been embedded in their day-to-day practice. Teachers were able to continue with their efforts when competence-based initiatives were re-introduced in 2016/17 (while noting some discontinuities with earlier reforms). Schools have been given more autonomy and are better able to address individual student needs.

In **Slovakia**, schools with strong leadership and management were able to adopt competence-based approaches, but other schools have maintained more traditional approaches. The recent National Resilience and Recovery Plan, which includes a proposal for new curricular reform at the ISCED 1 and 2 level, in order to better support competence development among students, provides the opportunity to support system-wide change.

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⁸⁰ https://www.cslireland.ie/



4.3 Evaluating progress to support system- and school-level learning and adaptation

Policy evaluation is often an overlooked step in implementation processes.⁸¹ At the design stage, policy makers may neglect to set out indicators to monitor implementation of initiatives.⁸² The impact of educational interventions may also be challenging to measure, as they are typically part of a broader policy mix.⁸³ It is important to pay attention to context as well as to the relationships between the many stakeholders and actors,⁸⁴ and to ensure the independence of evaluation of policy impact from political influence.

A growing area of research has focused on how evaluation methods better capture unexpected, nonlinear results. Evaluations that focus on the actual change process, rather than the plans on paper, can provide insights related to how systems and schools adapt and how to support sustainability.⁸⁵ Within complexity science, which can provide a useful framework for understanding change in practice, change is often chaotic and non-linear.⁸⁶ Effective evaluations also explore the impact of external environments (e.g., social, economic, political); the interrelationships of multiple actors and their roles in adapting policies over time and through formal (e.g., with the ministry of education), as well as informal interactions (e.g., between teachers and parents).⁸⁷⁸⁸ A well-designed approach to formative evaluation which takes into account the importance of these different elements supports iterative implementation and adjustment of initiatives.

Learning and adaptation at system- and school-levels depends on effective feedback (or/and feedforward) loops (Figure 9) between the central and school level actors, as well as across networks. Feedback/forward loops ensure that evaluation is not seen as a way to track fidelity to the initial policy design, but rather to support stakeholders to adapt policies and implementation strategies as appropriate for their contexts. At school level, school staff and other stakeholders may set their own priorities for development and innovation, and regularly evaluate their progress, adapting strategies as needed.

From this point of view, evaluation for improvement supports mutual adaptation and sense-making/co-construction over time.⁸⁹

⁸¹ Viennet, R. and B. Pont (2017), Education policy implementation: A literature review and proposed framework, *OECD Education Working Papers*, No. 162, OECD Publishing, Paris, https://doi.org/10.1787/fc467a64-en.

 $^{^{82}}$ Pont, B. (2021). Effective monitoring and evaluation of education reforms. Peer Learning Group, 17 September

⁸³ Halász, G. (2019). Op cit.

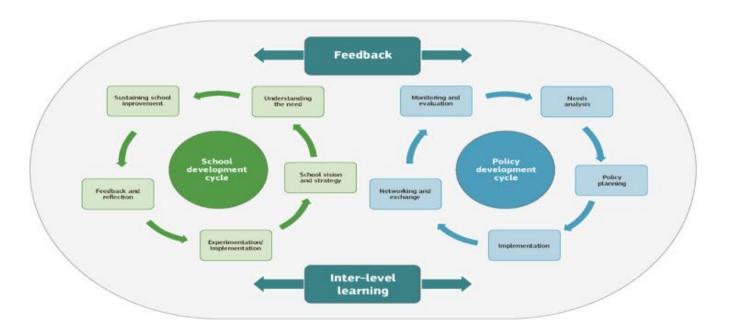
Koh, G.A. and Askell-Williams, H. (2020). Sustainable school-improvement in complex adaptive systems: A scoping review. Review of Education, Vol. 9, No. 1, February 2021, pp. 281–314 DOI: 10.1002/rev3.3246
 Bucknall, T., Hitch, E. (2018). Connections, Communication and Collaboration in Healthcare's Complex Adaptive Systems. International Journal of Health Policy and Management. Vol. 7, No. 6, pp. 556 – 559. doi: 10.15171/ijhpm.2017.138
 Ibid.

⁸⁷ Halász, G. (2019). Designing and implementing teacher policies using competence frameworks as an integrative policy tool, *European Journal of Education*. Vol. 54, No. 3, pp. 323 – 336.

⁸⁸ Koh, G.A. and Askell-Williams, H. (2020). Sustainable school-improvement in complex adaptive systems: A scoping review. *Review of Education*, Vol. 9, No. 1, February 2021, pp. 281–314. DOI: 10.1002/rev3.3246
⁸⁹ Datnow, A., & Park, V. (2009). Conceptualizing policy implementation: Large-scale reform in an era of complexity. In G. Sykes, B. Schneider, & D. N. Plank (Eds.), *Handbook of education policy research* (pp. 348–361). New York, NY: Routledge.



Figure 9: The twin cycles (processes) of development at school and system level, developed from the Study on Supporting school innovation across Europe (European Commission 2018)



Source: European Commission, 2018

The five case study countries have all taken different approaches to evaluation of competence-based initiatives over the last several years. They have noted ways in which their approaches have supported policy adaptations, but also ways in which their approaches to evaluation, feedback and adaptation of competence-based education could be strengthened.

The key elements for effective system-level policy evaluation that were highlighted in the different peer learning workshops include:

- Establishment of evaluation indicators during early stages of policy design and implementation. Indicators need to be coherent with the logic of the policy design.
- The importance of ongoing stakeholder engagement and intra- and inter-level policy learning. For schools, effective relationships between external and internal school evaluation processes are also important.
- Follow-through to support improvements. Effective adaptations need to be based on accurate diagnoses and to cohere with the logic of the policy design. In some cases, a need to reconsider the logic of policy design may become apparent.
- The need to improve and update evaluation indicators and methods as implementation evolves.

In the following sections, these elements are explored in more depth.



4.3.1 Establishment of evaluation indicators during early stages of policy design and implementation

Ideally, policy evaluation is part of an overall coherent approach, with synergies between different evaluation components. The information gathered through different evaluation processes should include both quantitative and qualitative data and evidence⁹⁰ which can support improvements and adaptations of policy at the macro-level, and at micro-level.

It is important to decide on monitoring indicators during the policy design and implementation process⁹¹ and to be sure that these are coherent with the policy logic and capture essential aims. In **Ireland**, participants in the country workshop pointed out that having a formal evaluation built into the original process can ensure education systems have relevant and rich data. It can also help evaluators to separate effects of any disruptive events, such as COVID-19, and the impact of the reform itself.

In **Denmark**, country workshop participants observed that research played a significant role in the design of the reform. A scientific steering committee was established early on. Research was carried out by VIVE⁹² researchers at the university colleges, and by EVA, the Danish Evaluation Institute. Substantial amounts of quantitative and qualitative data were collected between 2014-2018.

At the same time, while the research programme was well developed, Danish country workshop participants noted that indicators for regular monitoring focused primarily on student performance in Danish language and mathematics, and that data gathered were primarily quantitative. This has meant that evaluations have paid little attention to competence-based approaches to teaching and assessment and have not reflected the full scope of the initiatives or their underlying theory of change.

Portugal also included plans for monitoring and evaluation of competence-based initiatives during the policy design phase. Monitoring is to include regular reporting on implementation progress and specific challenges. In addition, plans have been made for a six-year evaluation of the legal framework and initiatives. This is intended to support continuity through any government changes.

In **Slovakia**, evaluation of curricular changes has been done primarily through official school inspections, which focus primarily on compliance. The inspectorate has also conducted thematic evaluations on teaching and assessment of selected key competences.

The **Netherlands**, which is in the midst of a significant redesign of competence-based education, has taken an approach similar to **Slovakia**, with most early evaluations to be conducted through the curriculum development organisation (SLO) for each subject. The SLO will note specific areas where improvements are needed. Country workshop participants noted the need to develop an overall evaluation framework with indicators that, taken together, paint a more complete picture of implementation. An evaluation of implementation processes, workshop participants suggested, might explore teachers' readiness for changes, whether and how they

⁹⁰Maxwell, B. and Staring, F. (2018). *Better learning for Europe's young people: developing coherent quality assurance strategies for school education*. Luxembourg: Publications Office of the European Union ⁹¹ Pont, B. (2021), Ibid.

⁹² VIVE is a Danish knowledge-providing organisation that contributes to the development of the welfare society and the public sector, working in the fields of society, health, governance, education, children and young people, employment, integration, elderly care, economics and public sector management. https://www.vive.dk/en/about-vive/



benefit from greater levels of autonomy in new curricula, and how they interact within teaching communities and networks.

External student assessments are an important way for countries to track the impact of curricular and pedagogical changes. However, large-scale assessments which typically treat problem-solving tasks as discrete items with close-ended multiple-choice or yes-no questions, cannot easily capture students' higher-order thinking, reasoning, or communication competences. Several country participants noted that high-stakes external assessments, while considered as more reliable—but which are not aligned with competence-based curricula—have a strong impact on teachers' preferences to maintain traditional, knowledge-based teaching and learning.⁹³

While performance-based assessments such as portfolios, oral presentations, demonstration of collaborative problem solving are more effective for capturing complex performances, there are some concerns regarding the reliability of scores, particularly when scores are awarded by human raters. ⁹⁴ Effective training has been shown to improve the reliability of scores on performance-based assessments, however. ⁹⁵ The experience of schools in teacher-rated assessments during COVID-19 confinement, including for higher-stakes assessments, confirmed that this approach is possible.

Independent of the impact of emergency remote learning on student assessment in **Portugal**, national student assessments have been adapted to include a focus on student competences (and not primarily knowledge). The Ministry has also changed the way in which it communicates the results of external student examinations to schools. Reports to schools now try to focus on competence areas where students preform less well so that teachers are aware of where they need to adjust their approaches. A next important step will be to revise higher education entrance examinations, which focus on knowledge rather than competences.

4.3.2 Supporting intra- and inter-level learning

Education evaluation systems typically include both hard and soft policy measures to support evaluation and accountability. Different mechanisms have been referred to as vertical and horizontal school accountability, with the former referring to central steering and the latter involving multi-stakeholder school-level control. Fince asingly, education systems have emphasised the importance of horizontal, or multiple school accountability involving parents, students, school staff and community members to set school-level priorities, monitor progress, and develop strategies for improvement. External evaluators also have a role to play in sharing good practices among schools they have visited. 97

⁹³ Examinations which determine whether students may move to the next level of school or graduate, or which are necessary for university admission, are considered as having high stakes. With these examinations, it is important to ensure that results are stable over time and across schools (i.e., that they are *reliable*). However, large-scale external assessments may rely on multiple choice or short answer formats, which do not effectively measure students' higher-order thinking.

 ⁹⁴ Looney, J. (2011). Alignment in Complex Education Systems: Achieving Balance and Coherence. OECD Education Working Papers, No. 64, OECD Publishing, Paris, https://doi.org/10.1787/5kg3vg5lx8r8-en.
 ⁹⁵ Caldwell, C., C.G. Thornton and L.M. Gruys (2003). Ten Classic Assessment Center Errors: Challenges to Selection Validity, Public Personnel Management, Vol. 32, pp. 73–88.

⁹⁶ Hooge, E., T. Burns and H. Wilkoszewski (2012), *Looking Beyond the Numbers: Stakeholders and Multiple School Accountability*, OECD Education Working Papers, No. 85, OECD Publishing, Paris, https://doi.org/10.1787/5k91dl7ct6q6-en.

⁹⁷ Maxwell, B. and Staring, F. (2018), op cit.

⁹⁷ Mobility Scoreboard https://www.cedefop.europa.eu/en/events-and-projects/projects/mobility-scoreboard



The quality of the relationships between external evaluators and school stakeholders is also important. External evaluation (reviews, inspections) can reinforce and support school self-evaluation. Collaborative cultures based on trust between and among external evaluators and school-level stakeholders are vital to effective working relationships. Ongoing dialogue and communication to ensure that stakeholders have a shared understanding of quality education and priorities for learning are also important.⁹⁸

School self-evaluation focused on improvement is most effective when the multiple stakeholders have a shared understanding of its purpose and have access to centrally developed training, tools, and data. At school level, school staff and other stakeholders (parents, community members) may set their own priorities for development and innovation, and regularly evaluate their progress, adapting strategies as needed. At the same time, schools generally have less experience with evaluation processes and need support from external evaluators in interpretation of data, setting priorities for improvement and monitoring progress.⁹⁹

In **Slovakia**, country workshop participants observed that there has been insufficient support for the schools' self-evaluation processes. The national model of school self-evaluation created by the State School Inspectorate (SSI) on the basis of foreign experience has not been put into practice. The SSI however signals support for self-evaluation of schools as an integral part of external evaluation and shared an Erasmus+ project as a model to support developments in Slovakia. Participants in the country workshop also suggested the need for "territorial" inspections to investigate whether municipalities and regions create suitable conditions for the implementation of the curriculum for schools in the territory of the municipality or region. This is a systemic weakness that is often seen as causing insufficient support of schools.

Participants from the **Netherlands** country workshop highlighted the importance of monitoring developments not only in schools, but also in school communities and networks. In the Netherlands' highly decentralised education governance structure, the Dutch Inspectorate has shifted its focus to helping school boards to adapt evaluations to local priorities and needs. The inspectorate and schools are thus partners in evaluation processes and are both focused on the school's broader community context.

In **Ireland** the National Curriculum and Assessment Authority (NCCA) conducted "early insight studies" on schools' experiences as the reform was being implemented. In addition, the NCCA's ongoing involvement of teachers has provided a space to informally gather formative feedback about their experiences of enacting the new curriculum specifications. NCCA's Board for Junior Cycle and Council meet several times a year, providing a forum for feedback and ongoing stakeholder engagement.

While the professional time for teachers to plan and collaborate has been very important to support the developments in **Ireland**, school leaders observed that it is probably time to consider how this is utilised and whether it needs to be revisited and further guidance provided. The three school management bodies, and the principals' network (the National Association of Principals and Deputy Principals) played a significant role in supporting and communicating the change process by providing professional development for their members as well as hosting supportive

⁹⁸ ET2020 Working Group Schools (2019). *Stakeholder engagement in quality assurance processes: Interim Report.* Available online, schooleducationgateway.eu

⁹⁹ Maxwell, B. and Staring, F. (2018), op. cit.



conferences and seminars. The main purpose of these was to encourage professional learning conversations among school leaders and to build leaderships for learning capacity. The gradual introduction of new assessment arrangements over a phased period was necessary to prepare teachers and to help them to feel comfortable with the change.

A more significant review of the reform is now being conducted by the University of Limerick. This is a three-dimensional study on the evaluation of junior cycle by the NCCA which is being conducted from 2020 to 2024. The study will work with 12 schools and will include an online survey for teachers, feedback from school leaders, etc. However, case study participants noted that feedback from students, parents, and school managers has been missing and should be included in future evaluations. Research on the progression to upper secondary is also required. It was suggested that it was unfortunate that an evaluation of the changes was not built into the reform process from the start.

Systematic attention to feedback/feedforward loops can help to ensure timely attention to areas where adjustments are needed, support an iterative approach to implementation, and provide ongoing opportunities for intra- and inter-level learning. At macro-level, feedback can be used to adjust guidelines, identify areas where investments are needed (e.g., to support school leader and teacher capacity building, invest in new teaching materials, reallocate funding to support disadvantaged schools and learners, and so on). At micro-level, schools can identify specific challenges in the shift to competence-based approaches and plan priorities for further development. At meso-level, sharing of good practices more broadly across networks accelerates professional learning, for example, organising policy learning platforms to support stakeholder involvement and horizontal learning as well as regular follow-up and decision-making at the policy level. 100

4.3.3 Follow-through to support improvements

The effectiveness of any evaluation is ultimately based on effectiveness of changes made in response. ¹⁰¹ Case study country participants pointed to a variety of measures ministries had taken in response to evaluation results.

In **Portugal**, important changes resulting from stakeholder feedback and other data have included the development of the pilot MAIA project—Monitoring, Follow-up and Research in Pedagogical Assessment. MAIA, which complements competence-based initiatives in Portugal, has been designed to support teachers to take on curricular autonomy and flexibility. The project focuses on assessment of student learning.

An evaluation of the MAIA project explored training processes and dynamics, followup and monitoring, a characterisation of the main actors and description of the work carried out by the trainees. The MAIA Project complements the reform, and it shows how the Ministry reacts to the feedback, in this case, by trying to identify how improvements can be made to pedagogical practices and assessment.

