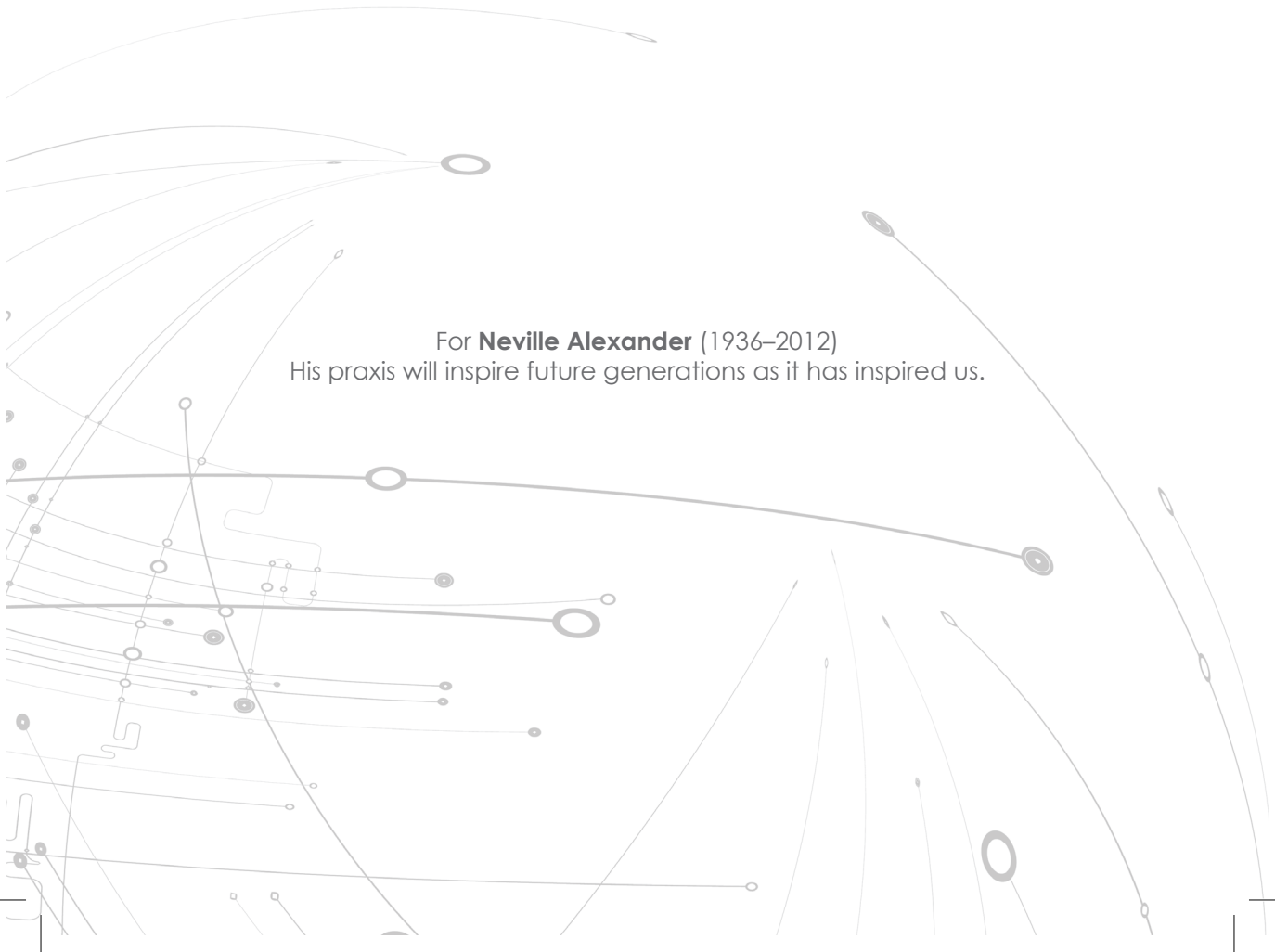
For **Neville Alexander** (1936–2012)
His praxis will inspire future generations as it has inspired us.



"A refreshingly different set of voices critical of the drone-like assertions of 'human capital' theories on the alignment of state policy, education and skills training regimes to market demands in tackling the much vaunted triple challenges of job creation, poverty reduction and inequality in post-apartheid South Africa. This exciting collection of essays questions the very logic on which this alignment is based, sets out to debunk a range of widely held 'common sense' myths about South Africa's 'skills crisis'… Its thesis, that unless there are profound and deep-seated democratic transformations in the core social and power relations of this economy, the 'crises of capitalism' will continuously be passed on as a 'skills crisis' and failure of public policy, presenting each generation with an ever-receding, but ultimately unreachable horizon on which to moor democratic public interests."
- Professor Derrick Swartz, Vice-Chancellor, Nelson Mandela Metropolitan University.

"A breath of fresh air, this myth-busting book brings a bracing balance to the contemporary debate on the relationship between education, training and the economy. A timely and sobering book on a much-neglected area in South African education, it foregrounds the structural context of South Africa's vocational education and training landscape while humanising understanding of its deep systemic challenges. I recommend it to anyone interested in understanding and acting on the challenges South Africa faces in this field."
- Professor Linda Chisholm, Visiting Professor, CERT, Faculty of Education, University of Johannesburg.

"Vally and Motala are two of South Africa's most outspoken critics of the 'there is no alternative' view to the hegemonic neo-liberal approach to economic development and the place of education within it. In this text they and a number of eminent colleagues provide one of the few elaborations in the country of what is wrong with human capital theory, with supply-side approaches framing economic policy and with current education strategies which privilege individual advancement. In many of the chapters the challenge of building alternative paths is taken up. The book is a deeply important contribution to a discussion that now must happen about where the country should go."
- Professor Crain Soudien, Deputy Vice-Chancellor, University of Cape Town.

"Grounded in knowledge produced in South Africa's vibrant education social movements of the recent past, and engaging with education scholarship from around the world, this book is of international significance. Few books critically address the range of higher education, vocational education and trade union education contexts which this volume tackles, with contributions that are analytical, while grounded in actual practice. Indeed, it offers valuable insights for scholars and educators everywhere concerning the hard yet urgent struggles ahead for social and economic justice, and to (re)build education to serve genuine liberation and democracy."
- Aziz Choudry, Associate Professor, McGill University, Montreal.

"As economists, it is exciting to see such an insightful engagement with the concept, and practical consequences of the use, of human capital theory. This volume demolishes the myths of neo-liberal economics. It shows us not only how intellectually flawed these ideas are but also how damaging they are for our society. The authors of this volume provide an opportunity to shift our discourse and policy discussion back towards a progressive vision for education and the types of policies we need."
- Seeraj Mohamed, Director and Nicolas Pons-Vignon, School of Economic and Business Sciences, University of the Witwatersrand.

"This erudite yet accessible book is an important intervention into the debate on education, economy and society in South Africa and internationally…"
- Professor Leon Tikly, University of Bristol.

"The impressive range of voices and research assembled in the volume speak to the power of hope and collective action… This book is a must read for policy-makers, practitioners, activists, educators, students and academics in the Global North and South committed to social justice as the antidote to global neo-liberalism."
- Professor Yusuf Sayed, Cape Peninsula University of Technology.

SALIM VALLY | ENVER MOTALA

EDUCATION ECONOMY & SOCIETY

UNISA PRESS
PRETORIA

First edition, first impression

ISBN 978-1-86888-758-3

Published by Unisa Press
University of South Africa
PO Box 392, UNISA 0003

Prior to acceptance for publication by Unisa Press, this work was subject to a double-blind peer review process mediated through the Senate Publications Committee of the University of South Africa.

Project Editor: Tshegofatso Sehlodimela
Book Designer & typesetting: Thea Bester-Swanepoel
Copy Editor: Gail Malcomson
Indexer: Elsabé Nell
Printer: <TO BE CONFIRMED>
Cover Image: © echo3005/Shutterstock.com

CONTENTS

FOREWORD

Steven J. Klees
University of Maryland

This excellent volume, *Education, the Economy, and Society*, edited by Salim Vally and Enver Motala, offers a trenchant critique of the concepts, frameworks, and interventions that underlie much of the South African education policy. The exposition of the book offers insight into education and development issues faced around the world. It offers a more fundamental commentary than most and deserves to be read by a global audience. Among its many virtues, the book offers a critique of three key current discourses.

The skills or mismatch discourse dates back to at least the 1950s, and probably long before that. In it, education has been blamed for not supplying the skills that business needs; education is blamed for the mismatch between what education produces and what business wants. The cause of unemployment, in general, is put at education's door, more broadly arguing that education is not teaching what the economy needs. It is, unfortunately, true that many children and youth around the world leave school without the basic skills necessary for life and work. But the mismatch discourse is usually less about basic skills and more about vocational skills. The argument, while superficially plausible, is not true for at least two reasons. First, vocational skills, which are often context-specific, are best taught on the job. Second, unemployment is not a worker supply problem, but a structural problem of capitalism. There are two or more billion un- or under-employed people on this planet, not because they don't have the right skills, but because full employment is neither a feature nor a goal of capitalism.