¹⁰⁰ Nielsen, S., Kärkkäinen, O., Varcin, R. and Vos, A. (2008). Policy learning – the experience of impact analysis in Turkey in *B. Chakroun and P, Sahlberg (eds). ETF Yearbook 2008: Policy learning in action*. Torino. European Training Foundation

Black and Wiliam specify that, in regard to formative assessment of student learning, "the general term assessment [is used] to refer to all those activities undertaken by teachers—and by their students in assessing themselves—that provide information to be used as feedback to modify teaching and learning activities. Such assessment becomes formative assessment when the evidence is actually used to adapt the teaching to meet student needs." A parallel definition for formative evaluation of policy initiatives may specify that evaluation is formative when the information is used to modify implementation. See Black, P. and Wiliam, D. (2010). Inside the Black Box: Raising Standards Through Classroom Assessment. Phi Delta Kappan 80(2) DOI:10.1177/003172171009200119



Participants from **Denmark** suggested that it is important to explore a range of factors affecting student outcomes. For example, poor academic performance may not be the result of too few lessons in math and Danish language—it may be due to a circumstance not addressed by the reform (e.g., the fact that 16% of primary school teachers are not qualified teachers). However, the way in which the evaluation was designed, meant that it was blind to the effect of factors external to the reform.

Participants from **Slovakia** highlighted that based on surveys of curricular authorities (ŠPÚ and ŠIOV) and suggestions from the Inspectorate and directly from schools, substantial revisions were made to the national curriculum (state educational programs). However, it was noted that reforms were not aligned with standards, which are reviewed and revised according to a separate cycle. Moreover, support for schools during the initial stages of managing the reform in primary schools came late and only helped to correct the already existing school curricula, which the schools had to prepare under time pressure during the summer holidays. The substantial revision of the national curricula in 2015 was seen as a compromise with which neither practitioners nor the curricular authority was satisfied. The main problem has related to the period of programming (setting standards annually or for multiannual cycles) and the focus of the programming framework versus core curricular, and educational areas versus individual traditional subjects.

Accurate diagnoses of factors impeding implementation and intended outcomes will require evaluators to consider the logic of the policy design, and to also consider other possible causes beyond the specific initiative. This is particularly important for evaluation of competence-based initiatives, which touch on curricula, pedagogy, assessment, teachers' professional learning, relationships with stakeholders, and so on. As has been emphasised, evaluators' need also to be ready to look for unanticipated developments and to consider the interrelationships of actors, and how they have adapted policies over time. 102, 103

4.3.4 Improve and update evaluation systems

Based on ongoing evaluation of reforms, or the information received through the feed-back/forward loops discussed above, successful implementation of complex policy initiatives requires that systems introduce interventions over time. As discussed above, a staged-based, or policy-sequencing, approach allows systems to develop capacity more gradually. ¹⁰⁴ A stage-based approach may also be used at school level, as well, with short-term and long-term aims clearly set out, and needs for capacity-building at each stage considered.

In the **Netherlands**, evaluation of initiatives first introduced in the early and mid-2000s, were done primarily through the curriculum development organisation (SLO) for each subject. New initiatives now under development will include plans for an independent monitoring and evaluation programme to be conducted by the national research institution (Dutch NRO).

Participants from the different case study countries pointed out that, over time, indicators need to be adjusted to reflect changes in programmes. In **Denmark**, for example, several adjustments have been made to the competence-based curriculum which was initially introduced in 2014. These changes have been piecemeal. It was suggested that future evaluations need to be based on a solid theory of change which

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¹⁰² Halász, G. (2019). Designing and implementing teacher policies using competence frameworks as an integrative policy tool, *European Journal of Education*. Vol. 54, No. 3, pp. 323 – 336. ¹⁰³ Koh and Askell-Williams. (2020), op. cit.

¹⁰⁴ Halász, G. (2019). Op cit.



has also been discussed with a broad set of stakeholders both to ensure a broad consensus and to test the logic of initiatives among different groups. In addition, participants noted that a helicopter view—considering the broader set of factors affecting student outcomes—is important.

4.4 Looking forward

As has been emphasised, in complex, multi-layer education systems, the policy cycle should be thought of as iterative, rather than linear. The case study countries highlighted several policy areas they are currently working to strengthen competence-based education. In some cases, they are "re-booting" processes, and in others they are expanding the reach of competence-based initiatives.

Among the areas of change discussed by case study countries were:

- New opportunities for stakeholder engagement
- Revisions of pedagogies and assessment
- Strengthening support for school-level change
- Strengthening school networks

In each of these areas, there is attention to building or re-building trust and improving vertical and horizontal communication.

The latter three of the above points include a focus on the effects of the COVID-19 crisis on ways of working. Indeed, ongoing implementation has also been affected by the disruption of COVID-19 and emergency remote learning, which has revealed areas of system fragility as well as resilience. The disruption has also provided opportunities to collaborate and to innovate. Ongoing reform efforts will be shaped by this current context.

4.4.1 New opportunities for stakeholder engagement

Efforts to engage a broad group of stakeholders in policy design and implementation are relatively recent, in general. Among the case study countries, only **Ireland** and **Portugal** launched consultation processes at the outset. Case study participants from **Denmark**, the **Netherlands** and **Slovakia** observed that the lack of stakeholder engagement in early stages of policy design, in combination with challenging political and economic contexts, as having contributed to subsequent challenges in implementation processes.

More recently, processes to (re-)engage stakeholders have been launched in both the **Netherlands** and **Slovakia**. Case study participants from the Netherlands has pointed to the top-down, expert-driven initiatives of the 2010's as having gained little traction. In 2016, a bottom-up process to engage a broad set of stakeholder groups and to co-create change initiatives was launched. In Slovakia, case study participants recognised the need to address the lack of stakeholder engagement, to extend the timeline for policy design and implementation, and to invest in teacher professional learning and teaching materials

In **Denmark**, new competence-based curricula were introduced in 2014 during a labour dispute between teachers and municipalities. Moreover, key stakeholders, in particular teachers, had no significant engagement in the policy design phase. Student voice was also missing from the process. Current efforts to support broad stakeholder engagement may build on the national Ministry's recent 'Together for



the school'. At the heart of this initiative is a general agreement that schools and their stakeholders do not need yet another reform, but rather to collaborate on strategies to current emerging challenges for Folkeskole.

While **Ireland** and **Portugal** made extensive efforts to engage stakeholders during the launch of policy design and implementation stages more than ten years ago, they note areas where improvements might be made. Both countries note that better communication with schools, parents, and other stakeholders on the purposes of change is needed. The use of social media to support communication with students could also be strengthened.

Country efforts to re-engage with stakeholders and to re-boot change initiatives are important opportunities to strengthen trust and communication. There is evidence that trust can be rebuilt¹⁰⁵ ¹⁰⁶, for example, through improved communication and transparency with stakeholders. ¹⁰⁷ Building or rebuilding trust may also involve an interactive process. Trust is required for and is also built through effective cooperation. ¹⁰⁸

As an example, during the pandemic, education stakeholders in **Denmark** have been closely engaged with community schools, in municipalities and with the national Ministry to find ways to minimise disruptions to teaching and learning. The experience has helped to reinforce and build trust between local and national levels and has also underlined the value of close collaboration.

4.4.2 Revisions to pedagogies and student assessment

Case study country participants reflected on the need for further revisions to pedagogies and student assessment. To a significant extent, their reflections have been influenced by the impact of COVID-19 and emergency remote learning on priorities for education. The exceptional circumstances provided an opportunity for fresh consideration of practice.

Emergency remote learning brought the importance of student (and teacher) wellbeing, relationships and engagement in schools, and social emotional learning to the fore. In **Slovakia**, a survey of the State School Inspectorate (SSI) on the impact of COVID-19 on school education revealed mixed results in terms of teaching and learning during remote learning and in classroom settings enforcing social distancing rules. For example, teachers have signalled that the students' social competences have suffered (e.g., ability to work in a team, ability to cooperate, ability to resolve conflict situations and communicativeness), and that students' have had limited opportunities to develop communication competences in the online environment.

In addition, socio-economic and digital divides between students have become even more apparent. An evaluation by the **Danish** Evaluation Institute (EVA) found that while academically strong students continued to do well during the school closures, digital learning reinforces social biases. In the **Netherlands**, the results of the most recent PISA (OECD's tri-annual Programme for International Student Assessment

¹⁰⁵ Jonker., C, J. Schalken J. Theeuwes and J. Treur (2004), "Human experiments in trust dynamics", Lecture notes in Computer Science 2995, Berlin: Springer, pp. 206-220.

¹⁰⁶ Schweitzer, M., J. Hershey, and E. Bradlow (2006), "Promises and lies: restoring violated trust", Organisational Behaviour and Human Decision Processes 101(1): 1-19.

¹⁰⁷ Carless, D. (2009), "Trust, distrust and their impact on assessment reform", Assessment and Evaluation in Higher Education 34(1): 79-89.

¹⁰⁸ Cerna, L. (2014). Trust: What it is and Why it Matters for Governance and Education. *OECD Education Working Papers*, No. 108, OECD Publishing, Paris, https://doi.org/10.1787/5jxswcg0t6wl-en.



of 15-year-old students), implemented in 2021, indicated a lowering of student basic skills.

Positive developments have included the focus on rethinking what elements of the curriculum are most essential to teach given reduced lesson time each week, as well as teacher innovation in delivery of lessons and development of supporting materials for use in the online environment. The SSI survey in **Slovakia** also found that remote learning helped to catalyse changes in teaching and assessment, for example, providing teacher feedback to help them assess progress (given the difficult of online testing). Teachers, parents, and other stakeholders have recognised the need for change, not only in teaching content, but also pedagogies, the need to develop teachers' and students' digital skills, and attention to student and teacher wellbeing.

Other country case study participants also noted that the benefits of online learning should not be lost. For example, in **Denmark**, remote learning was seen as an opportunity to deliver learning tailored to individual needs (including for some learners with special education needs). A student participant appreciated opportunities to conduct virtual company visits and meetings with young people around the world using internet-based meeting tools. In **Ireland**, remote learning has given greater visibility to digital and learning-to-learn competences.

Changes to student assessment in the context of remote learning have also been seen as an important benefit. Indeed, high-stakes student assessments that are not aligned with competence-based approaches have seriously limited the impact of curricular changes.

This has been the case for student transition from junior to senior cycle in **Ireland**, and for university entrance in **Portugal**. Changes in the structure of these high-stakes examinations so they are more aligned with competence-based curricula, along with teacher-based assessments of project-based work, have again become the focus of attention as assessment systems have had to change during the pandemic.

In **Ireland**, because of the pandemic, external state examinations at lower secondary were cancelled and schools ran their own assessment processes. Evaluations of this process uncovered some interesting views, including that there is no longer a need for external examinations and that these could be replaced by continuous assessment. School leaders reported an increase in teacher confidence around assessing students at junior cycle. A participant from the **Netherlands** observed that increased transparency of teaching and assessment during COVID-19 has led to increased trust in teachers' judgement.

4.4.3 Strengthening support for school-level change

Emergency remote learning has also highlighted the important role of school leaders and local authorities, both during the pandemic and in general.

Participants from **Slovakia** noted that the importance of school cultures and capacity for self-evaluation are now more apparent. In **Ireland**, the COVID-19 crisis has led to greater cooperation among education partners, and greater alignment in thinking as they move toward the next cycle of reform at the upper secondary level (now in the inception phase).

At the same time, it will be important to take advantage of this window of opportunity to sustain positive changes, including increased trust and transparency and improved communication as highlighted above. While COVID-19 has required teachers to make



decisions and has increased their agency, further support is needed to instil strengthened teacher roles (the **Netherlands**). Similar observations were made in **Ireland**, where it was noted that while the use of technology in schools presents a big opportunity for competence development, it needs to be supported in schools.

4.4.4 Strengthening school networks

Participants from the case study countries reported that teacher collaboration during emergency remote learning grew considerably.

In **Ireland**, for example, teachers reported that that there was a real sharing and collaboration between colleagues around how to adapt to the new situation of teaching and learning online. Teachers were using technology in new, different, and pedagogically rich ways. This changed their pedagogical practices and how they thought about what they were teaching, and teaching methods. Interestingly, after teachers returned to the classroom in September 2020, four out of ten teachers (37%) reported that they felt more confident in their face-to-face teaching following several months of remote teaching. Another 36% said their confidence hadn't changed, while 27% either felt less confident or didn't respond. Two thirds of the teachers (63%) said that, as a result of the COVID-related changes to their practice, they intend to use online and blended learning much more post-pandemic. There was also evidence of teachers working more closely with parents.

In the **Netherlands**, the National Programme for Education provided schools with additional funding for combatting learning delays and recovering the social-emotional development of students. The National Programme provided a framework for, and shared ideas on, cost-effective interventions and some approaches that were appropriate to the Netherlands' context.

Positive collaborative experiences between macro- and micro-levels in the **Danish** school system also served to (re-) build trust. During the early stages of the pandemic, schools sought steering and guidance from the Ministry, but also asked for (and received) trust from the Ministry so that local strategies could be developed. Stakeholders worked closely with municipalities and the Ministry to do as much as they could to prevent the pandemic from disrupting teaching and learning.

It remains to be seen whether various developments resulting from the disruption of the pandemic will be sustained over time. Inevitably, some innovations will fade. However, key stakeholders can build on the significant experience they have developed while working together to achieve change in the most challenging of circumstances.

4.5 Summary highlights

Chapters 1 through 4 have set out the aims and approach of this study (chapter 1), an overview of competence-based policies and initiatives across the EU 27 and the selection of five case study countries (chapter 2), the motivations for change, context of and approaches to competence-based initiatives in each of the five case study countries (chapter 3), and the results of the policy learning processes within and across these five countries (chapter 4).

Highlights from the desk research and peer learning processes are that:



- Effective design and implementation of initiatives for competence-based education—which are at the heart of this study—depend on strong political commitment of key education policy actors and implementation capacity. Where both political commitment and implementation capacities are high, change is more likely. All countries (and schools) can take a strategic approach strengthening both dimensions over time.
- Changes to support competence-based education are both broad and deep. Policy initiatives include the introduction of new curricula and pedagogies, new expectations for school leader and teacher competences, new approaches to student assessment, new school-university partnerships, and investments in new materials and school infrastructure. Policy designs need to recognise the complexity of introducing new initiatives in multi-layer, multi-actor systems, and that change process are iterative rather than linear.
- The mix of policy measures to introduce initiatives varies across countries. They may include a mix of legislation, regulations, centrally organised strategies as well as more flexible approaches such as frameworks, guidelines, and incentives to support local adaptation and learning across networks. The most effective mix of policy measures will depend on the country context, including its education governance model, and may evolve as a meso- and micro-level players build capacity to work more autonomously.
- Evaluation is essential for effective implementation and should be planned for in early stages of policy design. Formative and summative evaluations that focus on the actual change process, rather than the plans on paper, can provide insights related to how systems and schools adapt and how to support sustainability.
- Change across education systems requires investment in school leader and teacher professional learning to allow educators to build their efficacy with new competence-based approaches. Allocation of resources to schools can ensure that teachers have the time for and access to professional learning opportunities, as well as opportunities to collaborate with peers in their schools and school networks. Support for schools as learning organisations helps them to build improve pedagogical and organisational practices through networking, collaborative research and training. Teachers and school leaders are empowered within broader systems.
- Trust and communication are vital to effective policy implementation. Trust can be built or re-built. Effective communication and engagement with stakeholders. throughout policy design and implementation processes can strengthen trust.
- The disruption of COVID-19 and emergency remote learning has highlighted the need to improve inclusion and fairness in education. It has also created opportunities to (re-)build trust among stakeholders, to build broader online teacher networks, and to support innovations in teaching, learning and assessment.

Exchanges within and among countries allowed all participants to consider the process of change within their own countries, and to develop new perspectives. The case study countries have shared a wealth of knowledge and recounted their experiences and the lessons learned. The next chapter of this report (chapter 5) brings together countries' lessons learned as a concrete set of guidelines and recommendations to support all Member States as they develop and deepen competence-based education.



5. Policy recommendations and guidelines for policy makers

This chapter presents recommendations and guidelines based on the results of the policy learning process within and across the five countries participating in this study, and the country mapping of the EU 27 as part of the desk research. The recommendations can be adapted to the context of each country, no matter where they are in the process of policy design and implementation of competence-based initiatives.

5.1 Introduction and overview

These recommendations have emerged from the collective dialogue and thinking of participants drawn from policy makers, stakeholders, school leaders, teachers and researchers supported by some experts acting as resource providers and facilitators in the five countries participating in this study.

Policy makers referring to these recommendations and guidelines will want to consider them in terms of their own country contexts, education cultures, as well as the education governance model, commitment of key actors, and implementation capacities at various levels of their systems. Countries may develop strategies to build implementation capacities over time, building on existing strengths and addressing challenges.

While these recommendations are organised around the broad stages for policy design and implementation, this structure is not intended to suggest a linear model. Successful systems adapt strategies as needed. Strong and open channels of communication across systems are essential.

5.2 Recommendations and guidelines on policy design and implementation: early stages

1. Engage stakeholders in the design of policy initiatives

In the early stages of policy design and implementation for key competence reforms, it is important to ensure the political commitment of key actors and to develop a clear logic for policy changes related to the introduction of competence-based approaches. Policies need to reflect stakeholders' values and aspirations for education, and to also be grounded in evidence. Broad agreement on the purposes of and need for the shift to competence-based education can help to focus dialogue among diverse stakeholder groups.

Engagement of social partners and civil society in the early stages may involve lengthy periods of dialogue and negotiation, but supports implementation, ownership and sustainability of initiatives over the longer term. Capacity for constructive dialogue and debate, structured around a unified vision for competence-based education in the country may also needs to be built over time. Effective stakeholder engagement is in and of itself an important component in building of mutual trust and transparency.



Recommendations on implementation

- Clearly define and build consensus on key stakeholder groups to be included and ensure that all relevant groups are included throughout all phases of policy design and implementation.
- Ensure that stakeholder selection and engagement processes are transparent. Consider how to engage all stakeholders in a coherent, meaningful and consistent way.
- Structure stakeholder engagement around a shared vision on the need for and purpose of policies to support competence-based education.
- Include national councils of education to help depoliticise education policy development and support independent, long-term strategies.
- Be mindful of the genuine concerns of stakeholders and demonstrate that their feedback is being taken into consideration and making an impact on policy design and implementation to ensure trust.
- Ensure that student voice is clearly represented in policy design and evaluation processes, and that students are supported to develop representative governance at the school level.
- Plan for timely and coordinated involvement of stakeholders, and in particular, school leaders and teachers in the introduction of new competence-based approaches to teaching, learning and assessment.
- Develop a clear framework for engagement, include different methodologies to ensure representative input. Develop processes to manage differences constructively.
- Ensure that the roles and responsibilities of stakeholder groups are clear.
- Encourage and support stakeholder groups to build capacities to communicate and share viewpoints on new competence-based approaches with their constituents.
- Provide guidance on how to set up stakeholder engagement, particularly where the involvement of students, teachers or parents is new or previously has been focused on a few representatives.
- Provide financial resources necessary for parent and student engagement.

2. Policies need to bring together aspirations and research evidence to develop a theory of change and clear logic for implementation

Policies need to be based on stakeholders' aspirations for education and informed by research evidence. Evidence needs to include academic studies and policy reviews, as well as the contextualised insights of school leaders, teachers, parents and carers, and students.



The policy design needs to have a clear logic which also considers the nature of change in complex, multi-layer education systems. New initiatives will need to build on existing policies and practices and to be appropriate for the country's education governance system. The right balance of avoiding high levels of prescription, or low levels of support and guidance is important to allow for capacity building prior to the introduction of the new policy and throughout its implementation. Capacity building can be supported by phasing in policies over time.

The broader context of change processes needs to be considered. Teachers' working conditions, levels of financial support for schools, the political commitment of stakeholders, and levels of trust within systems are all important to the success of initiatives.

Issues such as school leaders' and teachers' motivations to shift to competence-based approaches and their efficacy in taking on new approaches need to be considered.

Recommendations on implementation

- Plan logistics of change as part of the "logic" of the policy design. These include plans for communication on the motivation for and the added value of new policies and approaches to teaching, learning and assessment with school leaders, teachers, parents and carers, and students.
- Agree on a clear framework setting out national priorities for student competence development. Use these as the foundation for changes to curriculum as well as changes to teaching, learning and assessment.
- Embed teacher professional development within the policy design from the outset.
- Ensure that teachers have time to engage in professional learning, including relevant continuing professional development opportunities, and collaboration with peers in school.
- Allow time for teachers to embed competences in different subject areas, to enable a more learner-centred approach to teaching and learning, and to shift emphasis to formative assessment and the introduction of teacher-based summative assessments.

3. Pilot new initiatives, gather feedback and adjust plans

Piloting of initiatives, whether in a small or larger groups of schools, provides the opportunity to gather early feedback on what is working well and what may need to be adjusted. The logistics of implementation plans should also be refined further at this stage. It is the opportunity to engage a broader group of school leaders and teachers on discussions regarding changes.



Recommendations on implementation

- Ensure that schools have pedagogical resources and expert support on new approaches to teaching, learning and assessment as they pilot new initiatives. Universities, education ministries, teacher networks, education consultants or specialist organisations, in line with their own specific roles and capacities, can each offer support to schools and teachers as they integrate new approaches and develop new materials.
- Allow time for pilot schools to phase in new approaches to teaching, learning and assessment (a sequence-based approach).
- Plan for evaluation of implementation processes in the pilot schools.
- Provide opportunities for teachers in pilot schools to collaborate, both in their own school and with other schools.
- Refine and clarify processes and pedagogical resources to support new competence-based approaches drawing on school leader and teacher experiences and views.
- Ensure that teachers have the time to tailor new teaching and assessment approaches as appropriate for the subject taught.
- Ensure that students and parents are heard early in the policy design process and during implementation and evaluation.
- Ensure that parents have confidence in the assessment of learning, and that assessments are meaningful for students.
- Plan for broader dissemination and take-up of initiatives and ensure that schools across the system have appropriate advice and support, based on their own readiness for change and implementation capacities.

4. Develop effective communication channels - horizontal and vertical

Clear and consistent communication on the purposes and processes of change will be important not only in the early stages of policy design and stakeholder engagement, but throughout the process of implementation and adaptation. This includes vertical communication between central policy levels, and horizontal communication between local governments and schools, within schools and across school networks.

Recommendations on implementation

- Develop clear messages and effective communication channels. Ensure transparency at all stages of design, implementation, and evaluation.
- Consider the timing of communication with stakeholders, balancing the need to involve them in the early stages of policy design and the need to have



evidence, grounded in research and practice, that demonstrates the effectiveness of proposed changes.

- Ensure communication and outreach to different stakeholder groups regarding shifts to competence-based approaches is appropriately pitched, avoiding overly technical or specialist language.
- Clearly communicate the value of and need for changes to curricula and pedagogies.
- Develop capacities to use social media effectively.
- Encourage and support two-way communication between national authorities/agencies and schools and local authorities.
- Encourage and support communication across school networks, within school-university, partnerships, and between schools and local businesses and communities.
- Engage with traditional media outlets.

5. Plan for formative and summative evaluation of competence-based initiatives as part of the policy design

Plans for evaluation of initiatives need to be built in the early stages of policy design. This includes identification of qualitative and quantitative monitoring data to be gathered at consistent intervals.

Formative evaluation is vital to effective implementation. In addition to monitoring data, regular consultation with school leaders and teachers helps to identify areas where adjustments are needed. Student and parent views need to be included, as well.

Summative evaluations of implementation processes and impact, based on the theory of change set out in the initial policy design, should be planned. Although strategies and initiatives are likely to change from early implementation to the time of formal evaluation, consistent data gathering is important. These more formal evaluations are also the occasion to consider overall processes, and to make more significant policy adjustments.

Recommendations on implementation

- Design evaluation to consider the complexity of policy design and implementation processes, and to allow sufficient time and flexibility for adaptation.
- Design accountability across multiple stakeholders (including school accountability for implementing new initiatives, and system-level accountability to support schools).
- Identify indicators and milestones for monitoring and evaluation (formative and summative), aligned with theory of change.



- Include both qualitative and quantitative measures of "broad student development" and wellbeing and avoid a "tick box" approach. Ensure that indicators gather contextual information on factors affecting implementation.
- Identify and share effective school self-evaluation and improvement models that allow for deeper reflection on implementation of competence-based approaches, including shifts in school cultures, in line with broad aspirations for education.

5.3 Recommendations and guidelines on developing and deepening practice

Developing and deepening new competence-based approaches following early stages of implementation requires time and opportunities to reflect and adjust strategies.

Support for schools as learning organisations may also help them to build their capacity to introduce change and to build on and develop new practices. School leaders play an important role in steering and supporting their schools through this change.

Effective feedback/forward loops between school and systems levels and across schools promote both system- and school-level learning and improvement. Capacity to interpret data, diagnose the source(s) of poor outcomes, to react to unexpected developments, as well as to adapt approaches are all vital.

1. Provide support to school leaders

While school leader roles and responsibilities vary across countries, they play a pivotal role in guiding school-level change and need to be supported to strengthen their roles as leaders and facilitators of teaching and learning.

School leaders need to understand the policy logic, the need for change and improvements to their pedagogies and organisational practices to support innovation and adaptation relevant to the school context. Sufficient financial and human resources to support school-level change can help to build and reinforce trust.

Recommendations on implementation

- Ensure that school leaders have financial and human resources to support their staff in the shift to competence-based education.
- Ensure that school leaders have access to professional learning communities and networks to support mutual learning.
- Share models of effective distributed leadership within schools to deepen school-level learning and implementation of competence-based approaches.
- Include school leaders in ongoing consultations on implementation of new initiatives.



2. Support teachers' professional learning communities

Opportunities for teachers' collaborative professional learning within schools as learning organisations, as well as between schools in professional learning networks can catalyse change and deepen learning. Policy makers can create the conditions for professional learning through support for schools as learning organisations and for school networks.

Recommendations on implementation

- Support the establishment of networks or clusters of schools so that school leaders and their school teams can explore, collaborate, share practices, and learn from each other in a trust-based environment. Ensure that network aims to support the development of competence-based education are clear.
- Provide opportunities for subject-area specialists to collaborate.
- Encourage the inclusion of teacher educators in networks.
- Highlight the importance of teachers' competences to design lessons and create effective learning environments to support competence-based education.
- Highlight the importance of teachers' competences for assessment. Support professional learning on the use of assessment tools and processes for formative and summative assessment of student competence.
- Ensure that teachers have time to participate in learning communities. New approaches to school timetabling, financial and human resources may be needed.
- Share models of effective learning communities in schools as learning organisations and across school networks.
- Support schools' organisational development, including through the support of external developers, to embed competence-based approaches within a whole-school approach.

5.4 Recommendations and guidelines on evaluating progress to support system- and school-level learning and adaptation

Plans for formative and summative evaluation, including identification of monitoring indicators, need to be developed as part of the initial policy design for competence-based approaches. Formative evaluation will be most effective when seen as an integrated part of the implementation processes itself. Longer-term, summative evaluation can provide further insight on the development of implementation capacities over time, the impact of initiatives on school-level and teacher practices and on student learning.



1. Support evaluation focused on school development of competence-based education, with a particular focus on the relationship between external and internal school evaluation

Evaluation focused on school development will be most effective when a climate of trust and a focus on the quality of student learning and wellbeing is fostered. Schools may benefit from broader engagement of parents, students, and other stakeholders in the local community. Positive relationships with external evaluators can ensure that schools are supported in school self-evaluation, and benefit from input of objective third-party views.

Recommendations on implementation

- Provide opportunities for school staff and stakeholders to develop competences to gather and interpret data on the school environment and student learning and wellbeing, aligned with priorities for competence-based teaching, learning and assessment.
- Make expectations for roles and responsibilities of stakeholders engaged in school evaluation clear.
- Support development of a shared understanding on the aims of competence-based initiatives and their evaluation within schools and between schools and external evaluators. This requires the development of trusting relationships.
- Provide extra support for schools with lower implementation capacities and working in more challenging contexts so that they have resources and support needed to develop.
- Evaluate and improve school evaluation processes over time.

2. Support effective feedback/forward loops

Learning and adaptation at system- and school-levels depends on effective feedback and feed forward loops between central and school level actors, as well as across networks. Formative evaluations can support the adaptation of policies and implementation strategies as they are being rolled out and ensure that stakeholders are listened to and that their feedback makes a difference to the implementation process. Formative evaluation can provide information that is essential for education systems and schools as they build their implementation capacities.

Recommendations on implementation

 Plan for regular communication between national authorities and agencies and local officials and school-level stakeholders to ensure that challenges to implementation of competence-based approaches are identified and addressed in a timely manner.



- Create channels for feedback and feedforward loops, including meso-level actors such as professional development providers and teacher educators, the inspectorate and curriculum developers and universities. Opportunities to engage with teachers and school leaders should be explored at all stages of design and implementation.
- Ensure that follow through on feedback is based on adequate diagnoses and is coherent with the logic of the policy design.
- Ensure adaptations and improvements made on the basis of feedback are appropriate and visible.
- Adjust evaluation indicators as needed to take into account any significant changes made to competence-based initiatives. Changes need to be coherent with the overall policy logic.

5.5 Recommendations and guidelines on building on lessons learned and looking forward

Implementation of complex, competence-based initiatives requires ongoing development across systems. Supporting deep changes to teaching, learning and assessment in all or even most schools in any system will take time. Moreover, through the process of implementation, needs for further development and adjustments will become apparent.

1. Build on lessons of the COVID-19 disruption

The COVID-19 crisis and emergency remote learning have revealed areas of fragility and resilience across systems. In particular, socio-economic disparities between learners and their families have been made even more apparent. The need to invest in teachers', students' digital competences has also been highlighted. At the same time, relationships between schools and central ministries, as well as between schools and their local communities and families, have benefited from collaboration. In many contexts, trust and communication among key actors have been strengthened. Teachers have developed innovative approaches to competence-based teaching to ensure that students are engaged. In several countries, education systems have promoted teacher-based assessments for high-stakes decisions such as graduation and university admission, as it was not possible to administer standardised examinations remotely. It will be important to use the crisis as window of opportunity for further change.

Recommendations on implementation

- Monitor the impact of the COVID-19 crisis on implementation of competencebased initiatives and on student learning and wellbeing.
- Create platforms for continued communication with schools, teachers and families to address student needs in the aftermath of the crisis. Innovative approaches to



re- engage students, address student learning loss, and address student wellbeing will be needed.

- Continue to support collaboration between regional and local areas that has developed a result of the pandemic.
- Build on relationships with parents and carers who have played important roles in supporting their children's learning from home.
- Invest resources in meeting needs of disadvantaged learners who may have fallen further behind or completely disengaged from school during emergency remote learning.
- (Re-)consider priorities for learning and wellbeing, and how curricula may be streamlined to focus on essential aims.
- Support teachers to deepen assessment competences, including digital assessment competences, and develop processes to reliable teacher scoring of high-stakes examinations.

2. Use a policy learning approach to engage key stakeholders and strengthen policy design implementation capacities

Policy learning processes within and across countries can support reflection on past successes and ongoing challenges in policy design and implementation of competence-based initiatives. Opportunities for open engagement can help to open channels of communication and build trust across all key actors.

The aims of policy learning may change. For example, at earlier stages of implementation, mutual learning across countries may support thinking on the logic of the policy design. Participants may also reflect on implementation processes at a later point, when the benefit of time allows greater objectivity and openness on what has worked or has not worked well.

Recommendations on implementation

- Engage with stakeholders (country level) to reflect on what has been learned about effective policy design and implementation, how these have been shaped by broader contexts, and how lessons might be built on.
- Continue to exchange 'good practices' within and across countries to support policy learning.
- Consider how experiences of the past might inspire new and innovative approaches.



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Annex A: Selection criteria for selecting case study countries

Cri	iteria	Description						
1.	Structural criteria: Educational structure and	Education systems and governance models and the extent to which curriculum design and assessment are centralised or decentralised.						
	governance model	Objective: To ensure that there would be a variety of structures represented, as well as a geographical spread.						
2.	Policy criteria: Implementation stage and reform	Reforms that had been introduced for some time (10 years). Which areas of reform were covered? Curriculum, assessment, teacher capacity, school leadership, inclusion, and structural reforms.						
	areas	Reforms targeted at systemic changes in areas such as core curriculum and assessment, improvements in school leadership and teacher capacity, rather than small scale initiatives.						
		Objective: To ensure a spread across the key competences, including basic skills, and a variety of areas of systemic reform that are sustainable.						
3.	Policy criteria: Implementation approaches, enablers and	Implementation approaches taken in each Member State and identification of the enablers, challenges and success factors of each of the reforms. Lessons learned during the implementation of the reforms.						
	challenges	Objective: To ensure that the countries selected provide a good spread of implementation strategies, stakeholder engagement and experiences of implementation and evidence of success across a range of areas such as tools and approaches that effectively influence school cultures and teacher practices and beliefs, including through teacher professional learning, development of best practices, new approaches to school leadership, student assessment results, innovations in teaching and assessment and school collaborations.						