Underlying the skills discourse is the human capital discourse. In the 1950s and earlier, the neoclassical economics that underpins capitalist ideology and practice had a problem understanding labour. While the overall neoclassical framework was embodied in mathematical models of a fictitious story of supply and demand by small

producers and consumers, labour economics was more sociological and based on the real world, dealing with institutions like unions and large companies, and phenomena like strikes, collective bargaining, and public policy. The advent of human capital theory in the 1960s offered a way to deal with labour in terms of supply and demand (mostly supply), as a commodity like any other. This took the sociology out of labour economics. Education was seen as an investment in individual skills that made one more productive and employable. While this supply-side focus is sometimes true, it is very partial, at best. That is, abilities like literacy, numeracy, teamwork, problem-solving, critical thinking, etc., can have a payoff in the job market, but only in a context where such skills are valued. The more useful and important question is the demand-side one, usually ignored by human capital theorists, regarding how we can create decent jobs that require valuable skills. The human capital discourse also ignores the value of education outside of work. These questions ultimately raise the issue of the viability of capitalism itself.

The neoliberal discourse has been fundamental to the human capital discourse, most directly since the 1980s. This is tied to neoclassical economics. Between the 1930s and the 1970s, in various countries, a liberal neoclassical economics discourse predominated which recognised some of the inequalities inherent in capitalism and argued the need for government interventions as a corrective. With political shifts exemplified by Reagan in the U.S., Thatcher in the U.K., and Kohl in Germany, a neoliberal, neoclassical economics discourse took over, which argued that capitalism was both efficient and equitable, that problems were generally minor, and that the culprit of any problems was too much government interference. In fact, government failure was seen as fundamental, so that even if there were significant problems, government would not be able to remedy them. This discourse has gone beyond economics and has political, social, and cultural dimensions. In education, the upshot of neoliberal discourse has been to ignore the problems faced by public schools and to promote market solutions through private schools, vouchers, charters, and the like. Human capital formation and skills training is still seen as important, but reliance on government solutions is not seen as likely to be successful.

Vally and Motala's book considers all three discourses in much greater depth. The issues of skills and human capital are central to many of the chapters in the book and a critique of neoliberalism forms the context for their analyses. While the left is often criticised, falsely, for an economic determinism, the book points out how the right, in the aforementioned discourses, practices its own version of economic determinism: education leads to skills, skills lead to employment, employment leads to economic growth. The book examines how these links are problematic in many ways, how they break down, and why they have not been fulfilled, as well as why fulfilling them may take us in wrong directions.

The book shows the failures and disingenuousness of the arguments of the right in establishing the blame for education and development problems in great detail. Principally, the problems are seen as the result of inefficient public schools and, more generally, an inefficient government. Labour is seen to receive too much protection,

government interferes too much in the market, and business does not receive the support it needs. Nowhere, of course, does the right see the inherent problems in the structure of capitalism nor does it even recognise neoliberalism.

For the right, the value of education is reduced to economics. This fundamentally contradicts the essence of education, a refrain throughout the book. In fact, the book opens with a quote from Neville Alexander to this effect and it is worth repeating part of it here: "Once the commodity value of people displaces their intrinsic human worth or dignity, we are well on a way to a state of barbarism." This critical humanist perspective combines with the political economy views of many chapter authors to offer an in-depth understanding of the failure of dominant conceptions and policies.

The book goes well beyond the failure of current discourses and realities. Throughout, chapter authors consider alternative perspectives and policies which may move us in more progressive directions. Some of their redistributive arguments are reminiscent of the "equity before growth" movement of the 1970s. The argument was that redistribution of income and wealth could not only remedy immediate problems of poverty and inequality, but could set up a longer-term process by which production was oriented to domestic demand by previously disadvantaged populations. Of course, significant redistribution may be impossible under neoliberal capitalism, or under any form of capitalism, as some authors consider.

We live in a world system where neoliberal capitalism dominates. The problems South Africa faces are faced globally. While the nature of some problems, their causes, and possible solutions are context-specific, many of these are shared in common. South Africa, in part due to the unique circumstances of the struggle against Apartheid, is at the forefront of applying a critical perspective to current problems and policies. Vally and Motala's book offers the voices of struggle and experience to understanding issues of education and development in South Africa and, by extension, to many other parts of the world. It is a path-breaking book that pushes the envelope to a more complex and critical understanding of some of the most important issues that our societies face.

PREFACE

The relationship between education, the economy and society is the subject of considerable media discussion, policy deliberations, academic writing and public angst. In South Africa and elsewhere there exists a resurgent and unquestioning acceptance of simplistic claims related to the link between education and economic growth and that more and better education and training will automatically lead to employment. The contributors to this book systematically challenge these assumptions and set out the basis for an alternative vision in which knowledge and skills are not perceived in purely instrumental terms but as intrinsic and indispensable to the creation of an inclusive and transformed society. We argue that the value and purpose of education is much broader – linked to a rich tradition of praxis based on social justice and democratic citizenship.

The chapters of this book written by a mix of established and exciting new researchers are carefully selected, and while covering a diverse terrain, they cohere well by including more discursive, theoretical pieces and detailed empirical research. The contributors question the dominant discourse around education which assumes that socioeconomic development is contingent on the banal 'productive' or entrepreneurial role of education. They also address the entire nexus of issues in which education is one strand in the tapestry of economic, political, class, racial, gendered and ecological policies and practices in the context of social forces that constitute everyday lives.

Professor Pam Christie, director of the School of Education at the University of Cape Town welcomes this book as a return to, and extension of, a critical tradition that is so necessary in South African education. She states that, "… the authors point to the poor track record of free markets in reducing unemployment, and the limitations of neoliberal orthodoxies in addressing poverty and inequality." For Christie "the book challenges readers to reflect more creatively on education, skills and the economy, and to reframe the value of education more broadly to include its social, cultural and political purposes."

Similarly, the Dean of Education at the University of Fort Hare, Professor George Moyo writes:

> This book is a fresh contribution to the increasingly sterile political and academic discourses on education and society. Using incisive and empirically grounded transformative perspectives as lenses of analysis, the authors succeed in liberating the reader from the dominant and simplistic economic determinism that has, for a long time, concealed the culpability of structural attributes of capitalism… While the book is valuable reading for all citizens, especially policy makers, I recommend that it should form the basis of a compulsory core curriculum course for all first year students at universities, regardless of their disciplinary specialisation.

Finally, we dedicate this book to Neville Alexander who we had the honour of collaborating with for many decades and who through praxis showed that the boundaries constructed by the requirements of conventional scholarship are artificial since engagement is inseparable from serious scholarly activity. Professor Sayed from the Cape Peninsula University of Technology appreciatively mentions that the book is inspired by the political activism and intellectual insights of Alexander who believed in the power of hope and collective action and we would like to add, sought concrete possibilities and demonstrable alternatives in the present.

ABOUT THE CONTRIBUTORS

STEPHANIE MATSELENG ALLAIS (PhD) is a senior researcher at the Centre for Researching Education and Labour, University of the Witwatersrand, Johannesburg.

BRITT BAATJES is a research associate at the Nelson Mandela Institute for Education and Rural Development, University of Fort Hare, East London.

IVOR BAATJES is the Director of the Centre for Integrated Post-School Education and Training , Nelson Mandela Metropolitan University, Port Elizabeth.

UTHANDO BADUZA is a researcher at the Centre for Integrated Post-School Education and Training, Nelson Mandela Metropolitan University, Port Elizabeth.

SHERI HAMILTON is a PhD candidate at the University of Johannesburg and researcher at the Centre for Education Policy Development, Johannesburg.

MONDLI HLATSHWAYO (PhD) is a researcher at the Centre for Education Rights and Transformation, Faculty of Education, University of Johannesburg.

ELANA MICHELSON is Professor of Cultural Studies at the Empire State College, State University of New York.

ENVER MOTALA is an Adjunct Professor at the Nelson Mandela Metropolitan University and a researcher at the Nelson Mandela Institute for Education and Rural Development, University of Fort Hare, East London.

OLIVER NATHAN is a researcher at the Centre for Researching Education and Labour, University of the Witwatersrand, Johannesburg.

SIPHELO NGCWANGU is a researcher at the Centre for Researching Education and Labour, University of the Witwatersrand, Johannesburg.

NIALL REDDY is a researcher at the Alternative Information and Development Centre, Cape Town.

ANTHONY TOLIKA SIBIYA is a researcher at the Centre for Integrated Post-School Education and Training, Nelson Mandela Metropolitan University, Port Elizabeth.