Annex B: Membership of the Peer Learning Group

Country	Full Name	Organisation
Denmark	Elsebeth Aller	Head of International Affairs for Children and Education, Ministry of Education and Children
Denmark	Andreas Rasch-Christensen	Via University College
Ireland	Áine O'Sullivan	Association of Communication and Comprehensive Schools
Ireland	Harold Hislop	Chief Inspector, Department of Education and Skills
Netherlands	Peter Lucas	VO-Raad
Netherlands	Tessa Van Dorp	Ministry of Education, Culture and Science
Portugal	Maria Emilia Brederode	National Council of Education
Portugal	Manuel Miguéns	National Council of Education
Portugal	Ana Maria Machado	Ministry of Education
Portugal	Luís Tinoca	University of Lisbon
Slovakia	Drahoslava Kečkéšová	Department of Curriculum and Innovation, Ministry of Education
Slovakia	Viera Nemcova	Trade Union of Workers in Education and Science of Slovakia
Slovakia	Juraj Vantuch	Country Expert





Annex C: Educational structure and governance models of EU 27

Countries	Main organisational model	STRUCTURAL CRITER Compulsory school age		level o	AL STRUCTURE f school ccountability	and GOVERNANC Accountability	E MODEL Curriculum	Assessment
		Minimum	Maximum	level of school autonomy in resource allocation	level of school autonomy in curriculum and assessment			
Austria	Differentiated	5 years	15 years	Low	Medium	Low	Centralised	Decentralised
Belgium (Flemish)	Common core	5 years	18 years	Medium	Medium	Low	Decentralised	Decentralised
Bulgaria	Single structure	5 years	16 years	High	Low	Low	Centralised	Centralised
Croatia	Single structure	6 and 7 years	15 years	Medium	Low		Centralised	Centralised
Cyprus	Common core	4 years	15 years	Low	Low	N/a	Centralised	Centralised
Czechia	Common core & single structure	5 years	15 years	High	High	Low	Centralised	Centralised
Denmark	Single structure	6 years	Mainstream	SEN	Medium	High	Centralised	Centralised
Estonia	Single structure	7 years	16 years	Medium	Medium	Medium	Decentralised	Decentralised
Finland	Single structure	6 years	18 years	Medium	Medium	Medium	Decentralised	Decentralised
France	Common core	3 years	18 years	Low	Medium		Centralised	Centralised



Countries	Main organisational model	Compuls	JRAL CRITER ory school ige	level o	AL STRUCTURE f school accountability	and GOVERNANC Accountability	E MODEL Curriculum	Assessment
		Minimum	Maximum	level of school autonomy in resource allocation	level of school autonomy in curriculum and assessment			
Germany	Differentiated	6 years	18 years	Medium	Medium	Low	Decentralised	Centralised
Greece	Common core	4 years	15 years	Low	Low	Low	Centralised	Centralised
Hungary	Mixed	3 years	16 years	High	High	Low	Centralised	Centralised
Ireland	Common core	6 years	16 years	Low	Medium	Low	Centralised	Centralised
Italy	Common Core	6 years	16 years	Low	Medium		Decentralised	Decentralised
Latvia	Common core & single structure	5 years	16 years	Medium	Low	Low	Centralised	Centralised
Lithuania	Common core & differentiated	6 years	16 years	Medium	Medium	Low	Decentralised	Centralised
Luxembourg	Differentiated	4 years	16 years	High	Low	Low	Centralised	Centralised
Malta	Common core	5 years	16 years	Varies according to school system (State vs	Varies according to school system (State vs		Centralised	Centralised



Countries	Main organisational model	STRUCTURAL CRITERS Compulsory school age		level o	AL STRUCTURE f school ccountability	and GOVERNANC Accountability		Assessment
		Minimum	Maximum	level of school autonomy in resource allocation	level of school autonomy in curriculum and assessment			
				Church vs Private)	Church vs Private)			
Netherlands	Differentiated	5 years	16 years	High	High	High	Decentralised	Centralised
Poland	Single structure	6 years	15 years	Medium	Medium	Low	Centralised	Centralised
Portugal	Common core	6 years	18 years	Medium	Low	Low	Centralised	Centralised
Romania	Common core	6 years	17 years	Low	Medium	Low	Centralised	Centralised
Slovakia	Common core & single structure	5 years	16 years	Medium	Medium	High	Decentralised	Decentralised
Slovenia	Single structure	6 years	15 years	Medium	Medium	Medium	Centralised	Centralised
Spain	Common core	6 years	16 years	Medium	Medium		Decentralised	Decentralised
Sweden	Single structure	6 years	16 years	High	Medium	High	Centralised	Centralised



Annex D: Overview of policy reform areas and implementation stages in EU 27

Country	Reform title		Implementation st	tage	Reform areas	Basic skills	Key competences
,		Year	Implementation stage	ISCED			and basic skills included
	Competence Standards and quality improvement	2008	Cancelled/ reversed	1,2	Assessment, Inclusion, Teacher Capacity, Structural reforms.	Reading and mathematics	Literacy, multilingualism, STEM.
	<u>Digitalisation strategies</u>	2008	Advanced stage of policy implementation	1,2,3	Curriculum, Assessment, Teacher Capacity.	Science and mathematics	STEM, digital, Personal, social and learning to learn
Austria	Continuous reform of curricula	2002	Fully implemented	1,2,3, 4	Curriculum, Assessment.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression, religion.
Belgium (Flemish)	Modernisation of Secondary Education (Flemish Community)	2013	Advanced stage of policy implementation	2, 3	Curriculum, Assessment, Inclusion, Teacher Capacity, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression, other.



Country	Reform title		Implementation st	age	Reform areas	Basic skills	Key competences
,		Year	Implementation stage	ISCED			and basic skills included
	Excellence Pact of Education (FR community)	2015	Early stage of policy implementation	0, 1, 2, 3	Curriculum, Assessment, Inclusion, Teacher Capacity, School leaders, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression, other.
Bulgaria	National Strategy for Lifelong Learning	2014 - 2020	Fully implemented	0,1,2,3	Curriculum, Assessment, Inclusion, School leaders, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression.
	National Strategy for Promotion and enhancement of Literacy	2014 - 2020	Fully implemented	0,1,2,3		Reading	Literacy.
	Strategy for Effective Implementation of ICT in education and science	2014 - 2020	Fully implemented	0,1,2,3	Curriculum, Assessment, Structural reforms.		Digital.
Croatia	School for Life	2018 - ongo ing	Advanced stage of policy implementation	1, 2, 3	Curriculum, Assessment, Teacher Capacity, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to

Country	Reform title		Implementation st	age:	Reform areas	Basic skills	Key competences
•		Year	Implementation stage	ISCED			and basic skills included
							learn, entrepreneurship.
	Modern curricula for modern society	2017 - 2019	Fully implemented	2, 3	Curriculum, Inclusion, Teacher Capacity, Structural reforms.	All basic skills	Multilingualism, STEM, digital Personal, social and learning to learn, citizenship, Cultural awareness and expression.
	Vocational education reform	2017 - ongo ing	Early stage of policy implementation	2, 3	Curriculum, Assessment, Inclusion, Teacher Capacity, Structural reforms.	All basic	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, entrepreneurship.
Cyprus	New Curriculum for the Public Schools of Cyprus	2008 - 2012	Fully implemented	0,1,2,3	Curriculum, Assessment, Inclusion, Teacher Capacity, School leaders, Structural reforms.	All basic skills	Literacy, Digital, Personal, social and learning to learn, Cultural awareness and expression.
Czechia	<u>Curricular Reform</u>	2007	Fully implemented	0,1,2,3,4	Curriculum.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural



Country	Reform title		Implementation st	tage	Reform areas	Basic skills	Key competences
,		Year	Implementation stage	ISCED			and basic skills included
							awareness and expression.
	Unified assignments	2015	Fully implemented	4	Curriculum, Assessment.		STEM, entrepreneurship, work skills.
	Inclusive education	2016	Advanced stage of policy implementation	0,1,2,3,4	Assessment, Inclusion, Teacher Capacity, Structural reforms.		
	Extension of Compulsory Education from 9 to 10 years	2008	Fully implemented	0,1	Curriculum, Inclusion.		Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, literacy and language focus; earlier start to education to help vulnerable children
Denmark	Reform of primary education. / Folkeskolereformen 2014 I ISCED 1+2	2014	Advanced stage of policy implementation	1,2	Curriculum, Assessment, Teacher Capacity, School leaders, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression, longer and more

Country	Reform title		Implementation st	age	Reform areas	Basic skills	Key competences
,		Year	Implementation stage	ISCED			and basic skills included
							varied school days; focus on physical wellbeing.
Estonia	Renewal of general competencies in the national basic school curriculum in 2014	2014	Advanced stage of policy implementation	1,2	Curriculum.		Multilingualism, STEM, digital Personal, social and learning to learn, citizenship, Cultural awareness and expression.
	Digital competence for students	2016	Advanced stage of policy implementation	1,2,3	Curriculum, Assessment.		Digital.
	Entrepreneurship education programme	2016 - 2023	Advanced stage of policy implementation	1,2,3			Entrepreneurship.
Finland	Introduction of Transversal Competences for Basic Education	2016	Evaluated	1	Curriculum.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression. Transversal competences.
	Teacher education development programme	2016	Evaluated	0, 1, 2, 3	Teacher capacity.		



Country	Reform title		Implementation st	age	Reform areas	Basic skills	Key competences
•		Year	Implementation stage	ISCED			and basic skills included
	CPD Master Plan for national education staff	2019 - 22	Advanced stage of policy implementation	1,2,3	Inclusion, Teacher capacity, School leaders.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, Cultural awareness and expression.
France	Common Framework of Knowledge, Skills, and Culture (2015, ISCED levels 1-2)	2005	Fully implemented	1.2	Curriculum, Inclusion, School leaders.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, Cultural awareness and expression. Revised 2015 framework formulated as: 1) Languages to think and communicate (including French language, foreign languages, mathematics, sciences, and arts; 2) Methodologies and tools to learn; 3) The training of the

Country	Reform title		Implementation st	tage	Reform areas	Basic skills	Key competences
		Year	Implementation stage	ISCED			and basic skills included
							individual and the citizen; 4) Natural and technical systems; and 5) World representations and human activity.
	Law for a School of Trust (Loi pour une école de la confiance, 2019, ISCED 0-3)	2019	Advanced stage of policy implementation	0,1,2,3	Curriculum, Assessment, Inclusion, Teacher Capacity, School leaders, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, Cultural awareness and expression, Introduction of specialised tracks.
	Digital pact for schools - DigitalPak Schule 2019-2024	2019	Early stage of policy implementation	1,2,3	Structural reforms.	All basic skills	Literacy, digital.
Germany	School makes you strong (Schule Macht Stark)	2019	Early stage of policy implementation	1,2,3	Curriculum, Assessment, Inclusion, School leaders, Structural reforms.	All basic skills	Literacy, Cultural awareness and expression.
	Reform of vocational education and training in Germany.	2005	Evaluated	3, 4	Inclusion, Teacher capacity, structural reforms.	All basic skills	



Country	Reform title	Implementation stage			Reform areas	Basic skills	Key competences
		Year	Implementation stage	ISCED			and basic skills included
	English language in kindergarten	2020	Early stage of policy implementation	0	Curriculum.	Reading	Literacy, multilingualism.
Greece	<u>Skills labs</u>	2020	Early stage of policy implementation	0,1,2	Structural reforms.		STEM, digital, Cultural awareness and expression.
	Project	2012	Cancelled/ reversed	2,3	Structural reforms.		Transversal comps.
	National Assessment of Basic Competences	2001	Advanced stage of policy implementation	2,3	Assessment, Structural reforms.	Reading and mathematics	Literacy, STEM, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression.
Hungary	Development of Student Competences	2007 - 2020	Advanced stage of policy implementation	1, 2, 3	Curriculum, Inclusion, Teacher capacity, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, Entrepreneurship, Cultural awareness and expression.
	Teachers' Qualification Framework	2013	Advanced stage of policy implementation	1, 2, 3	Teacher capacity.		Literacy, multilingualism, STEM, citizenship, entrepreneurship, innovation.



Country	Reform title		Implementation st	age	Reform areas	Basic skills	Key competences
,		Year	Implementation stage	ISCED			and basic skills included
Ireland	Junior Cycle Reform	2015	Advanced stage of policy implementation	2	Curriculum, Assessment, Inclusion, Teacher Capacity, School leaders, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, Cultural awareness and expression, other.
	National Literacy and Numeracy Strategy 2011 - 2020	2011	Evaluated	0-3	Curriculum, Assessment, Inclusion, Teacher Capacity, School leaders.	Reading and mathematics	Literacy, multilingualism, STEM, digital.
Italy	The Good School Act (2015)	2015	Advanced stage of policy implementation	0-3	Curriculum, Assessment, Inclusion, Teacher Capacity, School leaders, Structural reforms.	Reading and mathematics	Literacy, multilingualism, digital, Personal, social and learning to learn, citizenship, Entrepreneurship, Cultural awareness and expression.
	National Evaluation System (2014/2015)	2014 /201 5	Fully implemented	0-3	Assessment, School leaders, Structural reforms.	Reading and mathematics	Literacy.
Latvia	Introduction of Competence- Based Curriculum	2016 - 2021	Advanced stage of policy implementation	0-3	Curriculum, Assessment, Teacher capacity.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship,



Country	Reform title		Implementation st	age	Reform areas	Basic skills	Key competences
,		Year	Implementation stage	ISCED			and basic skills included
							Cultural awareness and expression, Technology, Health.
	Transition to the national language as means of instruction in minority schools	2004 - 2021	Advanced stage of policy implementation	0-3	Curriculum, Inclusion, Teacher capacity.		Literacy, National language proficiency for minorities.
	Education Strategy 2003- 2012: initiative. Digitalisation and learning to learn	2009 - 2015	Advanced stage of policy implementation	2	Curriculum, Teacher Capacity, Structural reforms.		Digital.
Lithuania	National competence-based assessment and examination monitoring	2012 - 2015	Advanced stage of policy implementation	1.2	Assessment, Teacher capacity, School leaders	All basic skills	Literacy, STEM.
Litiidailia	National Education strategy 2013-2022 - Implementation of STEAM competences development	2015	Early stage of policy implementation	0,1,2,3	Curriculum, Assessment, Inclusion, Teacher Capacity, Structural reforms.	Science and mathematics	STEM, entrepreneurship, Cultural awareness and expression, Improving green attitudes.
	Multilingual education programme	2017	Fully implemented	0	Inclusion.	Reading	Multilingualism, Cultural awareness and expression.
Luxembourg	Simply digital	2020	Advanced stage of policy implementation	0, 1, 2	Curriculum.	Science and mathematics	STEM.
	competence centres in specialised psycho-pedagogy	2020	Fully implemented	0, 1, 2	Inclusion, School leaders.	All basic skills	Literacy, multilingualism, STEM, Personal,

Country	Reform title		Implementation st	age	Reform areas	Basic skills	Key competences
,		Year	Implementation stage	ISCED			and basic skills included
							social and learning to learn.
	Vision for Science education in Malta	2011	Advanced stage of policy implementation	1,2	Curriculum, Inclusion, Teacher capacity.	Science	STEM.
Malta	National Curriculum Framework	2012	Early stage of policy implementation	1,2	Curriculum, Assessment, Inclusion, School leaders.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression.
	Literacy Strategy for all in Malta and Gozo	2014 - 2019	Early stage of policy implementation	1,2 (mainly, but all in principle)	Curriculum, Assessment, Inclusion, Teacher Capacity, School leaders, Structural reforms.	Reading	Literacy, multilingualism, digital, Cultural awareness and expression, The reform covers NFIL (working with families) as well as formal learning.
Netherlands	Education deficiency policy	2006	Advanced stage of policy implementation	1	Inclusion, Structural reforms.	Reading	Literacy.
Recilerianus	<u>Teacher agenda (2013-2020)</u>	2013	Fully implemented	0, 1, 2, 3	Teacher capacity, School leaders.		