JOHN TREAT is a researcher at the Centre for Education Rights and Transformation, University of Johannesburg.

SALIM VALLY is an Associate Professor and Director of the Centre for Education Rights and Transformation, Faculty of Education, University of Johannesburg.

VOLKER WEDEKIND is an Associate Professor in the School of Education, University of KwaZulu-Natal, Pietermaritzburg.

ACKNOWLEDGEMENTS

We extend our heartfelt gratitude to the contributing chapter authors; Steven Klees for the Foreword; Karen Press and Neville Alexander's literary estate for his chapter and the anonymous reviewers of the original manuscript for their suggestions. We also acknowledge the following colleagues for their support and comments: Samantha Ashman, Azeem Badroodien, Patrick Bond, Linda Chisholm, Aziz Choudry, Pam Christie, Linda Cooper, Paul Kgobe, Lis Lange, Seeraj Mohamed, George Moyo, Trevor Ngwane, Ruksana Osman, Richard Pithouse, Nicolas Pons-Vignon, Brian Ramadiro, John Samuel, Yusuf Sayed, Mala Singh, Crain Soudien, Carol Anne Spreen, Derrick Swartz, David MacFarlane and Leon Tikly.

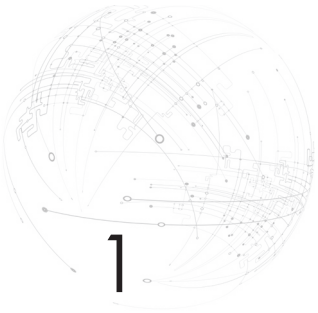
Thanks to UNISA Press's production team especially Thea Bester-Swanepoel, Sharon Boshoff, Alicia de Wet and Tshego Sehlodimela for gently guiding us through the daunting mechanics of book publication. The conceptualisation of this book emerged out of the engaged discussions and collaborative praxis of the Education Policy Consortium (EPC). We thank all our colleagues and comrades from the following EPC entities: The Centre for Education Policy Development (CEPD), the Centre for Education Rights and Transformation (CERT), the Centre for Integrated Post-School Education and Training (CIPSET), the Nelson Mandela Institute for Education and Rural Development (NMI) and the Centre for Researching Education and Labour (REAL). Thanks also to Ousmane Niang and the staff of the Rosa Luxemburg Foundation's regional office in Johannesburg.

Finally, this book is deeply influenced and inspired by those educators and organic intellectuals who believe in the joy of learning, have aspirations for a more just future without ignoring possibilities in the present and who live by the Freirean dictum: Reading the word and the world, changing the text and the context.

ABBREVIATIONS AND ACRONYMS

ALMP	Active labour market policy
ABET	Adult Basic Education and Training
ANC	African National Congress
BEE	black economic empowerment
BRICS	Brazil, Russia, India, China and South Africa
CDE	Centre for Development and Enterprise
CEO	Chief executive officer
CBET	competency-based education and training
COSATU	Congress of South African Trade Unions
DA	Democratic Alliance
FOSATU	Federation of South African Trade Unions
FET	Further Education and Training
GDP	gross domestic product
GEAR	Growth, Employment and Redistribution Strategy
HCT	Human Capital Theory
HSRC	Human Sciences Research Council
HSS	humanities and social sciences
ILO	International Labour Organsation
IMF	International Monetary Fund
ITUC	International Trade Union Council
JSE	Johannesburg Stock Exchange
LSOS	labour service organisations

MERG	Macro Economic Research Group
MERSETA	Manufacturing, Engineering and Related Services Sector Education and Training Authority
MEIBC	Metal, Engineering Industries Bargaining Council
MEC	minerals-energy complex
NCV	National Certificate Vocational
NDP	National Development Plan
NP	National Party
NPC	National Planning Commission
NQF	National Qualifications Framework
NT	National Treasury
NUMSA	National Union of Metalworkers of South Africa
NEET	not in education, employment or training
OECD	Organisation for Economic Co-operation and Development
OBE	outcomes-based education
PAYE	Pay As You Earn
PSET	Post-school Education and Training
QCTO	Quality Council for Trades and Occupations
RPL	recognition of prior learning
RDP	Reconstruction and Development Programme
SAGDA	South African Graduates Development Association
SAQA	South African Qualifications Authority
SETA	Sector Education and Training Authority
SMMEs	small and medium sized enterprises
STEM	science, technology, engineering and mathematics
SOE	state-owned enterprise
TVET	Technical and Vocational Education and Training
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organisation
US	United States
VET	Vocational Education and Training
WTO	World Trade Organisation
YWS	youth wage subsidy



1

‘NO ONE TO BLAME BUT THEMSELVES’:

Rethinking the Relationship Between Education, Skills and Employment

Enver Motala and Salim Vally

Once you are on that road [to ‘human capital’ theory] – and most capitalist business ideologues are on that road – it is very easy to fall into the kind of discourse where one or another group of people is considered to be ‘superfluous’, ‘over-concentrated’, etc. The Hitlers and the Fronemans of the world eventually forced these people into railway trucks or lorries and transported them to their death in the gas chambers, or to their last graves in the many Dimbazas of our beloved country . . . Once the commodity value of people displaces their intrinsic human worth or dignity, we are well on the way to a state of barbarism. Unless and until we bring back into our paradigms, and thus into our social analyses, the entire human being and the ways in which human beings can live fulfilled lives beyond their mere economic needs, we will continue to promote anti-human philosophies and policies that ultimately tend to work to the benefit of those who have, and to the detriment of those who do not.

— Neville Alexander, 2012

Introduction

Accepting the link between education and training and the economy, and the idea that education has a defining role in promoting individual economic capability and national economic performance, requires critical reflection. All too often the relationship between education and the economy is understood through the crude and uninformed formulations of many political and business leaders, ‘expert’ commentators, economists and even some higher education leaders, academic analysts and reviewers. Even a casual reading of the print media or a listen-in to the many ‘chat’ and current affairs shows on the subject, will show how unrestrained the power of the prevailing dominant approach to skills and knowledge development

has become. The nation, and regrettably even organisations that seek to represent the interests of the poor and working class, are now hostage to a particular way of thinking about education and the economy and are largely paralysed by it. In this view, the main proposition is the idea that there is a great shortage of skills in South African society which is accentuated in particular 'critical areas of shortage' making any possibilities for economic advancement unimaginable; that the education and training system is hopelessly out of sync with the demands of the local and global economy; that the lack of skills is one of the (if not the) greatest obstacles to achieving higher levels of economic growth; and that it simultaneously is the primary cause for low levels of productivity and un-competitiveness internationally resulting in South Africa falling further behind relative to the economies of other countries. We are, as it were, living through what Kenway (1998) has described as the triumph of economics over education.

The framing ideas that inform this dominant view have become the received and conventional wisdom, even though, as we will show, they are based largely on the assumptions and practices drawn from a limited understanding of the role of education and training as no more than an adjunct to higher levels of economic performance and growth. These assumptions we argue are imprisoned by the conceptual conservatism of an economic-determinist perspective which regard education (and training) simply as instruments of economic growth. Discussions about the skills needs of society rarely transgress the bounds of these perspectives despite the strong and seemingly instructive constitutional injunctions about the broader humanising and citizenship-related role of education and training systems. Although there is a body of 'progressive' writing about these issues, it is not an adequate counter-weight to the extraordinary influence of the ideas that pervade policy making processes and the public discourses that carry the putative authority of powerful international policy and strategy-setting 'advice' (Klees, Samoff & Stromquist 2012) buttressed by the threat of sanction for failure to adopt it.

We seek to explore the underlying assumptions framing this conventional wisdom and its effects which have, in our view, paralysed policy makers and researchers alike. The influence of these conventional ideas is manifested in the choice of issues they examine for policy making and practice; the authoritative place they give to technical solutions often based on mathematical models that largely ignore contextual and historical analysis; the socially divisive and privileging effects of the 'solutions' that are provided by such 'advice'; and the deleterious consequences for socially and economically disadvantaged social classes. Even more disconcerting is the reliance on policy 'experts' and consultants chosen on the basis of selective and exclusionary criteria rarely defined or agreed to publicly and whose ideological biases tend towards conservative approaches to economic and social issues.

The lineage of this instrumentalist perspective lies in an unproblematic approach to human capital theory (HCT) and its successive incarnations in neoclassical economic thought whose premises, having had considerable purchase on policy and

social analysis over a long time, are now de rigueur. As Cahill and Paton (2011:8) have argued:

> For more than a century, the discipline of economics has been dominated by the neoclassical tradition of thought. This has bequeathed an understanding of markets as spheres of free exchange between autonomous, asocial individuals. Moreover, this understanding of markets is often reflected in mainstream public policy discourse.