Country	Reform title		Implementation st	tage	Reform areas	Basic skills	Key competences
,		Year	Implementation stage	ISCED			and basic skills included
	Curriculum reform (1998- 2019)	1998	Evaluated	1, 2, 3	Curriculum.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression.
	Curriculum Reform, focusing on learning outcomes approach	2009	Evaluated	0,1, 2, 3	Curriculum, Assessment, Inclusion, School leaders, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression.
Poland	Return to single structure education	2016	Advanced stage of policy implementation	0,1, 2, 3	Curriculum, Inclusion.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression.
	Return to mandatory school leaving exam (Matura) in mathematics	2010	Evaluated	3	Assessment.	Mathematics	Literacy, STEM.



Country	Reform title		Implementation st	age	Reform areas	Basic skills	Key competences
-		Year	Implementation stage	ISCED			and basic skills included
	Curriculum Reform in Basic and Secondary Education	2012	Fully implemented	1,2,3	Curriculum, Assessment, Inclusion, Teacher Capacity, School leaders, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, Cultural awareness and expression.
Portugal	National Program for Educational Success	2016	Fully implemented	1,2,3	Curriculum, Assessment, Inclusion, Teacher Capacity, School leaders, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, Cultural awareness and expression, digital, Personal, social and learning to learn.
	Exit Profile of Students Leaving Compulsory Education	2017	Fully implemented	1,2,3	Curriculum, Assessment, Teacher capacity, School leaders.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression.
Romania	National Strategy for Reducing Early School Leaving (2015-2020)	2015	Fully implemented	1, 2	Inclusion, Teacher capacity.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship.



Country	Reform title		Implementation st	tage	Reform areas	Basic skills	Key competences
		Year	Implementation stage	ISCED			and basic skills included
	Education Law & Curriculum Reform	2011	Advanced stage of policy implementation	All	Curriculum, Assessment, Inclusion, Teacher Capacity, School leaders, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression, other.
	New Education Act No 245/2008	2008	Fully implemented	0, 1, 2, 3, 4, 5	Curriculum, Assessment, Teacher capacity, School leaders.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression.
Slovakia	IT Academy - Education for the 21st Century	2016	Advanced stage of policy implementation	1, 2, 3, 4, 5	Teacher capacity, School leaders, structural reforms.	Science and mathematics	Digital, Personal, social and learning to learn, Despite the focus on STEM, and the strongly promoted using of ICT, he prefers to speak about developing higher cognitive skills, critical thinking, scientific curiosity via inquiry-based



Country	Reform title		Implementation st	age	Reform areas	Basic skills	Key competences
,		Year	Implementation stage	ISCED			and basic skills included
							learning and a constructivist type pedagogical approach.
	Strategy for Education in the Financial Field and and Personal Finance Management	2008	Advanced stage of policy implementation	1, 2, 3	Curriculum, Teacher capacity.		Financial literacy.
	Piloting replacement of two- year to three-year cycle in basic schools	2021	Early stage of policy implementation	1, 2	Curriculum, Assessment, Inclusion, Teacher Capacity, School leaders.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression, Focus is really on social inclusion with this reform (taking the 2008 reform further).
Slovenia	National Strategy for Literacy Development	2006	Early stage of policy implementation	0 to 8	Curriculum.	Reading	Literacy.
Siovenia	Modernisation of the Curricular Process in Basic School and Gymnasium	2010 - 2014	Fully implemented	1, 2, 3	Curriculum.	All basic skills	Literacy, multilingualism, STEM.
Spain	<u>Digital Competence</u> <u>Framework</u>	2020	Early stage of policy implementation	0,1,2,3	Teacher Capacity.		Digital.



Country	Reform title		Implementation st	tage	Reform areas	Basic skills	Key competences
		Year	Implementation stage	ISCED			and basic skills included
	Organic Law 8/2013 for the improvement of Educational Quality	2013	Cancelled/ reversed	1,2,3	Curriculum, Assessment, Inclusion, Teacher Capacity, Structural reforms.	All basic skills	Literacy, multilingualism, STEM, digital, Personal, social and learning to learn, citizenship, entrepreneurship, Cultural awareness and expression.
	The Read-Write-Count guarantee for early intervention	2019	Evaluated	0,1	Curriculum, Assessment, Inclusion.	Reading and mathematics	Literacy, multilingualism, STEM.
Sweden	Innovative in-service teacher training in mathematics ("Matematiklyftet"), reading ("Läslyftet") and science ("Naturvetenskapslyftet")	2012	Fully implemented	1,2,3	Curriculum, Teacher capacity.	All basic skills	Literacy, mathematics.
	Strategy for entrepreneurship in education and training:	2009	Fully implemented	1-8	Curriculum.		Personal, social and learning to learn, citizenship, entrepreneurship.



Annex E: Country case studies

Country Case Study for Denmark

Overview

This country case study focuses on the 2014 reform of primary education in Denmark ("Folkeskolereformenaf 2014"). The main rationale for the reform was a wish to address a number of challenges to primary education in Denmark. First, Danish primary schools (compulsory education, grades 0-9) were increasingly unable to provide students with sufficient basic skills, compared to other comparable countries (based on PISA scores and national policy documents) — in particular in Danish language and mathematics.

Second, there was substantial variation in the number of planned lessons per week across the Danish municipalities. This was interpreted as a challenge to ensuring that all children were given equal opportunities to learn to their abilities.

Third, PISA scores from 2000 to 2009 had indicated decreasing motivation, especially in students with a migrant background and students of low-educated parents.

Finally, research indicated that the vulnerable groups of students would benefit significantly from variation in the learning activities and across the school-day, from clear and explicit class management, and from a practice-oriented approach to teaching.

The reform followed a number of major changes to primary school education, of which the most important in this context was the Act on Inclusion, which aimed to reach 96% of all children, including children with disabilities and additional educational needs into mainstream primary schools. The reform further coincided with a labour conflict between the teachers' union and the municipalities, which ended in 2013 with an intervention from the government. The resulting law abolished existing contractual norms for preparation time and introduced a right and duty of teachers to spend the entire working week of 37 hours at the workplace (school). This measure was met with considerable opposition from teachers.

Policy design

An important source of inspiration for the reform were experiences with the concept of the 'All-day School' (i.e., school days lasting from 8 in the morning until late afternoon). These experiences had been carried out with apparent success mainly in specialised educational offers to migrant students and students that had dropped out of primary or secondary education. While there was no research evidence available to underpin the assumption, the Ministry assumed that the All-day School concept had the potential to benefit all students by offering more coherent and active school days.

Based on these results and reflections on the abovementioned challenges, three goals for the development of the Folkeskole were formulated ('The clear objectives').

- 1) The Folkeskole must challenge all students, so that they are enabled to develop competences appropriate to their abilities.
- 2) The Folkeskole must contribute to reducing the importance of social background in determining students' academic and personal outcomes.
- 3) The trust in the Folkeskole and wellbeing at school must be strengthened through respect for professional knowledge and practice.

In addition to the objectives mentioned above, there were four political objectives:



- More young people should complete secondary education.
- All students should achieve at least grade 2 (third grade from the bottom in the Danish grading scale) in the school leaving examinations in Danish language and mathematics.
- Improve wellbeing at school through a longer, coherent, and more varied school day.
- More parents should opt for the Folkeskole over private education providers.

Based on the clear objectives and the political objectives, a set of operational performance targets that could serve as monitoring indicators were developed. For instance, at least 80% of students must achieve good grades in reading and arithmetic evidenced by the national tests; the proportion of the high achieving students in the Danish language and mathematics must increase year by year; the proportion of students with poor results in the national tests for reading and mathematics—regardless of the students' social background—must be reduced year by year; the students' wellbeing should increase. A monitoring and evaluation programme was put in place based on these indicators.

Elements of the reform include:

- A longer and varied school day with more and better teaching and learning, including
 - guidance and counselling,
 - supportive teaching (learning activities beyond the curriculum, but supporting the teaching of school subjects)
 - o opening up of the school,
 - homework-help cafes,
 - o at least 45 minutes of movement/sports/exercise during the school day.
- Development of the competences of teachers, pedagogues, and school leaders.
- Few clear objectives and simplification of rules and regulations.
- Assistance to schools from learning consultants provided by the ministry.

The key stakeholders (teachers and municipalities) were not directly involved in the design phase. Prior to the launch of the reform, a "Partnership for the Folkeskole" had been created by the Government. This partnership involved the seven key political parties and included individual dialogues with stakeholders. However, having the reform partly financed by an increase in the teachers' working time meant that their ownership of the reform was reduced.

Implementation strategy

The implementation of the reform started with the beginning of the school year 2014/15. The main stakeholders responsible for the implementation were the municipalities and the schools. The reform was financed from the municipal budgets. As part of the financing, there was to be a reduction in the opening hours of the after-school care schemes without a corresponding reduction in the parental payment. The Teachers' Working Hours Act helped fund the extended school day.

It was a requirement that the extended school day and the minimum number of lessons were implemented from the beginning of the school year. The remaining elements of the reform could be implemented at a pace adapted to local circumstances.

The Ministry of Education established a corps of 'Learning consultants' to support implementation of the reform as well as reforms in other sectors of the education system. The learning consultants are part of the Center for Outgoing Quality Work (CUK) at the Danish Agency for Education and Quality (STUK). At the time of the establishment, the learning consultant corps was divided into several teams, of which six were dedicated to assist primary schools. In the school year 2017/18 the tasks of the consultants were (and



still are) to offer advice on subjects and assessment to teachers, school leaders and administration, and to provide courses, thematic trainings, etc.

Aside from these initiatives, it was left up to the individual municipalities to implement the elements of the reform.

Adaptations to the strategy over time

There have been several adjustments to the strategy over time.

- In 2017, the Clear Objectives were relaxed, giving schools and teachers greater room for manoeuvre and flexibility in organising teaching.
- In 2018, a political agreement introduced a two-year compulsory practical/musical elective, strengthened practical elements in the compulsory project assignment in 9th grade, and gave all students the right to an internship in a workplace in the 8th and 9th grade.
- In 2019, the reform itself was adjusted. Main adjustments were a shortening of the school week, increased freedom to schools, and improvements of the supporting teaching.
- In the 2020 national budget, millions of DKK were set aside to increase the number of teachers in primary schools.
- In 2020, the regulation of the National tests was relaxed, giving schools a possibility
 of exemption from tests in the school year 2019/20, while increasing the Ministry's
 focus on the worst performing schools
- In June 2021, a political majority agreed to set aside DKK 107 million for primary schools as part of an effort to support student performance across the initial education institutions. In the primary schools, the agreement introduced a further relaxation on central requirements to teachers and school leaders (compulsory elaboration of individual learning plans and quality reports) in the school year 2021/22. The funds from the agreement can be used for initiatives to give an academic boost for the students who need it the most (especially those who have suffered most during lockdown in 2020-2021), and efforts that can help to strengthen wellbeing.

These adjustments and amendments along the way has meant that it is difficult to evaluate the results of the original reform. Further, alongside the implementation of the reform, some stakeholders (i.e., teachers and Local Government Denmark) have entered into a collaboration called 'A new start' and a teaching commission was established to work on a common understanding of the challenges and development paths of the Folkeskole.

Meanwhile, the Ministry for Children and Education has set up an Advisory Group that will advise the Ministry about an adjustment of 'Common Targets' (Fælles Mål, 215 compulsory learning objectives and 3,170 knowledge and skills objectives, not to be confused with the 'Clear Objectives' of the reform).

COVID-19 impact

According to the Ministry of Education, the lessons learnt during the pandemic have served to better prepare the entire system for events like an epidemic. In an effort to prevent the pandemic from disrupting teaching and learning too much, all stakeholders drew close around community schools, municipalities, and the Ministry. The experience clearly demonstrates that a close collaboration with all stakeholders around the school pays off.

The Danish Evaluation Institute (EVA) has gathered data about the impact of COVID-19. A number of political initiatives have been launched to ameliorate the consequences of restrictions and school closures, such as the political agreement of June 2021 described in the previous section. The Ministry has continuously gathered information about how



schools managed during the pandemic (and continue to do so), and recommendations on 'school outdoors' have been drafted. According to the ministry,

- A close collaboration with all stakeholders around the school pays off. In a close partnership, the stakeholders succeeded in helping schools in the transformation required. Flexibility was introduced, and teachers, pedagogues, and students all proved to be very adaptable.
- Governance and trust can go hand in hand. Schools have demanded steering and guidance from the Ministry but have also asked for trust from the Ministry that local solutions could be found.
- Digital learning has become part of everyday life at school. Some students have improved their learning using digital means, but most have missed the social interaction with their peers.
- The use of outdoor spaces in teaching has been strengthened and led to intensified collaboration with local sports clubs and the like.

The absence of daily social contact between students turned out to be the most problematic aspect of the school closures, and the wellbeing of students has suffered more than their academic performance. An analysis by EVA has shown that young persons whose wellbeing suffered most during the school closures were academically weak students. Teachers in country workshops emphasised that online teaching requires more resources, that it is less effective in their experience, and that it is socially biased.

On a positive note, teachers and students have learnt that digital communication can be used to establish contacts and have dialogues with people and organisations outside the school regardless of physical distance. Experiences include virtual visits to companies, discussions with students in other countries, etc. In addition, the use of outdoor spaces in teaching has come more into focus than before the pandemic.

Lessons learned

The most important lessons pertain to processes, not only during implementation, but in the objective-setting and design as well. The absence of commitment of key stakeholders, in particular the teachers, both in the preparation and in the implementation of the reform turned out to be a key challenge to the success of the reform in reaching its objectives. The process has illustrated that it is easier to implement new frameworks than to change actual teaching practices, and that renewal and innovation of pedagogical practices cannot be achieved through legislation alone.

The implementation phase has demonstrated that school leadership is of crucial importance for implementation. This is the case at municipal level, but not least at school level. School leaders need to be involved and act as champions for the reform to ensure that teachers get involved and are willing to try on new ways of teaching.

During the process, it became clear that implementation of the reform required competences that were not necessarily present in the schools, such as skills needed to involve external stakeholders in the learning processes, skills for integrating movement and physical activities in the teaching of traditional subjects, etc. For example, the reform element 'Open school' (opening up the school to local stakeholders, including workplaces) was surrounded by doubt and subjected to a variety of interpretations. In spite of this, several initiatives were implemented, experiments were carried out and experiences gained, so that there is a better foundation to build on.

With respect to monitoring, the process indicates that it might have been wise to have followed more closely the details of the monitoring and follow-up research programme instead of just looking at the performance indicators. Flexibility should have been embedded in the monitoring system since the content of the reform changed during implementation.



'Together for the school' is a national initiative led by the Ministry of Education to involve all stakeholders in a discussion about challenges and possible solutions for the Folkeskole. At the heart of the initiative there is agreement that what the school and its stakeholders need is not yet another reform, but rather collaboration to solve current and emerging challenges.

A new agreement on an evaluation and assessment system will ensure that tests in the Folkeskole can be integrated into the school's everyday life, and that a culture of evaluation in the classroom is strengthened.

The current educational policy agenda focuses on the following points:

- Greater freedom for well-functioning schools (the vast majority) combined with tighter control of the few schools that perform less well.
- Increased orientation towards the purpose of teaching and learning instead of managing schools and teaching by objectives.
- Focus on vulnerable students, students with special educational needs and what is often referred to as 'the residual group', in risk of becoming NEETs (Not in Education, Employment or Training).
- Connection between basic skills and knowledge, and practical subjects.



Country Case Study for Ireland

Overview

The most significant development in school education implemented in Ireland over the last decade was the reform of lower secondary education through the introduction of the "Framework for Junior Cycle" (2015). 109 It has been introduced to schools on a phased basis and competence development is articulated through the principles underlying the new junior cycle, through the eight key skills (competences) and the 24 statements of learning. It was an ambitious development targeting changes to curriculum and assessment, with an emphasis on learning outcomes-based curricula, classroom-based assessment, and encouraging more learner-centred teaching and learning approaches. It was supported by significant investment in professional development for teachers and school leaders.

Both international and Irish-specific factors influenced the ideas behind the policy change. Key competences were increasingly a factor in the design of curricula across Europe and there was a sense that Irish curricula were not well aligned with competence-based curriculum design. At the same time, there was a degree of dissatisfaction with the way in which the state examinations at upper secondary were impacting on teaching and learning at post-primary. Many of the conversations at the time concentrated on senior cycle (upper secondary), but there was concern about the degree to which that this also impacted on junior cycle.

The proposals for the reform of "Junior Cycle" were grasped by an incoming government that had a new agenda, and particularly a new Minister who had a very strong political will about the need for change at lower secondary and was determined proceed with it.

In 2009, Ireland's PISA results in literacy and numeracy were surprisingly low, resulting in the development of a new Literacy and Numeracy Strategy (2012)¹¹⁰, which was welcomed by the incoming new government and implemented vigorously.

Policy design

There was a strong evidence base for the policy reform. Research undertaken by the Economic and Social Research Institute (ESRI)¹¹¹ on the experience of junior cycle, along with evidence from a network of schools that tested aspects of the developments as they were developed, underpinned the proposals for change. Other evidence included reviews of the international context conducted by the National Council for Curriculum and Assessment (NCCA), and evidence from the inspectorate based on practice observations in schools.

The initial proposals, as published by the Minister in 2012, were controversial, with objections and threats of strike action from the teacher unions. These challenges resulted in detailed bilateral discussions between the Department of Education and Skills (DES) and the teacher unions. Eventually, agreement was reached, based on the resourcing of dedicated professional time for teachers, and a range of other supports, such as additional teaching resources. It has been suggested by stakeholders that one of the weaknesses of the process was that there wasn't sufficient collaboration and agreement to begin with. Following the bilateral discussions changes were made to the design of the junior cycle

¹⁰⁹ DES. A Framework for Junior Cycle (2015). Available from: https://www.education.ie/en/Publications/Policyreports/Framework-for-Junior-Cycle-2015.pdf

¹¹⁰ DES. (2011). Literacy and Numeracy for Learning and Life. Available at: https://www.education.ie/en/publications/policy-reports/lit_num_strategy_full.pdf
¹¹¹ https://www.esri.ie/



developments, especially in relation to assessment and there was agreement that the curriculum changes be implemented slowly.

The structure of the NCCA allows significant and authentic engagement by all the education partners with proposals as they are being designed and developed. Teachers, school managers, employers, parents and others can provide direct inputs to the design of curriculum and assessment, providing important evidence for the policymaking process. Despite the significant effort made to engage with all of the education stakeholders at all stages of the reform process, there was still a sense that many teachers were not ready for the change when implementation commenced, leading to the observation that one of the weaknesses of the process was that there wasn't sufficient collaboration and agreement in the early stages.

The issue of the power relations between stakeholders was raised during the country workshop in Ireland, with participants suggesting some stakeholders hold more power than others. For example, the teacher unions, through their bilateral negotiations with the DES were able to strongly impact on the design of the final product and the process of its implementation. School management bodies expressed some dissatisfaction with their ability to impact on these final arrangements. Objections by the teacher unions in advance of implementation attracted a lot of media interest, impacting on communication of the changes more broadly and leading to some negative reaction and confusion among teachers, parents and the general public.

While the Literacy and Numeracy Strategy, and a new approach to school self-evaluation were intended to be complementary policies, this complementarity was not fully understood by the system, and schools saw these as just more change that had to be managed. School leaders were already challenged by the reduced resources available to them to manage their schools and found the demands on them unsustainable.

Implementation strategy

The main elements of the implementation strategy were testing elements of the reform in a group of 48 network schools, publication of the framework, phased implementation, a rolling programme of subject curricular reform, extensive continuous professional development (CPD) provided using practicing teachers, financial to allow for professional time for teachers for collaboration and planning. In addition, the gradual introduction of new assessment arrangements over a phased period was necessary to prepare teachers and to help them to feel comfortable with the change.

Teachers' professional learning was supported in several ways. Those schools that were part of the original School Network (48 schools), set up to test aspects of the design of the developments, experienced intense and personalised support from the education officer assigned to their school by the NCCA. Schools were also supported to appoint a school-based coordinator from within the school (for a limited time each week) to assist with planning and coordination within the school. In this case teachers worked collaboratively and felt very empowered.

From 2013, the national support service (JCT) was set up to support teachers and school leaders during the implementation phase, provided support for all schools. This involved whole-school support, support for teachers in their subject areas, support for school leaders and the provision of online resources. The focus was on building capacity in the system—teacher capacity, leadership capacity and school capacity. It was important to start where teachers felt comfortable—to know the school's context and to build on the strengths of the school. The approach taken was to introduce change slowly, allowing time for teachers to build confidence. Teachers need to feel they are part of their professional development, to give them a sense of ownership of process.



Further support was provided by the National Association of Principals and Deputy Principals and by the management bodies, as well as by teacher professional networks in the various subject disciplines. These organisations proved to be significant meso-level actors in the process.

Many elements of the change strategy were successful. However, its main weakness was the approach to communication—to teachers, to parents and to the general public. More effort in achieving a greater degree of consensus to begin with, would have been helpful. The communication to parents, for example, wasn't as strong as it ought to have been. On the other hand, there was a sense politically, that full consensus would never have been achieved in advance of the introduction of the change, and that there was a need to lead from the centre for change to be implemented.

Adaptations to the strategy over time

A multi-level approach was taken to formative evaluation over the implementation phase. The Department of Education and Skills created strong links between school planning, school self-evaluation and the junior cycle developments by issuing circulars and guidelines to schools and through discussions with schools by the inspectorate. The School Self-Evaluation process (SSE)¹¹² has been central to the introduction of "Junior Cycle" in schools. It helped schools to prioritise their starting points, to set targets and to plan how they would achieve those targets.

As inspectors support schools in this process, and are involved in Whole-School evaluations, they were an important point of contact for schools and were involved in feeding information gathered back to Department, to NCCA and to the support service (JCT), who could then address any of the key challenges being reported. Feedback also fed into the inspectorate through their own internal channels resulting in further support for schools.

The NCCA monitors the implementation of junior cycle on an ongoing basis through ongoing communication with stakeholder representatives on its Council and other structures, through its work with teachers to gather examples of student work for each subject area and through research and engagement with academics.

In addition, NCCA have engaged in subject and short course early impact evaluations as the subjects are implemented. As well as the subject-specific nature of these reviews, feedback on the broader implementation of the "Framework for Junior Cycle" has also emerged.

All these engagements offer opportunities for feedback from teachers to the sites of design and implementation and allow for adaptations to be made.

A more formal review of the implementation and impact of the "Framework for Junior Cycle" has commenced this year. This is a longitudinal study that will explore the experiences of schools over a period of four years, to capture the complexity, challenges and successes in enacting the JCF and it is designed to enable schools and teachers to tell their stories of working with this curriculum change and to capture their views on the opportunities and challenges it presented.

Also useful to the ongoing evaluation process are the many articles published by university academics and doctoral students. Universities have a role in developing a culture of evaluation which empowers the different actors in the system to be part of an evaluative culture. Teachers are prepared to talk about evaluation and to be part of a systemic

¹¹² School self-evaluation is a collaborative, inclusive, and reflective process of internal school review. For more information see: http://schoolself-evaluation.ie/post-primary/



professional dialogue and the strong evaluative culture. Teachers, on leaving university are ready to join a system that is more dialogic and reflective.

The various levels of evaluations have supported learning and adaptation at the system-level over time. Subject reviews enabled adaptations to subject specifications. For the most part, these were small changes, but these were in direct response to the consultations engaged in.

All the main actors, DES, NCCA, JCT, and the inspectorate have many opportunities for collaboration which supports learning and adaptation at the system level. For example, from feedback received, JCT changed the CPD model and moved to the cluster model, involving clusters of schools in an area, which has been well received by school leaders and teachers.

Having a formal evaluation built into the original process would have provided the system with important and rich data. It will be challenging now to separate the COVID-19 influence from the impact of the junior cycle developments. Therefore, attention needs to be paid to evaluation indicators from the outset.

COVID-19 impact

Recent research reported that teachers¹¹³ experienced a new emphasis on sharing and collaboration between colleagues around how to adapt to the new situation of teaching and learning online. Teachers were using technology in new, different, and pedagogically rich ways. This changed their pedagogical practices and how they thought about what they were teaching, and how. Interestingly, after they returned to the classroom in September 2020, four out of ten teachers felt more confident in their face-to-face teaching. It appears that they now realise how important what they do in the classroom is. There was also evidence of teachers working more closely with parents. Through their interactions with their children's online learning, parents could now see what was happening in schools and in classrooms.

Many teachers spoke about junior cycle and how the new practices associated with junior cycle had brought about changes in how teachers were approaching teaching and learning and assessment, indicating a shift in how teachers teach and their levels of comfort with assessment. "Junior cycle" is seen as a new way of thinking about teaching and learning.

As a result of the pandemic, external state examinations at lower secondary were cancelled and schools ran their own assessment processes. The research uncovered some interesting views on this, including that there is no longer a need for external examinations and that these could be replaced by continuous assessment. School leaders reported an increase in teacher confidence around assessing students at junior cycle.

However, there is already some evidence that teaching and learning approaches have slipped back to more traditional approaches with the return to schools. COVID-19 distancing requirements are likely to have impacted on collaborative work in classrooms. There is a sense that the "junior cycle way of teaching", and all the progress that was made, is being lost with all the rules.

The most positive outcome of this challenging period is the flexibility and agility that teachers and school leaders demonstrated showing that there is considerable agility within the system. It is important to celebrate this agility and the professionalism of teachers who changed so much so quickly during this time.

¹¹³ Dempsey, Majella and Burke, Jolanta (2021) *Lessons Learned: The experiences of teachers in Ireland during the 2020 pandemic.* Project Report. Maynooth University.



In a second study¹¹⁴, school leaders reported that communication between teachers and the broad school team is very important. Both school leaders and teachers reported that they need more time to plan for teaching and learning. In the case of school leaders, their main issue was the weight of the administrative load on their time and how this is taking from their desired focus on teaching and learning.

School leaders also sought assessment reform, referring to the fact that assessment has been managed differently in the last two years and that it is time to rethink how we plan and manage assessment practices.

Remote learning during the pandemic has strengthened pedagogies for key competence development. Competences are more visible now, especially digital competence and learning to learn.

Changed pedagogical practices, assessment reform and the use of technology are most likely to impact on the approaches to teaching and learning. The use of technology in schools presents a significant opportunity for competence development, but it needs to be supported in schools.

The importance of the relational aspect of schooling came through very strongly in the research. School leaders and teachers expressed concern around student wellbeing and engagement.

Other comments included the socio-economic and digital divide between students. Investment in education generally, and for students from lower socio-economic backgrounds is a crucial basis for any improvement.

Lessons learned

The phased introduction of the reform was considered essential, allowing time for teachers and school leaders to experience the change over time. However, there was still a sense that the reform tried to do much at once. At the same time there was a sense that the implementation took too long.

Investment in the system was significant and particularly in the areas of continuous professional development and building capacity for school leaders. Introducing and resourcing professional time on teachers' timetables, that is devoted to planning, had a positive impact, and let teachers know that what they are doing in this new situation is valued. This is an important aspect of sustaining the change.

The shift to a learning outcomes approach to curriculum design has supported competence development and an expansion of pedagogical practices used in classrooms. However, teachers need significant support in working with learning outcomes.

Changes to assessment, with an emphasis on more classroom-based assessments, were largely viewed as important and successful for changing learning and assessment practices and approaches. While the introduction of classroom-based assessment was controversial at the outset, teachers have now come around to accepting this and even valuing it. They can see the benefits for students who are developing new competences such as learning how to learn and managing their own learning.

School leaders reported a change in mindsets and classroom practice in their schools. Professional learning conversations have become common among teachers and school leaders. School learning and assessment review meetings (SLARS), where teachers meet

¹¹⁴ Burke, Jolanta and Dempsey, Majella (2021) *One month before Covid-19 and one year after: An assessment of wellbeing of post-primary school leaders in Ireland.* Project Report. Maynooth University.



to discuss classroom-based assessment, were credited with encouraging these important conversations around learning and assessment.

Impact on learners is now visible in higher education colleges. Students have a learning dialogue and are more comfortable with a language of learning. They are more comfortable with the idea of assessment portfolios, and they expect feedback on assessment and what they need to do to improve. The new approach (junior cycle) has developed student agency around learning.

It was argued that this linear system of policy development for change in schools is flawed and that other approaches need to be considered. Policy development needs to be more closely aligned with the culture in schools, rather than a linear reform process. Policy makers need to take an important strategic role in the process of change.

An initial announcement by the then Minister for Education, that took the education partners by surprise did not serve the reform well and undermined the collaborative approach to stakeholder engagement. This was an approach not to be repeated.

Despite best efforts at communicating the change and preparing people, teachers and school leaders found it very sudden and overwhelming. There was a strong sense that there should be a longer lead-in time to the change. Everything was happening at the same time and school leaders struggled with limited resources. There was little time to encourage and develop the necessary willingness to change or to create a culture of change in schools. Teachers and school leaders were experiencing change overload with significant increases in workload for both. Teachers are not opposed to change but they need significant support and time to make sense of the change and to accept it as part of the school culture.

Stakeholder consultation needs to be mindful of the genuine concerns of stakeholders and they need to feel that that they are being heard and that their feedback is being taken into consideration and making an impact on design and implementation. The language used is important, for example, the term 'reform' indicates that everything that went before is bad and needs to be reformed.

Concern was expressed that the effect of the external examinations at upper secondary, which still uses quite traditional approaches, has limited any potential transformational capability of the developments at junior cycle.

Discussions and consultations have now commenced on reviewing the curriculum and assessment at upper secondary. Some teachers are apprehensive about further reform and believe that the ideas and methodologies of junior cycle are not yet embedded enough to be ready for change at upper secondary. Others believe that reform is needed at upper secondary as a natural continuation from lower secondary.

Stakeholders accept that it is still quite early to draw any strong definitive conclusions about the success of the new junior cycle, and particularly in relation to the learner perspective and the experience of learners. Indeed, the lack of a formal evaluation process to date, may limit any conclusions on this theme.



Country Case Study for the Netherlands

Overview

A series of curriculum reforms was introduced in the Netherlands since 1998 as well as a key policy development, the "Teachers' Agenda" (2013-2020), which was important for the professionalisation of teachers and school leaders. In 1998 the so-called 'second phase' of secondary education was introduced in HAVO (higher general continued education) and VWO (preparatory scientific education). This second phase would start from the fourth year of secondary education and was intended to enable students to learn more intensively and independently from the curriculum and to ensure a better connection between secondary and higher education. Four study profiles were introduced in secondary education, HAVO and VWO: Nature and Technology, Nature and Health, Economics and Society and Culture and Society; and a Study House that students could use at school to study independently. There was no pilot phase for this reform, and it was immediately introduced for fourthyear secondary students in 2006, while only a third of schools had expressed a preference for it. Large demonstrations were held in The Haque at the start of the implementation in 1999. In response to this, the Secretary of State Adelmund decided to reduce the intensity of the study programmes. The Study House was also abolished in 2006 due to its inadequate functioning.

In 2006, 58 core objectives, across seven learning areas, were introduced for primary and the first years of secondary education. The intention of these core objectives was to give teachers and schools more freedom when drawing up learning programs for students, not to be confined by traditional subject boundaries, and to harmonise primary and secondary education. These headline targets are currently still the frame of reference for teachers and schools to develop curricula, but as they are almost 15 years old, the Ministry launched a revision of the curriculum in 2013. In October 2019, an advisory report was prepared by teachers and school leaders with building blocks for the revision of nine subjects in primary and secondary education, (Curriculum.nu). In 2020, a temporary scientific committee was established to advise the government on the curriculum reform.

Policy design

The curriculum reform which was implemented in 2006 were motivated by several factors. Firstly, the curricula were overloaded, secondly, not enough attention was given to the differences between students, and thirdly, there was not enough decision space for schools. The curriculum reform process was led by experts and expert organisations together with teachers and schools. It's important to note that there were two trajectories: one on primary education, and the other on lower secondary, with different time frames and different approaches. The approach adopted for primary education was much broader than the one adopted for lower secondary education. The main characteristics of this curriculum reform are the focus on students, 58 core objectives in seven learning areas, and a global formulation, which give schools more agency. The core objectives are based on the development of young people in lower secondary education. According to the documentation, "the pupil learns actively and independently, together with others, in an orientating and cohesive way, in a continuous learning path, and in a challenging, healthy and safe environment." 115

The 2006 reform involved a variety of stakeholders: schools and teachers (as opposed to only subject matter experts and representatives); panels of teachers, students and

¹¹⁵ https://slo.nl/publish/pages/4881/karakteristieken-en-kerndoelen-onderbouw-vo.pdf Directly translated to English from the Dutch: "de leerling leert actief en zelfstandig, samen met anderen, oriënterend en in samenhang, in een doorlopende leerlijn, en in een uitdagende, gezonde en veilige omgeving"



parents; field organizations and experts; and a broadly composed advisory board. It is believed by high-level stakeholders that it is important to remember the role of textbook publishers when conceptualising a reform. The implementation of the reform involved an open process including a series of meetings regionally and at school level. It included disseminating information online through websites and via newsletters. Additional efforts to reach teachers in the final phase of the implementation of the reform were made, including in-depth interviews with teachers, and experimenting with teaching materials in 50 schools.