Although the core premises of HCT are not dealt with here, since they are dealt with specifically in the second chapter of this volume, we regard it as extremely influential – even foundational – for much of the public discourse and policy approaches which are dominant in setting the framework for the relationship between education and development. The value of education should be defined in socioeconomic, cultural and political terms, and not reduced solely to the needs of economic growth. Knowledge, skills and the competencies derived from education and training processes are of course critically important for all societies and the well-being of nations. However, the reduction of their value to the needs of employers in a market-dominated economic system, to the exclusion of their wider societal purposes, is a serious limitation on their social role.

This is especially so in societies like South Africa which evince high levels of unemployment as an unmitigated characteristic of their capitalist development. In South Africa the level of 'surplus' labour has been consistently around 25% in the last decade (and more) in the 'official' unemployment data. In fact, according to the last *Quarterly Labour Force Survey* (Statistics South Africa 2013), unemployment increased by around 100 000 between the fourth quarter of 2012 and the first quarter of 2013, and the national unemployment rate increased to 25.2% in that period.[1] If the expanded rate of unemployment (including those who are regarded as 'discouraged' work-seekers) is taken into consideration that figure is likely to be closer to 37% and the actual number of the population this represents together with those who are 'officially' unemployed is close to 7 million citizens. This is the magnitude of the problem of unemployment in South Africa as a whole and we can safely surmise from the data that there are areas of considerably higher levels of unemployment. For instance, according to the Survey, the expanded rate for the Eastern Cape is 45.8%. Indeed if the data is disaggregated to rural parts of the country or for gender, unemployment levels would be seen to be more egregious (Meth 2009).

Accepting the extraordinarily severe levels of unemployment in South Africa, the phenomenon of unemployment itself is hardly surprising, since in reality nowhere have free-market economic systems, outside the periods of worldwide war, been able to provide full-employment. Reflecting on this phenomenon as early as the 1980s, Sayers (1988) contended that it had become obvious that unemployment was very much a part of the global reality even in countries of the West.

The prospect now, in much of the Western world, is of long-term mass unemployment. Present government policies, in the United Kingdom (UK) at least,

seem almost deliberately designed to this end. If the experience of the 1930s is any guide, the recommended alternative of a programme of public works (unless on a massive scale), while it might do some good, is unlikely to alter the situation fundamentally. It is a sobering thought that it was only the policies of fascism in Germany and the approach of world war in other countries that lifted the capitalist world out of the great depression (Sayers 1988:739).

As recipient of the Nobel Memorial Prize in Economic Sciences and former senior vice president and chief economist of the World Bank, Joseph Stiglitz (2013:1) has argued about the present situation:

> While Europe's leaders shy away from the word, the reality is that much of the European Union is in depression. The loss of output in Italy since the beginning of the crisis is as great as it was in the 1930's. Greece's youth unemployment rate now exceeds 60%, and Spain's is above 50%. With the destruction of human capital, Europe's social fabric is tearing, and its future is being thrown into jeopardy.

Even more alarming for countries like South Africa is the reality that high levels of unemployment is *a structural condition* and an implacable attribute of economic growth and capital accumulation. The world is no longer what it was in the post-War period of the twentieth century regardless of the mechanisms which global corporate interests will fashion out of the present crisis and whether or not 'confidence' in the system is restored. There is simply no place in global corporate capitalism for jobs to satisfy the demands of high rates of labour participation – especially not for those who are deemed to have no skills and 'knowledge' despite their wealth of work-related experience and the complex competencies, 'graduate attributes' and even high level specialised skills they may have (Vastag 2012). The political framework represented by post-war social democracy in the developed economies of the West has been dramatically eroded by the reversal of strong state policies to support employment especially since the era of Thatcher and Reagan in the UK and United States (US), respectively.

In many of these countries relatively well educated job-seekers are in fact underemployed. For Sears (2003:69), 'there is simply not enough demand for their labour irrespective of skills level'. Those who aspire to full-time employment find themselves with temporary jobs, with the formal credentials of those with employment often exceeding the requirements of the job. Livingston and Sawchuk (2004) discuss the multiple dimensions of underemployment including involuntary temporary employment, credential underemployment, performance underemployment, subjective underemployment and structural unemployment.[2]

Political economist Forslund (2013:96), in an insightful analysis of mass unemployment and the low-wage regime in South Africa, argues forcefully that the South African economy is 'characterised by a structural demand deficit and the lack of domestic demand breeds mass unemployment'. For Forslund (ibid), higher wages are necessary to stimulate domestic demand and 'cut into the excessive profits

harvested by the big private corporations within mining, car manufacturing, retail, construction, banking and the food industry – as well as the large farms and the big wineries'. Forslund (ibid:99) concludes that unemployment in South Africa can be ameliorated by reducing inequality, increasing wages, preventing financial speculation and, relying on Ashman, Fine and Newman (2011), understanding how profits are 'hoarded in bank accounts, or simply siphoned off abroad, legally and illegally'.

Pre-Emptive Power of Conventional Approaches and Its Assumptions

The vision and mission statements of their institutions notwithstanding, many people in leadership positions at educational institutions, have succumbed to the unquestioning insularity and the reductive vogue of the dominant discourse pertaining to education's relationship with the economy. This insularity is both limiting and acontextual. There are troublesome signs, as we will show through the collection of writings in this volume, of the growing ascendancy of particular discourses and injunctions based on the perceived universality of some prescriptions about the role of education and post-school education in particular, aggravated by the absence of meaningful public debate about these issues. Parliamentary discussions about particular strategic documents, legislation and the 'public' seminars and academic conferences are inadequate for these purposes where a wider public debate is required. This ascendant and largely unchallenged discourse to which society is held hostage is based on the idea that there is no viable alternative to the role of education other than that of responding to the demands of the economy. Little if any recognition is given to the impact of the claims being made on the education system by the avalanche of corporate global requirements and its regimes in undermining the public character and mandate of (non-private) education institutions in South Africa and in other developing countries.

These narrower approaches threaten to pre-empt any meaningful discussion about the complexities of the relationship between education systems, the demands of capitalist labour markets and society. What are the issues that provide a pre-emptive framework for any alternative conceptualisation of the education system? We start from a well-known and oft repeated premise – that the most important issue facing the country today is concerned with rampant unemployment, poverty and inequality, a theme restated by President Jacob Zuma in his State of the Nation address of 2012. Although this has now assumed the status of a mantra, there is, in fact, no shared conceptualisation of this triad of unyielding issues. How people understand the relationship between these is contested because it is underwritten by different assumptions and conceptualisations about the generative causes and possible solutions.[3] Furthermore, most, if not all discussions about education and skills development are about job creation. Job creation is itself regarded as the key to the resolution of the triadic challenges of poverty, unemployment and inequality

– in whatever relationship these stand. Yet, job creation is itself regarded as strongly reliant on the existence of the requisite skills for the job, or to put the relationship conversely: although jobs exist, the requisite skills for them are either non-existent or deficient.[4]

In a situation of mass unemployment and inequality this pre-emptive discourse is seductive, playing, as it does, into the anxieties and ambitions of both parents and young people. Sears (2003:78) argues that:

> Students facing a dismal market are likely to be more sympathetic to the idea that education should provide them with competitive advantages. Parents may have some sympathy for [this discourse] as they seek out opportunities for their children to succeed . . . Vocationalism is a central means by which education is being reoriented towards the market. The goal of lean schooling is to teach students how to realise themselves through the market, both by marketing themselves and meeting their needs through the market.

This seemingly common-sense[5] approach places the burden of responsibility squarely on individuals and their 'deficits' while obscuring the real obstacles to procuring decent and remunerative employment. The problem of 'transition from school to work' (Sears 2003:80) is then simplistically reduced to inadequate career planning models and the lack of 'entrepreneurial skills'.

In effect, therefore, the underlying premises of the dominant discourse are characterised by a strong concentration on the relationship between education and skills development, on the one hand, and the economy, on the other. This is encapsulated in the vocabulary and imperative voice of business's complaint that the key element of the failure of the state lies in the failed systems of education and skills development. The consequences of such failures are variously described as disempowering for the country's competitiveness,[6] productivity, income levels, and the development of a 'knowledge economy' especially when it is alleged that these problems are exacerbated by other factors, such as the inflexibility of labour regimes, failed (inefficient and ineffective) public services and poor infrastructure to support private economic activity. These complaints, largely emanating from business and its representative voices, are often interposed with even stronger voices about the limits and failures of state intervention per se, although they are relatively muted now because of recent global events in which nation-states provided considerable support for ailing capitalist corporate and financial enterprises in the failed attempt to forestall the global crisis of capitalism.

Very occasionally, however, the insistent corporate voice is mediated by one which represents a broader 'developmental' approach as typified by the argument of Pampallis (2012:1), advisor to the Minister of Higher Education and Training, that:

> Developing the scarce skills needed by our economy, and extending this type of training to previously disadvantaged groups, should not be equated with simply trying to meet the needs of the business. Rather, it is meeting the needs of the South African economy which we all rely on to provide the resources

> necessary for ending poverty and unemployment. In addition to big business, all employers – including the state, state-owned enterprises, the co-operative and non-governmental organisation sectors and small business – will benefit from a more skilled workforce. Even more importantly, those who develop their abilities and become skilled workers will benefit.

Whether one takes the narrower reductionist views of business or the agenda of a 'developmental state' – to which Pampallis refers – there remains an integral relationship between education/skills development and jobs (and consequently poverty and unemployment) and by extension, of education and the development of the economy – however that 'economy' is understood. The implications of these framing premises are quite profound both for research, policy and its application and will ultimately affect both our theorisation of the problematic and the strategies which might be useful for addressing it.

These untested assumptions pervasive in public policy, market-driven and even academic discussions about education, skills development and job creation, prevent us from considering the more fundamental and transformative approaches to education as these are deliberately underrepresented or omitted. We believe that a number of very important – perhaps fundamental – issues arise for examining the relationship between education and training and the economy.

To begin with, conceptualising the relationship of the economy to education and training systems should be preceded by some orientation to the nature of the economy that is being referred to. As we know there were substantial differences within the state-planning driven economic systems that characterised the former Soviet bloc, on the one hand, and the wide varieties of capitalism that have existed throughout the twentieth century, on the other.

There are also differences between post-colonial countries themselves, ranging from those largely based on rural subsistence and agribusiness to those based on extractive economies or a mixture of such economies and a manufacturing sector. More recently there are economies based on a newly developed tertiary and service sector and some characterised by a high level of militarisation of economic activity and indeed South Africa's 'minerals-energy complex'.

These economies, in all their forms, exhibit a considerable variety of political systems ranging between statist and varieties of social democratic, religio-nationalist and military-oligarchic dictatorships and permutations of these. It could be argued that if there is any single thread of similarity between these systems, this would be that all these forms of political economy and statism are characterised by huge inequalities of social power expressed through the extraordinary power of statist bureaucracies on the one hand and, in the case of the varieties capitalist economies, pervasive (even if different) differentials of wealth, incomes, property ownership and socioeconomic status.

All these societies evince social cleavages and structural differences that express themselves in the forms of social, class and gender disadvantage based on racial categorisation, religio-cultural prejudice, caste, geographic and other forms of social

differentiation and discrimination – whether or not these are legislatively prescribed. The defining attributes of such societies, even if they are more pronounced in some societies relative to others (Scandinavian countries relative to the US, 'developed' relative to 'underdeveloped' or peripheral), have been amplified in every case by the processes of global environmental degradation whose effects have been profoundly more damaging for the lives of the urban and rural poor of these societies.

Taking just one of these multiple forms of social and political systems: What are some of the implications that are assumed – yet untested – about the core assertion that there is a deterministic relationship between skills and jobs?

- One implication is that under the forms of production prevalent in this economic and social system there is a readily available supply of jobs if the requisite skills are there – or that, conversely, once there are skills in the market the jobs will follow. The further assumption that follows this is that such jobs are there if not immediately then at least in the short term – regardless of the conditions for the reproduction of capital, its composition, the social conditions for its investment, global financial flows, or even the resistance of labour to the form of its investment.
- Given especially the composition of capital in market-driven economies, the increasing mechanisation and robotisation of work results in a decreasing availability of jobs. What is the presumed relationship between the new forms of technological innovation and employment? What is the record of this relationship over time, and, similarly, what is the role of capital mobility in the sustainability of jobs in any national employment system. What evidence is there about this relationship in the global arena where increases in rates of unemployment are conspicuous?
- Another implication is the assumed relationship between jobs and skills demand that is largely silent about the qualitative attributes of work, that is, about all those attributes of the nature of work even in developed economic systems, such as its racialised and gendered nature, hierarchies intrinsic to it, the lack of work security in market-based economic systems, the ecological costs, the phenomenon of child labour, the problem of alienation, and the lack of any serious conception of citizenship and a broader framework of rights in society.
- How do people understand the conundrum posed by the simultaneous complaint that there are no jobs – even for graduates – while there are no skills that are appropriate for the economy? Is it simply that those who do have unused skills are wrongly educated and trained – too many humanities and social science degrees and too few science and technology degrees? Or is this conundrum really an expression of the contradictory and selective preferences of capitalist labour markets, which can refuse particular skills while simultaneously complaining about the absence of skills, at once kicking out some workers while employing others based on the narrower requirements of the industry

and its plants at particular points in time. Indeed, underlying every anecdote about failed attempts at securing employment opportunities is the fear that for every story about an employer who seeks 'qualified employees' there is a compensatory story about employers with impossible or exclusionary hiring requirements.

- In any economic system – and certainly in countries such as South Africa – how does the extreme concentration of capital in a few large multinational corporations affect the possibilities for employment creation both in the private sector and in a highly dependent informal economy, and what is the impact of the extreme mobility of investment capital on the possibilities for job creation in any area of work other than formal sector employment? These attributes and many more characterise the constitutive social relations affecting work in all societies, making the assumptions drawn from developed economic systems about job opportunities to economic and social systems based largely on the primary economic sector or for subsistence economies, untenable.
- Assuming, however, that the corporate capitalist sector is not the main area of concentration of job possibility, and assuming that in fact it is in the small business, public, informal and care economy, what then are the necessary conditions that would make these areas of economic activity actual and meaningful for work? What in that case would be the types of useful economic and social activities which can be explored for the purpose of job creation and social investment, that is, outside of the formal private sector economy? What openings are there in such economic systems not only for the much vaunted small and medium sized enterprises (SMMEs) but also for alternatives based on co-operatives, the care economy and the care of the environment as part of a wider planetary responsibility and justice, and the green economy?
- What, realistically, are the possibilities for supporting rural economic activity in the absence of the resolution of the 'land question'? Moreover, if these alternative forms of economic activity and work were to be encouraged, what specifically would be the similarly alternative forms of education and skills development, alternative institutional forms, curriculum and all the associated issues that speak to a systemic approach to reconfiguring the present system quite fundamentally. And how would these be funded?

All of these, we assert, are assumptions (and their related questions) that remain untested but are critical to any real understanding of the relationship between societies and their systems of socialisation through the processes of learning through education and training. We can conclude from these observations that poorly developed conceptions of education and training, and their relationship to 'the economy', remain a key barrier to constructing a meaningful discourse around policies and practices about the usefulness of education and the potential role that school and post-school education might play in society. Crude formulations of the connectedness of economic activity and knowledge mar any serious view of how knowledge is

produced, what its useful characteristics are, and how it might be assured. Complex questions reduced to 'quick fix', facile and reductionist approaches to knowledge development and particular explanations of the national skills strategy are hopelessly inadequate and the purported benefits of seeing education as largely an instrument of economic growth are in reality spurious.

Supply Side Interventions and State Failure[7]

The dominant discourse we refer to is also predicated on the charge of 'government failure'. While there is unquestionably much to hold government accountable for and there are many systemic weaknesses which it has failed to resolve since 1994, this discourse is inadequate and *one-sided* since, especially in South Africa, the interests of mining, manufacturing and agricultural capital shaped the character of the state and its policies and were themselves complicit in erecting the structural barriers to high quality education for the working class and the poor. Corporate culpability in acquiescing to the idea that blacks were only good as 'hewers of wood and drawers of water' remains unacknowledged. This lack of contrition is hardly innocent since acceptance of culpability on the part of capital would only be meaningful if it were accompanied by structural 'atonement' which must have far-reaching consequences and for its socioeconomic hegemony. Several other factors attributable to the behaviour of and choices made by the leaders and ideologues of corporate interest also affect the level of jobs in the labour market, including its ability to relocate to centres of cheaper labour in the world; the replacement of workers by technologies; the low levels of training investment in occupational skills following sea-changes in technological innovation; and the absence of a protective and supportive environment for workers. In addition, in some approaches to the issue of skills and knowledge as related to labour markets, much of the 'advice' proffered to government is based on mathematical modelling that does not lend itself to contextual and historical factors. In this regard, the salutary advice of Ziman, the eminent physicist is apposite. He refers to the use of mathematical models as 'permissible' in the physical sciences because its approximations are 'applied only to carefully chosen subject matter under highly contrived conditions' (Ziman 1991:160) and warns against the unwarranted use of mathematical models in the social sciences. In his view:

> For such intellectual feats to succeed, however, the formal properties of the mathematical symbols must be isomorphous with the empirical relations of the categories they purport to represent in the real world. The language of theory must correctly mirror reality. In physics, of course, this isomorphism is imposed by convention; it is taken for granted that nature is inherently 'mathematical', and the subject matter for research is selected accordingly (ibid:163).