A new reform was introduced in 2016 to update the content of vocational exam programs in the VMBO, improve the organisation of schools in the context of declining student numbers, and provide a greater flexibility to adapt quickly to changes in further education and vocational contexts, a new reform was introduced in 2016. This reform was developed by schools as well as advisory groups formed by sector organisations and started as a pilot in a limited number of schools. The main characteristic of this reform is the introduction of fourteen different profiles in the VMBO.

The main aims of the 2016 policy reform were to: update the content of professional examination programmes; improve school and teaching organisation with declining student numbers; and provide greater flexibility to quickly adapt to changes in further education and vocational contexts.

The ongoing curriculum reforms are taking place in the context of what started with the creation of the Platform on Education 2032 (which functioned from 2014 – 2016), which had a focus on dialogue and is the update and revision of the attainment targets from 2006. Sessions were organised and many stakeholders in the education field were involved in developing the new reforms. The four steps in the process were (i) a national brainstorm; (ii) a dialogue phase, including online sessions on social media, and talks with students, teachers, parents, education professionals and entrepreneurs; (iii) a consultation phase; and (iv) the final advice. These steps are to ensure that everybody who has a stake in the design of education is involved on time.

Implementation strategy

A policy development that was important for the implementation of the curriculum reform was the *Competency development of schools and teachers.*

The success of any (educational) reform depends on the professionalisation of the actors implementing the reform 'on the ground', in this case the teachers and schools that develop and teach the curricula. The 2013-2020 "Teachers' Agenda" has been very important in this regard and consists of seven action points that seek to strengthen the professionalisation of teachers and schools. The seven agenda items are: (i) Better students in teacher training; (ii) Better teacher education; (iii) Attractive and flexible learning pathways; (iv) A good start for aspiring teachers; (v) Schools as learning organizations; (vi) All teachers competent and authorized; and (vii) A strong professional body.

Moreover, updated competency requirements for teachers were introduced specifically aiming at the content of the subjects, as well as the didactic and pedagogical skills of teachers. Even when schools hire new teachers, they must comply with this. Also, schools are encouraged to become learning organisations through annual teacher performance and peer reviews, as well as increasing teacher satisfaction.



De Lerarenagenda: blijvend leren en professionaliseren



Source: https://www.delerarenagenda.nl/

The implementation of the "Teachers' Agenda" (almost fully completed) was supported by setting up pilots for various action points in various municipalities. For example, Utrecht experimented with 'promodocs'. To motivate teachers to continue learning, the Ministry of Education, Culture and Science has continued investing every year, enabling teachers, for example, to obtain a master's degree. Thus, the Ministry had the task of implementing the reform and providing subsidies to schools and schools had to implement these new ways of working and invest in their teachers. Teachers were expected to continue their studies and obtain a higher education diploma.

The main learning points and challenges associated with the implementation of this reform can be summarized as follows:

- The reform is seen to support the quality of (future) teachers, the attractiveness of the profession, and motivating teachers and schools to continue to invest in improving the quality of teachers.
- The Personnel and Mobility Survey (PoMo) showed that the target increases in teacher satisfaction of 15% was lower than expected. The majority of teachers also participated in annual performance reviews (98%) and peer reviews (74% in primary education and 68% in secondary education).

During the first Peer Learning Group in May 2021, a number of success factors and challenges regarding the focus and implementation of the reforms were discussed:

- As discussed above, the 1998 reform used a top-down approach to implementation, meeting a lot of resistance. There was also insufficient investment in communication and outreach activities (e.g., the most important means of communication were two brochures for primary and secondary education on the headline targets). Reforms adopted since (for instance the 2006 reform) and which are currently underway are being worked out and implemented with more collaboration with stakeholders—there is more involvement of advisory boards, trade unions, teachers, parents and students and the government is also using social media and other channels to communicate broadly about the reforms.
- A very important aspect of the 2006 reform was the reduction of the number of learning objectives from 150 to 58, which meant greater freedom of choice for teachers and schools to develop curricula better suited to local and individual needs.



This was welcomed positively by the education sector, and also led to better coordination and cooperation between primary and secondary teachers. A challenge is that some teachers and schools were unsure how to achieve the learning objectives and therefore relied too much on textbooks instead of using their freedom.

Going forward, the main challenges are to develop updated learning objectives in the revision of the curriculum, without making the core objectives (and the resulting curricula) overloaded. The government wants to come up with a proposal that is widely supported and ensures coherence in education. Another important focus point for the future is to narrow the gap between more professional and academic study profiles.

Adaptations to the strategy over time

Reform and evaluation plans are currently on hold whilst the new cabinet await to take office. The future monitoring and evaluation plans involve three strands:

- Evaluation of the first phase of the current curriculum renewal process
- Theory of Change: review of studies on curriculum renewal processes which will be published in January 2022
- Monitoring and evaluating the implementation and realisation of the planned curriculum revision.

The third strand, Monitoring and evaluating the implementation and realisation, is aimed at providing insights on the phase of development of revised attainment targets and preparations at the school level. The monitoring activity involves 3 themes:

- Support among teachers and schools
- Readiness and capacity for curriculum revision in schools
- Feasibility in school practice.

COVID-19 impact

The experience of the pandemic increased students' and teachers' use of ICT but affected the social skills of students. On a political level, the pandemic exacerbated the need for digital skills for pupils and teachers, the need for a focus on the socio-emotional wellbeing of students and to understand the impact of home-schooling. There has been a loss of basic skills as evidenced by national tests. Due to the pandemic, there is a higher appreciation of teachers.

During the country workshops, one stakeholder mentioned that the NPO, which is the COVID recovery strategy in education, is the main strategy and funding is also considered an important priority in the Netherlands. This entails a more proactive approach by policy makers. In fact, the NPO (National Education Programme) took a framework from the Education Endowment foundation on how (cost-)effective certain interventions are. This offers ideas of which are the best interventions to implement and how to fund them. COVID-19 required teachers to make decisions and gave teachers more agency. It's necessary to continue to create toolkits to support teachers.

Lessons learned

The implementation of the 2006 curriculum reform presented a series of barriers. For one, teachers do not always feel like they are involved in the curriculum design. This may be due to a number of reasons; teachers are difficult to reach, and especially primary school teachers, and are not really involved in an association. They often stay within their subject, without a strong association across specialisations. To represent teachers, gatherings



should be facilitated so they can participate in debates. The goal is thus to enhance 'teacher agency' or ability. Teachers should become part of the curriculum development, instead of having change enforced on them from the top of the system. This discussion should be seen in a broader context, as teachers and schools deal daily with the dynamics of problems in their schools, creating a tension between individual urgency and political urgency.

Another issue is that that schools are insufficiently prepared for taking on the task of implementing the policy reforms. There is not enough time and expertise, and the culture/mindset to develop the curriculum needs support. To implement the policies presented from above (top-down), adjust them to the school's individual context, and think about their needs to develop new policies (bottom-up), more support is needed, especially in school leadership.

Teacher involvement turned out to be one of the biggest challenges for the previous (2006) and current policy reforms according to national high-level stakeholders. However, stakeholders believe there are possible solutions to resolving this barrier. First, involving a 'subject matter expert' (vakdidacticus) could be a good option, as they have very specific knowledge and are trusted by teachers. This, however, is not currently included in their tasks. Second, allowing networking and knowledge-sharing across schools, could bring many benefits for developing and implementing the new curriculum. Implementing the curriculum, should become a natural part of the process, as the curriculum reforms should come from developments in the schools. Third, and importantly, more time and structure must be given to teachers to develop the curriculum together. This is not only about a change in the content, but also in the organisational structure, involving colleagues etc. This asks for leadership skills from teachers. The research conducted for the purpose of this study also demonstrated that the voice of parents and students should be better integrated in the discussions concerning curriculum reforms.

Stakeholders mentioned that it's important to involve teachers at the right time throughout the conceptualisation and implementation process of the curriculum reform. Too early and they might drop out, too late and they don't feel involved. Stakeholders believe that teachers can be trained within their own organisations. More coherence could be implemented in collective bargaining agreements for teachers to develop their skills. It's important to not see teachers as a homogenous group, because they have different qualities and aspirations. But it's important to have a special focus on teachers who are interested in teacher and curriculum development.



Country Case Study for Portugal

Overview

In 2015 Portugal had one of the highest retention rates¹¹⁶ in Europe. Moreover, there was a serious problem of low performance and socio-economic inequalities that have persisted over the years. Therefore, there was a need to reflect on what was wrong, to create something that would lead to a democratic and inclusive school.

There were two main reforms implemented in Portugal over the last decade on the area broad competence development in school education:

- (i) The National Program for Educational Success (2016);
- (ii) The Exit profile of students leaving compulsory education (2017).

The first reform aimed at encouraging schools to think strategically about ways to improve students' learning in the defined competences. The emphasis on the learning of a diverse group of students has also been strengthened in this reform.

The second reform outlined the profile of the student at the end of compulsory education in a generic way, which was complemented by the plan for essential learning (*Aprendizagens Essenciais* – AE). AE functions as the main curricular guidance documents for planning, designing and evaluating students' learning and aims to develop the skills areas included in the *Exit Profile of Students Leaving Compulsory Education*. These educational benchmarks have been built to develop specific competences of each knowledge area and transversal competences. The two reforms can be considered as complementary to each other and should be analysed as an integrated set of reforms.

Policy design

Reform 1 is a core plan in the current educational policy and targets some critical weaknesses in the system, such as early dropout and absenteeism. Although it includes multiple initiatives, it would be a very relevant perspective into the effectiveness and innovativeness stance of the Portuguese system. This program takes the curriculum as a given. It aims at encouraging schools to think strategically about ways to improve students' learning in the defined competences. However, the emphasis on the learning of a diverse group of students may be a relevant link.

Reform 2 frames a lot of the current approach towards competences. It is expected to significantly impact educational policy, as the ministry will continue supporting it for at least two mandates. Although the program is a bit abstract, the plan for essential learning (AE) complements it. The main areas of competences emphasised in the reform are the following: (i) Languages and Texts; (ii) Information and Communication; (iii) Reasoning and Problem-solving; (iv) Critical and creative thinking; (v) Inter-personal relations; (vi) Personal development and Autonomy; (vii) Welfare, Health, and Environment; (viii) Artistic and Aesthetic sensibilities; (ix) Scientific, Technical, and Technological Knowledge; (x) and Awareness and Command of the Body.

The approach of the reforms has been comprehensive, transversal, and recursive. Moreover, it emphasized the inclusiveness and multifaceted nature of schools. The approach also emphasized that each subject should contribute to developing students' competences in an integrated manner. The Ministry tried to involve different stakeholders at different levels to implement and design such reforms. To implement the reform, the

 $^{^{116}}$ In this context retention refers to students who do not qualify for promotion to the next year and are retained at their current level.



Ministry created interdisciplinary teams that included representatives from schools, the Ministry, teachers, local authorities, parents, researchers, etc. The Ministry started to implement the reform through a pilot, which included 130 schools. With those, the situation was monitored, and there were a series of webinars, exchange of experiences with schools, students (e.g., the event "students' voice 2016"), and different agents were involved in evaluating and implementing the necessary changes to the reform.

The reforms are still under implementation and only after a couple of years will it be possible to fully assess their effects. Additionally, the reforms have been implemented gradually, which tends to delay its overall impact. The plan is to have midterm evaluations to monitor the implementation of the reform and then a comprehensive, external, evaluation after six years.

Implementation strategy

Reform 1 was launched through a resolution of the Council of Ministers of 2016 and then implemented through two Decree Laws (54/2018 and 55/2018) that defined the major aspects of the program, its main objectives, and supporting mechanisms.

The program has established a close monitoring and support of the plans devised by schools, namely through local, regional, and national initiatives. The local ones target the specific schools, and the regional and national ones are more related to sharing good practices, exchanging experiences, and debating difficulties. For instance, the program launched a series of seminars in 2017 and 2018 to involve teachers, schools, school leaders, municipalities, and technical staff.

Dispatch no. 6478/2017, 26th July, launched reform2, which sets out the expected results of young people when they finish compulsory schooling. This reform was a significant political commitment from the government (and the Ministry of Education since 2015). It was presented as a clear departure from the previous reform of 2012 and focused on a diverse and integrated set of competences and skills.

The reform was initially launched in a pilot mode. The pilot took place in the school year 2017/2018 in the classes of schools that were part of the initial group experiencing the project of curriculum autonomy and flexibility. During that pilot project, a survey on Essential Learning was used to assess teachers' perceptions regarding the identification in the content of what is essential for all students to learn in relation to what is established in other curricular documents in use and to assess the coordination of Essential Learning with the development of the Student's Profile.

In 2018, the Student Profile was published and made available to all public and private schools. The approach of involving a team of experts led by a prestigious figure (and former Minister of Education) aimed to strengthen the credibility of the reform.

The implementation tried to involve all major stakeholders. Thus, several national initiatives were developed to promote the ownership of this document by all those who, in one way or another, are involved in the education of Portuguese young people, and a reflection focused on specific solutions involving the organisation of school and education geared towards achieving this Profile.

¹¹⁷There were 226 schools initially invited to the initial stage of the pilot, and 57% of them continued until the last phase of the pilot (see Portugal case study in Annex XX).



Adaptations to the strategy over time

Two dimensions were taken into consideration in the implementation of the reform: monitoring and evaluation. Monitoring was expected to occur regularly with the production of reports. These reports would help to understand how the policy has been implemented, the challenges faced, and what could be done to correct it. In addition, there was an objective to incorporate a six-year evaluation in the legal documents that implemented the reform. Underpinning that approach was the motivation that even if the government changed, there would be continuity and subsequent assessment of the reform.

In the meantime, there were a series of indicators and instruments that were produced. First, the Ministry is not looking only at disciplines that are subject to a national exam at the end of high school, but at all fields. The idea is to understand the performance of the student in all different areas. Nevertheless, the national exams are important because they have shown that most of the difficulties that students face are not at memorizing skills but related to interpretation skills. This is highly relevant to understand how important it is to consider transversal competences even when teaching content that requires memorisation.

One of the leading indicators created was the so-called "equity indicator". This new indicator makes it possible to measure the levels of educational success of students taking into account socioeconomic conditions (beneficiaries of the Schools' Social Support System), in each clustering of schools or non-clustered school, municipality and district, compared to the average results of students with a socioeconomic background and educational background similar at the national level. Thus, this indicator is expected to measure students' performance within the specific context of each school.

COVID-19 impact

The educational results (attained in the last year before the pandemic caused by COVID-19) were encouraging, showing already some positive effects of the reform. They represented the best results during the last decade. Moreover, the pandemic showed how key competences' developments are important and that there are still significant inequalities in the education system. The COVID-19 pandemic did not slowdown the development of key competences but has stressed how an inclusive education approach was necessary. The pandemic has also placed in evidence how the socioeconomic background could shape the development of key competences. Additionally, access to higher education still places significant hurdles to some students, especially those from disadvantaged socioeconomic backgrounds. The pandemic may have had an impact in the employment or income of many of those families, thus influencing the decision of those students on whether to pursue higher education. Although this is not a new phenomenon, the pandemic may have reinforced the inequalities that already existed in the education system.

Mathematics was more affected by the pandemic according to some of the stakeholders. Results, on average, were the ones that fell the most. In terms of literacy, some stakeholders participating in the workshop suggested that there may have been a reduction in the reading skills, but at the same time an increment on the utilitarian (normal) reading. Stakeholders considered that the 5th grade (where students move from first to second cycle of basic education) was the more penalized one in terms of developing key competences.

Finally, this pandemic gave relevance to the reform introduced by the Decree Law no. 54/2018 that established the basis of what should be an inclusive education system, which was generally considered by stakeholders as a major step forward.



Lessons learned

Different loops of feedback were considered. The Ministry organized national seminars, regional seminars, seminars between schools and the community. The idea was to decentralize and get the involvement of the different stakeholders. The reports produced at each motorization level were necessary and directed to schools.