The real import of our criticism in regard to the attack on government, however, is the expectation that it can resolve the skills crisis by its *supply side interventions*. This idea hides from view, once again, the culpability of the corporate sector in

regard to the low levels of employment creation because of the 'investment boycott' and the 'tardiness' of its plans to mitigate job losses. Here it is useful to revisit the debate around supply and demand of skills following the discussions that took place around the government's human resource strategy in the late 1990s which followed the publication of an article written by Colclough (1998) a consultant to the South African Department of Education. In commenting on Colclough's ideas, Robertson (1998:3) complained that Colclough's views were 'flawed' in one fundamental respect – they reduce the human resource development (HRD) strategy 'largely to supply-side interventions and adjustments', that is, that 'it is necessary *and sufficient* to embody labour with skill via the provision of better education and training'. Robertson points to the importance of demand side factors and takes issue with `the abstraction' that improving the skills capacity of the workforce necessarily enhances the productivity and wage gains for the economy and for workers respectively since this too is dependent on the demand for skills enhancement?

In Robertson's view, (especially important in the light of the severity of unemployment in South Africa) the assumption that the 'repressed demand' for labour can be met by supply side measures – the supply of enhanced labour through more and better training itself, are not justified. For him the 'single most challenging' issue in the elaboration of a national human resource strategy was breaking the stranglehold of the 'ideological/cultural legacy of marginalisation and dispossession' by generating a demand for higher and better levels of education. This required targeted initiatives and major programmes supported by government.[8] For him a strategy for human resources development in South Africa must 'begin' with questions of demand even while the supply side measures remain 'fundamental'. Moreover, according to Robertson (1998:6), demand side strategies need to be large-scale, 'highly visible, prestigious, and enduring. They must also be ruthlessly focused, selective and phased in, at least initially, if a culture of achievement and success is to be created and the cycle of scepticism and mistrust broken' and he concludes tellingly that 'an HRD strategy for South Africa which simply seeks to 'throw skills at the workforce' without developing complementary demand-side, industrial and labour market strategies is probably doomed' (ibid).

In South Africa *demand side factors* are largely ignored in the approaches adopted by those who insist that the poor *supply* of skills is the only cause of the knowledge and skills crisis in South Africa. The reality is that low paid and insecure jobs, low levels of investment in skills acquisition, unsatisfactory conditions of work, and the spectre of unemployment are an inherent part of capitalist development and blaming the government alone and the poor themselves provides no greater understanding of the underlying causalities nor any useful explanations. As is already known, the present unemployment figures have a gaping lacuna. Not for nothing. What does the fact of 'discouraged' work seeker imply if not a pernicious social phenomenon reproducing the structural attributes of a reserve army of labour which cannot be wished away by the supply side interventions which the present framework suggests. These interventions have no orientation for example to the problematic

of the relationship between the lack of resources even to pursue the possibility of employment, the effects of low wages and its effects on demand, or the form and quality of work available. Focusing on interventions on the supply side alone avoids any recognition of the causal factors affecting demand. These are made even more complex, in the case of rural communities, bereft of meaningful access to land or the capacities and facilities necessary for agricultural production, together with the absence of the necessary mechanism for market access. These communities are impacted by the prevalence even now of the gendered forms of unequal labour and in the context of the patterns of land ownership under the chieftainship system. In other words we need to examine and understand the factors in the specific case of rural communities which result in the lack of demand for skills uptake even more if any meaningful interventions are to take place in such communities.

The implication of these questions should be clear – that it is impossible to research the question of education and skills development whether in post schooling or in any other regard, without reference to the condition for the production of skills and its impact on communities. In particular, the concentration on the supply of skill is disingenuous and distracting because it is likely to obscure the need for a detailed analysis of the fundamental structural attributes which are the real barriers to the development of human societies and – regardless of the character of skills supply – or, at least as critical to shaping the nature of supply. This 'distraction' is hardly accidental since it is also ideological and seeks to shift the burden of provision to the state and to families and individuals and to void any consideration of the underlying context of socioeconomic demand.

Yet even these demand side considerations are not adequate in themselves as Castro (1995) has argued, warning against 'swinging the pendulum' too far in the direction of demand. He emphasises the key attributes of the learning process itself as being critical to skills formation and argues that after World War II, rapidly developing economies were able to absorb increasing numbers of skilled workers and this led to the creation, in many countries, of training systems to deal with the problems of the supply of labour. Following the downturn of the 1970s, however, the problems of slow growth and unemployment created different conditions in which the problems of supply were superseded by the lack of demand for training. According to Castro (ibid:2), training cannot, however, be simply a response to demand, 'it needs to be more proactive':

> Now is the time to retreat and have the demand drive the supply of training. Yet, this principle has its risks and may lead us to forget both the limits to a purely demand driven policy and the need to look inside the black box of training.

Although there is an increasing awareness of the necessity to 'tune' training to the demand for jobs a great deal of training remains 'supply-driven'. In his view, demand driven training 'is still the way to go' although 'we risk going beyond the reasonable' in doing so. Although it is appropriate to 'wait for demand to appear' this simple rule is not enough in the 'complicated world of training' and 'the pendulum' has swung too

far from the 'myopia' of supply driven training: 'Now, with the pendulum swinging in the other direction, economists look at costs and markets, completely forgetting what is inside training centres, how they work, what are the critical contents to be taught' (ibid:6).

That is to say, the nature of training itself is important because of the rapidly changing technological and work environment demanding new forms of training. These are `long-run considerations' which cannot be easily isolated as well as 'matters of equity and broader political considerations'. Training produces 'externalities' which are not easily measurable and 'are not reflected in the results obtained' and the lack of information 'about the impact of skills on productivity is another source of market imperfection'. Moreover, the lack of demand for particular forms of training does not automatically imply a lack of demand for training in general (ibid).

In effect, therefore, we cannot avoid asking the question whether, given the contemporary socioeconomic and political realities that characterise the lives and experiences of rural and poor communities in South Africa in particular, there can be meaningful approaches to an exploration of post-school education and skills development in South Africa under the constraining conditions of the formal private economic sector alone. Finding the right approach to probe such an issue, including the appropriate and deep engagements with the communities most affected by the education and skills development would be the most useful starting point for understanding the relationship between education and society. Such an approach can begin to provide an informed view while reducing the dependence of policy makers and other interested parties on the obfuscatory ideas of the consultant, their vacuous reports and empiricist data unsupported by critical analysis, and their palliatives encouraging false hope. Referring to such 'false hope', Marsh (2011:212) in his book titled *Class dismissed – Why we cannot teach or learn our way out of inequality*, concludes:

> So, yes, by all means, fix schools, reward good teachers . . . leave no child behind, end the soft bigotry of low expectations. The problem, however, is when our notion of social and economic justice starts and stops with education, or when education . . . displaces other tools needed to secure economic justice. 'Dangerous talk' – which is dangerous because by wrong assignment of causes it persuades that the 'cure' is possible through means which in fact would have little effect save to delude the saviours in the comfortable idea that nothing more needed doing, or even looking at.

While Marsh concedes that education might enable some individuals to escape from poverty and social disadvantage, he argues that, 'The real question is whether the guidance we offer one young person . . . is guidance we could offer a whole class of people – say the poor or low-income or unemployed' raising the issue exemplified in the 'Horatio Alger myth'[9] which falsely generalises from an individual example. As Livingston (1999:163) too has observed:

> Generalising from individual cases to aggregate conditions without carefully assessing the representativeness of the individuals and the overall situation they face is to commit a fallacy of composition error over logic . . . a dominant tendency persists for those with vested interests in existing institutional structures to exaggerate the extent of upward mobility by pointing to exceptional individual cases. I will argue that this error of logic is inherent in *human capital theory*, the current dominant perspective for explaining relations between education and employment, because of its narrow and presumptive focus on individual educational investments.

Other Untenable Assumptions

There are related ideas suggesting that individuals can make the kinds of choices that can 'lift' them out of their social predicament. This approach has its theoretical provenance in the economic theories about 'methodological individualism'[10] first systematised by Joseph Schumpeter, the Austrian American economist, and elaborated by Friedrich Hayek,[11] as a powerful canon of economic theory, the idea that the behaviour of human beings can be explained by their 'rational choices' constrained only by prices and incomes and that individual preferences can be accepted as givens as they engage with the 'market'. In more recent times this idea has been used by the architects of human capital development, to ascribe to individuals the ability to make unfettered choices about their educational goals and to ascribe the blame for the lack of skills and knowledge in poor communities to their failed 'choices', that is, their inability to use the skills on offer in the market-place, and so 'they have no one to blame but themselves'. This ascendant discourse about skills has 'persuaded' policy makers to ignore the combination of social, economic, political and cultural factors which make the acquisition of knowledge and skills difficult for working class and poor communities. The dominant discourse also downplays the impact of poor access to educational institutions and costs, locally based educational facilities and infrastructure, pedagogical barriers arising from being taught in unfamiliar languages together with the relative powerlessness to intervene in ways that can counteract the weight of existing relations of power. As ethnographic studies have shown, the conditions that face the majority of the poor and working class children are only rarely altered by education and other 'life chances' since even these are available to only a minority amongst them and largely serendipitously (Dolby, Dimitriadis & Willis 2004). These contextual issues of fundamental importance are often glibly dismissed as 'ideological', sometimes in the most powerful places, as a recent statement by the Minister of Finance, Gordhan (2013) exemplifies:

> We've got to compete, there is a real world out there, we have to compete… and ask ourselves why would somebody go and buy from X shop and not Y shop and why does Y shop close down? Is it because X is efficient, cheaper or whatever the case might be so that we need to get a more competitive spirit amongst us to go forward. On the question of the youth wage incentive, it is part

> of the package . . . we must stop being ideological . . . let's change our mind-sets . . . and demonstrate our entrepreneurial spirit . . .

A further barrier to that constructed by the prevailing discourse about 'relevant skills' concerns the idea that for members of the working class and their families only technical knowledge, knowledge useful in the workplace, is possible. This is the old 'head and hand' issue resurfacing – the idea that some people are incapable of work related to 'thinking' and must be consigned to do work related to 'doing'. Regrettably it has a pervasive grip even amongst some progressive academics. In their view, workers' knowledge and experience is inadequate for grasping the requirements of 'higher learning'. Yet the history of human civilisation over thousands of years is synonymous with collective knowledge, is dependent on and has been built upon the knowledge of ordinary human beings going about their daily lives and fashioning new ways of doing things, of thinking, of observation and experience, of trial and error and practical application, intelligently solving many of the vexing issues that faced humanity over the millennia. Without these contributions to human knowledge there would be no civilisation as people know it.

As Conner (2005:2) has argued science as we now know it originated in such prior knowledge since

> it should not be surprising to find that it originated with the people closest to nature: hunter gatherers, peasant farmers, sailors, miners, blacksmiths, faith healers and others forced by the conditions of their lives to wrest the means of their survival from an encounter with nature on a daily basis.

He asserts that the sciences and especially chemistry, metallurgy, and the materials sciences more generally arose from the work of 'surveyors, merchants, clerk-accountants, and mechanics' over many millennia bequeathing science to 'modern societies' through a process of continuous modification and adaptation. The role of 'familiar Great Men of Science' were predicated on prior contributions of artisans, merchants, midwives and tillers largely unrecognised in the formal histories of knowledge and work because although there are some remarkable studies of pre-industrial societies including pre- and post-Neolithic societies, very little about its social anthropology, culture, language and traditions and the development of work in such societies is recognised or referred to in contemporary discussions about jobs and employment. Yet, remarkably, some social anthropologists have even suggested that 'prehistoric foragers' were the 'original affluent society' since they typically required to work for only a few hours a day to meet their material needs, leaving much time for relaxation and leisure and this has led at least some anthropologists to re-examine their interpretations of early cultures and artefacts (Grier, Kim & Uchiyama 2002).

Knowledge and skills are indispensable human attributes and not the preserve of special castes or classes in society. They are what make us human, derived from the mutually reinforcing socialisation that makes possible the progress of society. They are utterly reliant on the idea of sharing, collective learning and caring in the

community of all nations and as cumulative over time as they are interdependent. This is despite the searing tribulations suffered by societies in some moments of extreme inhumanity such as the period of slavery, colonialism and Nazism in Europe, the recent episodes of genocide in many places, societies under military occupation or indeed, apartheid in South Africa. The fact that some individuals have made outstanding contributions to the stock of civilisational knowledge is entirely due to its collective social origins and to the fact that they were able to rely on the pre-existing body of knowledge bequeathed to humanity by previous generations wherever they may have been located. These great leaps in human understanding that occur at some times in human history are entirely reliant on the slow and steady accumulation of generations of knowledge produced by humanity over time. This humanity is no other than the vast multitudes of those who toil to produce the socially useful and necessary labours in all societies throughout the world.

The Burden of This Volume

If the many South African educationists of the past, including I.B. Tabata, W.T. Thibedi, Olive Schreiner, A.C. Jordan, Rick Turner, Ruth First, Steve Biko, Mathew Goniwe, Abu Asvat and Neville Alexander,[12] representing the diverse political traditions of this country are to be taken seriously, then the narrow, reductive and economic determinist perspective which is today the dominant approach drowning out important ideas on education and society must be rejected. Their legacy gave rise to vibrant and vital education social movements in South Africa's recent past[13] intended to instil in society the importance of knowledge as essential to the development of a citizenry, for the fullest expression of civic rights and responsibilities, for such elementary rights as numeracy and literacy, accessing public goods, making informed choices, and most importantly, for ensuring greater levels of democratic accountability of public representatives and organisations. A purposeful education which recognises that the role of education and training involves understanding the many cultures, values and belief systems in society, rebutting 'race', gender, ethnic and other stereotypes; the ability to evaluate ideas and systems critically, for transformative and critical thinking; the ability to communicate socially and to work for oneself and for society, and indeed to stimulate 'intellectual curiosity'. One which saw the potential role of education and training systems, in which a framework for state-directed support for working class and poor communities can be achieved and where a wide range of socially useful activities which are amenable to educational interventions exist. These include interventions in health-care, early childhood development, care for the aged, frail and disabled, locally based economic activities, co-operative development initiatives, cultural initiatives, small-scale enterprise and other activities specifically directed at engaging communities in the process of development.

Many of these activities could have direct benefits for such communities and reduce the expectation that reliance on market-driven systems would produce the conditions for 'labour absorption' and 'higher participation rates' through formal

employment. For instance, such communities can be engaged in a range of projects relating to areas like primary health, the local economy, housing development, service infrastructure, land usage, recreation and cultural activities and support for schools. Indeed, there are examples of communities who support the unemployed through finding useful activities, such as child care, community and school meal services, school renovation and maintenance of public spaces. These activities, if undertaken collectively, have the potential to graduate into co-operative forms of production and distribution. Much more has to be done to exemplify the potential for co-operative forms of production and distribution and to understand the educational requirements of such forms of production because here too there is a valuable history of worker co-operatives which provide the evidence and the potential for humanising and creative approaches to the formation of skills and competencies in developing societies. We hold the view that education can bring together the worlds of intellectual and physical labour, and overcome the separation of 'head and hand' that characterises so much of the present education and training discourse privileging abstraction relative to action and separating the academic from the vocational.

The distinguishing approach to the chapters in this volume, we hope to show, is its orientation to the question of unequal social relations in all societies dominated by the power of 'market-fundamentalism' and its ideological battering ram, neo-liberal approaches to all social, economic, political and cultural questions. These approaches, we argue, have no regard for their damning implications for the majority in many developing societies characterised by the reality of social disempowerment, landlessness, poverty, low-wage and cultural entrapment. These so called 'citizens' constitute if not a majority of the world population, then a very significant part of it. In our view present approaches to the (ostensibly uncomplicated) nexus between education and work are insouciant about the influence of social power, that is, the entrenched inequality in the social relations which are extant in all fragmented and divided societies dominated by the influence of global corporate interests. These approaches avoid any purposive reflection on the implications of their framing conditions and fail to recognise its deeply structural characteristics. They continue to speak only abstractedly about issues of poverty, inequality and unemployment without engaging with its fundamental implications for any meaningful conception of the idea of transformation and change. Since they do not address questions of unequal social power and its impacts, such discussions about the issue of poverty and its effects have assumed the status of mantra having no clear relationship to the underlying causalities or structural impediments which stand as impregnable barriers to change. This inability to recognise that underlying any possibility for genuine social transformation is the question of how members of society (whether they be classified racially, in gendered, social class or geographic terms) occupy vastly differing social places and roles and consequently have vastly differing allocation of 'capabilities'. Often their social roles are largely transfixed in time and bequeathed to succeeding generations of disempowered communities.