The current reform implied a change of curricula, at least on the way of delivering teaching. Teachers need time to assimilate the reform and also formation to implement it better. Changing the curricula delivery implies that the formation of teachers in higher education needs to change and incorporate the reform. Hence, changing initial teacher formation is essential. Another teacher formation issue relates to those who recently graduated and were "caught" by the reform. After finishing their degree, recently graduated teachers work on centres for extra activities. The students spend a couple of hours on these centres after school and usually take these recently graduated teachers three to four years to be admitted to a school. When they are admitted, their skills might need to be obsolete in light of this reform. A solution is either to change teacher formation in the higher education sector or when teachers are admitted to schools to receive specific training.

Probably the main change during the reform refers to the national secondary education exams, which is still not finalized. Because the teaching delivery approach changed, and now it is more focused on developing key competencies, the incidence of the national exams also needs to change. That change started already. The problem is that, because of COVID-19, in 2020, after the first lockdown, there was limited information about student learning during that period. The national exams were not cancelled, but their structure was different in that year. However, because there was some uncertainty about the effects of the first lockdown on student learning. not all contents have been evaluated as planned in the 2020 exam (some of them were placed in optional questions). Thus, one possibility for future developments may be that exam structure may include more of the aspects considered in the profile of students at the end of secondary education, e.g., exams could evaluate specific components of each subject and also include some open questions trying to evaluate other key competences.

Finally, the way that the results of these exams is communicated to schools has changed. The reports try to focus on the fragilities in each subject to help teachers (and students ultimately) understand which competences they need to work on.

Overall, there was a remarkable convergence among the stakeholders on the implementation of these two reforms. In general, there is a positive assessment of the reforms of 2016 and 2017 regarding the question of competences. On the other hand, it is also recognized that there is still work to be done in achieving the purposes of the reform. One of the areas that was highlighted referred to teacher training, regarded as a necessity for both recently graduated teachers and current teachers, as explained before. Moreover, it was recognized that more needs to be done regarding the pedagogical training of teachers.

Another area that attracted significant concerns is the link between secondary education and higher education, namely the strong pressures placed by national exams and access requirements to the latter. Several stakeholders regard it as a hindrance to fully attain the purposes of the reform on basic skills. One possibility could be the introduction of some changes in the structure and content of national exams that would align them with the new curricula based on key competences.



Country Case Study for Slovakia

Overview

Before 1989, curriculum was uniform and developed centrally; school directors primarily focused on the transfer of state policy principles to the educational process. Since 1990, directors of primary and secondary schools have been granted a high degree of autonomy in management and in curriculum development. A new measure, the so-called `10/30 rule' allowed schools to change up to 10% of the lesson allocation for individual subjects and up to 30% of the content originally prescribed by the centralised curriculum.

The National Program of Education in the Slovak Republic for the next 15 to 20 years, was approved by the government in December 2001. However, two decisions slowed implementation of this planned reform significantly: the government focused on fiscal stability (the principal condition for Slovakia's accession to the EU) under the pressure from Finance Ministry, omitted from the Millennium Paper commitments to increase investment in education. The second unfortunate decision was not to take part in the first PISA study in 2000.

The poor results of Slovak students in the PISA 2003 study, after the excellent results of 14-year-old pupils in the TIMSS 1995 study, was a big shock for the public. The PISA shock and the inability of political parties to agree on the reforming principles, led to a conflicting period that finally resulted in focusing the reform processes just on the development of new legislation. The motivation for the reform of the new government appointed in 2006 has been highly political—to adopt the long-awaited "New Education Act" as soon as possible—in believing that new legislation would be enough to make the reform change happen and not investing in the design and development of the envisaged reform processes. The new education minister, who took office in 2006, set a deadline to launch the reform as early as 2008. No substantial investment in school infrastructure, improvement of the learning environment, or teacher retraining to cope with the upcoming changes were planned for prior to launching the reform.

Since the 1990s, and also during the implementation of the main reform since 2008, the education sector as a whole has been subject to austerity measures. Long-term underfinancing caused deficiencies that are still visible: equipment of schools lagging behind the state of the art and lack of quality teaching/learning materials suitable to reflect the variety of learners' needs. Although the state strictly requires formal qualifications and subsequent career development for teachers, there isn't enough support available for pedagogical leaders. Moreover, the lack of leadership capacity to lead the reform together with the decreasing attractiveness of the teaching profession might hamper the implementation of future reforms.

Policy design

The initial reform document was positively perceived by the public, creating a space to discuss the particularities of the reform and its implementation. However, sufficient discussion did not take place; stakeholders, including municipalities and self-governing regions (who have an important role in managing schools), were not involved in the further preparation of the reform, resulting in a legislation that wasn't developed in a participatory way.

This reform was submitted for public discussion in late December 2007, with the Ministry of Education disregarding many relevant objections to the project. The priority was to prepare the "New Education Act" as soon as possible regardless of its quality and the reform principles put forward by the Millennium paper and the Education Act weren't sufficiently elaborated. The Education Act 245/2008 Coll. adopted by parliament on 22 May, 2008:



- declared the transition from the curriculum design based on input regulation via detailed syllabi to the regulation of outcomes in the sense of the principle: "it is not important what the teacher teaches but what the learner learns";
- initiated support for the development of "competences" of pupils/students and setting content and performance standards related to educational areas and competences;
- introduced the decentralisation of the curriculum development based on the creation of national curricula, represented by State educational programmes (StEPs) for respective ISCED levels of education and followed by autonomously developed School educational programmes (SchEPs).

Subsequently, schools had to translate the reform into practice immediately after the summer holidays. StEPs prepared by national curricular authorities under time pressure were published in June 2008, and by September 2008 schools had to have elaborated their SchEPs. The lack of time to prepare a new curriculum negatively affected basic schools (ISCED 1 + 2), which were more vulnerable compared to kindergartens and secondary schools concerning the planned shift towards competence-based education. Cooperation with stakeholders concerning the reform in basic schools was insufficient, as confirmed by the statements of stakeholders themselves during the first country workshop held in July 2021. There was little time allocated to prepare quality teaching/learning materials in support of the new curricula and practically no time to pilot the reform. The Ministry of Education communicated the three main reform principles but failed to communicate how the reform would be implemented. The burden of the reform fell on schools and school leaders in particular.

Implementation strategy

Although the reform was discussed at the legislative level and there was a broad agreement on the main principles of the school reform, the details of the curricular change were not clear for all stakeholders involved. While there was agreement on the need to reduce the volume of the curriculum, there was no agreement on the basic/core contents, which were supposed to be binding, and teaching materials to support the implementation of a competence-based approach in the classroom were not available. The Ministry focused on drafting a new education law. In addition, the "New Education Act" was under preparation for a long time, under difficult political conditions throughout three election periods. In the end, the final version of the law which launched the reform was prepared by the Ministry with limited participation of external experts. The actual preparation for the implementation of the reform took only about 6 months and started without piloting and without adequate preparation of teachers for competence-based education.

Schools had to introduce the reform without sufficient preparation and support, with an obligation to prepare school curricula based on methodological manuals for programming (e. g., "Methodology for creating a school curriculum" for VET in 2008). The need to develop new methodological manuals and to train teachers quickly became apparent. In 2011, new methodological manuals for all types of schools (primary schools, grammar schools, and secondary schools) were developed with the support of ESF funds.

The short time given to the launch of the reform hindered the development of a systemic support from stakeholders. However, some strong NGOs were active in support of innovations in general education. In VET after the adoption of Act 61/2015 on VET (replacing the first-ever specific act on VET from 2009), the involvement of employer representatives is strongly backed by law. The best example of cooperation in competence development concerned improvement of financial literacy with strong involvement of the banking sector. Some interesting initiatives are visible concerning digital literacy and the involvement of IT businesses and the Digital coalition, that was formed to support the



digital transformation of the country. Gradually, other stakeholders including more NGOs and parents' organisations began to actively engage in the discussion of the reform.

In-service training providers also tried to compensate for the lack of initial training, through initiatives funded from ESF and supported by a professionalisation scheme substantially based on the accommodation of credits for completion of retraining. Nevertheless, the core aspects of the reform (the shift to competence development of pupils/students) and the understanding of the role of content and performance standards remained insufficiently addressed.

Despite the challenges, the implementation of the reform facilitated a turning point. It offered schools the freedom to adjust their curriculum, and reform-oriented schools gradually took advantage of this. However, most schools have been stunned by this opportunity, as teachers are not used to curriculum development. Often, teachers see their role in the classroom and want to prioritize their time in supporting learners' learning and not on creating or finding suitable teaching/learning materials. Sharing of good practices was however not sufficiently supported as there were no systemic measures (e.g., a dedicated financing scheme) adopted. Nevertheless, there are good practice examples and scaling up of success stories of innovative schools that can support change in the ongoing second attempt at curricular reform.

Adaptations to the strategy over time

National curricula (state educational programs) were reviewed based on surveys of curricular authorities, suggestions from the inspectorate, and comments from schools. Substantial revisions of state educational programmes followed in 2013 for VET and in 2015 for general education. The revised 2015 programme was seen as "a compromise" by the Country Workshop participants, given that neither practitioners nor the curricular authority were satisfied.

The reform legislation stipulated that the State School Inspectorate (SSI) inspections should focus on compliance with the curriculum, and on the development of (some) key competences. National student assessments in the 5th and 9th year would indirectly inform about literacy and mathematical competences. International measurements, especially PISA, are also reflected. However, competences other than basic skills are difficult to assess and schools also raised some concerns about addressing these competences.

The current model of state administration and self-government (regions, municipalities) does not manage monitoring and evaluation at the intermediate level. In this sense, the State School Inspectorate does not perform a "territorial" inspection, nor does it conduct research on conditions for the implementation of the curriculum for schools in the territory of the municipality or region. This is a systemic challenge that is often seen as linked to the insufficient support for schools. SSI however stated their ambition to expand their inspections and to provide support for self-evaluation of schools as an integral part of external evaluation.

Considering the implementation issues of the reform, the Education ministry and the National Curricular Authority have understood the importance of preparing an implementation and monitoring strategy that offers sufficient time for schools to adjust to change. The new ISCED 1+2 education reform should be made obligatory from 2026/2027 and network of Regional centres of curricular management and support for schools (RRP) will facilitate the change.

should facilitate the change. Nevertheless, the Education ministry still sees areas for improvement such as an increased focus on implementing reform theses by SPU (e.g., shift to key competences development) and the creation of a friendly environment for the reform, by providing new teaching /learning materials. Practitioners agree that the main output of SPU efforts should be a new national curriculum, but they insist on the delivery



of teaching /learning materials in time. Practitioners see their role as performers/interpreters and expect support from directors as reform leaders, from methodologists as suppliers of class-ready learning materials, and from the state as a crucial provider of the state-of-the-art equipment.

One of the key issues of the conceptual framework for the 2008 curricular reform—that could also challenge the new reform efforts—is related to the programming timeline (e.g., setting standards annually versus multiannual cycles), programming focus (e.g., broader educational areas versus individual traditional subjects), and programming main concept (e.g., framework to be provided by schools versus core curriculum to be complemented by schools).

COVID-19 impact

During the distance learning period prompted by the pandemic, teachers were forced to adapt the curriculum, which helped them to think more about its potential developmental effect and to search for alternative methods compatible with the reduced time available for lessons per week. Online learning has forced a quest for innovative and active learning methods. The creation of supporting materials, the use of Internet resources, and digital applications have become part of their daily work. There have also been calls for a different approach to digital equipment for schools, teachers and learners.

In this new context, teachers found themselves in need of adapting the curriculum and had to look for alternative ways to communicate with learners and parents. This helped to improve digital skills of all, as it was necessary to provide students with feedback and to evaluate their progress in a completely different way. New methods of assessment of learners have emerged, and there have been efforts to expand formative assessment.

Participants in the Country Workshops mentioned the advantages of the so-called 'Digital allowance'. Practitioners suggested to introduce financial contributions to teachers and learners for leasing of comprehensive equipment (hardware, software, Internet and data, maintenance, insurance) adapted to schools and their programmes. They consider such a solution to be environmentally friendly as the equipment would be recycled after the end of the contract.

Lack of access to equipment excluded some learners from online education, in particular learners from marginalised Roma communities. Although national student assessments have shown a lower performance of children from socially disadvantaged backgrounds, similar to the pre-pandemic period, a stronger impact on learners from socially disadvantaged backgrounds without access to online education is yet to be confirmed. The Education Ministry called for additional research on this issue and introduced remedial measures such as summer camps, support for enrolment of children into afternoon school clubs, and tutoring for primary and secondary learners. Since autumn 2021 these activities are explicitly linked to the Recovery and Resilience Plan (RRP).

An extremely long period of school closing deepened the negative impact of the pandemic on pupils and students' competences, including

- insufficient development of social competences (e.g., ability to work in a team, ability to cooperate, ability to resolve conflict situations, and communication skills;
- the decline in psychomotor and artistic competences due to reduced space for physical, musical, artistic activities, and
- limited opportunities to develop communication skills, as communication with teachers outside of online teaching was fragmented.

However, some positive aspects have been observed: all stakeholders, including parents, better understand the importance of socialisation at school and the well



being of pupils. Students, and educators for the first time became part of the policy agenda. Moreover, it has been confirmed by many stakeholders that the pandemic opened the door to a future reform, as teachers found themselves adapting to the new context and parents got more involved not only with the content but also with forms and methods of teaching.

Lessons learned

A positive aspect of the reform is that it created the conditions for the decentralisation of curriculum development and allowed educators to make changes based on their experience, which wasn't possible with the previous curricular regulations. It opened the door to making changes in line with reform intentions for educators prepared for reform but this involved a relatively small number of teachers in innovative schools and did not impact sufficiently on the whole school education system. The performance of learners completing ISCED 2 education in international PISA measurements has disimproved since the introduction of this reform. Lessons learned agreed by stakeholders participating in workshops include:

- 1. More time was needed to prepare for the implementation of the reform.
- 2. For the reform to succeed, it needs to be preceded by a timely discussion of the main principles of change with teachers. These principles should be reflected in new teaching materials and the reform should be piloted before being launched.
- 3. Before launching a reform, it is necessary to identify those educators who need support to cope with the reform, and provide them with in-service training courses, tutoring, or other appropriate means of support.
- 4. Implementation progress should be carefully monitored to:
 - Avoid deviation from the reform intention, which could negatively impact student performance,
 - Ensure that learners' outcomes are not adversely affected.
- 5. Any measures to correct implementation of the reform should be preceded by an evaluation and a discussion with stakeholders to provide feedback as well as a feedforward loop to manage the further development.

Some lessons learned from the process are as follows:

- 1. Curricular reform cannot be confused with the creation of only curricular documents.
- 2. Reform legislation cannot be the beginning of reform, legislation must be preceded by a sufficiently long preparatory phase and the agreement of key players not only on the intentions but also on the conditions for the implementation of the reform.
- 3. Curricular reform requires piloting and transitional period to verify how theoretical reform theses have been translated into new teaching materials and new practices.
- 4. The freedom that teachers need is the freedom to choose from the large number and variety of teaching materials and practices available to them in advance. This enables them to fulfil their efforts to provide individualized support to learners.

The curricular reform 2008-2020 started a focus on competence development reflecting the European narrative on key competences. Nevertheless, the reform was reduced to the creation of new curricular documents in the belief that the curricular freedom is sufficient for envisaged paradigmatic change. Although reformers are now fully aware of the limitations of the reform and want to prepare schools for the change proposed by the new curricular reform, there is a risk of overestimating the importance of structural changes in curricular documents and in schools themselves. Reformers advocated expansion of the ISCED 1 education by one year and shortening of ISCED 2 education by one year, thus keeping the basic cycle of ISCED 1+2 education at nine years, while programming curricula and setting standards for three multiannual cycles (3+2+4 years) is envisaged. The Education ministry explicitly stressed that the introduction of three programming cycles is



expected to remove "pressure on all pupils to learn subjects in a given year, as pupils' learning outcomes will be assessed at the end of multi-year cycles. In this way, schools will be better able to adapt the objectives and content of education in each year to the pace and needs of their pupils, which will reduce the number of students repeating a year and ultimately help to prevent early school leaving." The lesson learned from the past indicates that new curricular documents are not 'game changers' and that retrained educators able to apply new methodologies and new teaching/learning materials are the ones that could foster competence development. There is however a high risk, made visible also in the discussion during workshops, that delivering teaching/learning materials is underestimated.



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