The idea that socially fragmented and divided societies can, without reference to the problem of entrenched power, deal with the impact and social reality of structural, personal and social inequality and its implications for freedom and justice is both naive and disingenuous if not deliberately misleading. In this regard it is also our view that references to the power of the Constitution (RSA 1996) are not particularly helpful since they seek to cede to constitutional fiat the possibilities for addressing the structural attributes of unequal power. Although the Constitution (RSA 1996) is a hugely influential document, and its moral imperative has resulted in some far reaching improvements in the conditions of some poor communities, it simply cannot resolve the fundamental contradictions that abide in a post-apartheid capitalist society and the underlying relations of power which characterises such a society.[14] Discussions about 'successful' economies, invariably approached on the basis of the continued social differentiation and 'special zones of economic activity' in which ideas about equal rights must be suspended hardly address the underlying conditions. Similarly, 'youth subsidies' in which social conventions begin to be entrenched to make the idea of 'less than equal' become an acceptable norm and 'flexible labour conditions' as the basis of economic stimulation touted uncritically as the panacea to competitive economic performance are extremely retrogressive and harmful for any conception of social cohesion and justice.[15]

From all of the above one can conclude that a tendentious way of framing the issue has taken precedence and that its influence is ubiquitous. It is the simplistic notion that in South Africa at this time education and training will resolve the problems of unemployment both because it will build economic capability and simultaneously resolve the problem of job creation. We point to the limits of the present perspectives, the overt and subliminal impact of the standpoint of the corporate world, the enchantment of the public media with their point of view and even academic discourses which speak uncritically about the benefits of supply side interventions and ignore almost entirely the problem of low and muted demand – a social phenomenon inseparable from market driven economic systems.[16]

The objective of this volume is not only to provide a constructive critique about the limits of the present approaches on this issue but also provide a wider, more responsive and encompassing conceptual lens by which to examine the issue of education and the economy or work and schooling/post schooling. We emphasise a view of education consonant with a vastly different society from that which bears the unnerving stamp of global corporate agendas. In our view conventional approaches are likely to entrench the bifurcation of society along the cleavages that are presently self-evident, increase the powerlessness of those who are so 'incapacitated' and marginalised while simultaneously continuing the process of enhancing social privilege and deepening the continuities of South Africa's colonial and apartheid past. In this there is no hope for any alternative for the majority, only the entrenchment of their 'unfreedom' and underdevelopment.

The chapters in this volume speak to a number of issues illustrating the tenuous and misconstrued nature of the relationship between education and society when that

relationship is reduced to narrower economic ends, based moreover, on assumptions about employment and work which are unproven and untenable. The architecture of the book is organised with a particular sectoral and sequential logic in mind. Chapters 1 and 2 introduce and frame the concepts and debates relating to education, skills and employment; chapters 3, 4 and 5 discuss concretely, developments in higher education and technical and vocational education and training (TVET); Chapter 6 provides a theoretical overview of the relationship between education and labour market relations, while chapters 7 and 8 show empirically how these relationships manifest themselves on the factory floor and the implications for workers. Chapters 9 and 10 focus on unemployed youth, while chapters 11, 12 and 13 critically examine stratagems, successes and failures by the state, organised labour and capital and their attempts to deal with the relation between education, the economy and society. The summaries below provide further details of the various chapters.

Chapter 2 elaborates on the premises of this introduction and places the origins of the pervasive language of economistic ideas about 'human capital' which has evolved over the last half a century. We hope to show the serious limitations in this prevailing discourse about education and training's role in society. The approaches we refer to (about the role ascribed to education as essentially an investment of capital) do not acknowledge the scholarship contained in a growing body of literature, empirical studies and analytical writings about this issue. We argue, in essence, that even a high-level education is not an automatic guarantee to employment; that an instrumentalist view of the role of education is unhelpful especially as such a view is always based on a raft of unjustified claims about the purposes of education in society; that education and training is not simply a handmaiden for resolving the problems of low economic output in capitalist societies; and that a wide range of factors and social relations (inherent in all societies) circumscribe the potential value of education and training.

Thereafter the focus of the chapters turns to a number of related issues which exemplify more fully the ideas in the first two introductory chapters:

In a presentation he gave shortly before his death, ***Alexander*** scanned the nature of the evolving relationship between publicly funded universities and the corporate world. He argued that there are especially disconcerting developments around the ostensible 'third mission' of publicly funded universities as they evolve to represent the 'symbiotic relationship that developed between knowledge production and transnational corporate requirements and modalities'. Chapter 3, based on a commitment to a humane and just world, is critical of the drift of universities into 'the orbit' of corporate interests through what has come to be known as the 'triple helix' shaped largely by the present phase of the capitalist industrial revolution. Alexander addresses the idea of the 'knowledge economy' and its implications for scholarship, the privileging of the science, technology, engineering and mathematics (STEM) disciplines relative to liberal arts and human sciences and the impact of these on the socioeconomic and cultural dimension of the 'second academic transformation' now taking place worldwide.

In chapter 4, ***Wedekind*** shows how the linked discourses of responsiveness and employability have recurred in every policy initiative of the democratic period (and continues a much longer tradition of trying to 'align' the education system to the needs of the labour market). Focussing on TVET colleges, he argues that despite the policy reforms that have totally reorganised the system, poured vast amounts of money into infrastructure, and introduced major shifts in curriculum, current assessments of the system present it as poorly aligned to the labour market prompting further reforms. The chapter suggests, by drawing on other writings, that the dominance of a 'market city' (ie, the discourse that frames everything in terms of markets) needs to be set against a wider and more inclusive view of human capability and open up spaces for critique which highlight a range of different perspectives. Wedekind reflects on the wider purposes of education in society and structural constraints in the economy that make employment difficult.

Ivor Baatjes, ***Baduza*** and ***Sibiya*** trace the evolution of Technical and Vocational Education (TVET) in chapter 5, providing a critique of its limits and weaknesses and especially to an orientation to education and training as no more than an instrument of economic growth. Such a reductive conceptualisation, they explain, is a consequence of an adherence to the failed promises of HCT and its conceptualisation of the idea of investment in human capital. Their critique is particularly important because it signals an alternative to this failed approach pointing to a Freirian approach to the pedagogical orientation of educators engaged in vocational education. This, they argue, affirms a much wider remit for education based on a set of philosophical dispositions and values which are oriented to encompassing goals necessary to serve the aims and purposes of a transformatory education system.

Allais and ***Nathan*** provide an analysis of research into the evolving relationship between education and work. Chapter 6 examines 'transitions research', which traces young people from education to work, often through longitudinal or panel survey research. They suggest that this literature tends to over-emphasise individual agency, and does not sufficiently address structural economic constraints. A broader perspective is required to understand how education relates to the world of work as well as to the economy. They provide an overview of some of the theories including HCT, education as a positional good, education as a proxy for trainability, education as legitimised means for social inclusion and exclusion, the idea of the 'global auction', educational transformation of work, and the argument that the expansion of education has very little to do with the requirements of work. While much literature bemoans a 'mismatch' between education and work, and looks to curriculum reform to solve it, Allais and Nathan argue the structure of the labour market as well as broader social policy determine the quality of vocational and professional education.

In chapter 7, ***Hlatshwayo*** uses his case study of the ArcelorMittal steel mill to show how specific strategies are employed in the corporate sector to ensure that job-based training strategies are used to enhance profitability through technological change and 'lean production' at the expense of labour participation rates – even for skilled workers. In effect the driving forces of these strategies, which result in

retrenchments, are not about the lack of skills and low levels of formal education in the plant, but about how the restructuring of workplaces is predicated on the idea of 'lean production' based on technological changes which inevitably favour a highly mechanised workplace with a smaller workforce. Hlatswhayo also shows the need to ensure more effective trade union representation in relation to these tidal changes in the production system and the power of global multinational corporations.

Britt Baatjes draws evidence from her research in a textile factory and examines the link between the levels of education used as a 'measure' for the first stage of selecting prospective employees as machine operators, and the actual knowledge and skills used in the workplace to perform the job. Chapter 8 shows that there is incongruence between the 'requisite' knowledge and skills and the actual knowledge and skills needed. Baatjes reflects on the evolution of the 'new workplace' that has emerged with the advent and spread of globalisation and explores issues of inclusion and exclusion, power relations, morality, ethics and social justice.

Treat critically examines the assumptions underlying the dominant narrative regarding education, skills and employment, particularly youth unemployment. Chapter 9 interrogates the 'logic' of education interventions and why they remain pervasive despite the evidence against them. Treat argues for a conceptualisation of unemployment that recognises the vulnerability of youth historically. The interventions in question he argues are at best misconceived and are 'at worst, corrosive of deeper possibilities for humane and socially cohesive development'. Importantly, this critique raises the possibility of alternative approaches to education reform that are less likely to exacerbate existing social inequalities – alternatives that may simultaneously contribute toward avoiding our growing ecological crisis. Treat thus enables readers to appreciate the valuable social function that an education system can serve.

In chapter 10, ***Reddy*** interrogates the unemployment crisis especially as it affects youth in South Africa. He examines wage subsidies as a targeted intervention generally designed to correct 'market failures' by advantaging specific groups but not widely regarded as correctives to mass unemployment. Formal evaluations of these subsidies largely focus on the micro-level effects of the policy, not aggregate employment effects, and are at best ambivalent when it comes to rich nations and largely negative regarding developing countries. He argues that two major drawbacks to the policy are large substitution effects – where employers swap unsubsidised for subsidised workers – and deadweight losses where the subsidy acts as a transfer to profits without incentivising net employment creation. Both of these are likely to be severe in South Africa where employers have shown a massive appetite for informalised labour and where profits have decoupled from investment. Despite this, the wage subsidy policy has been manoeuvred to the centre of the intense public debate on unemployment where proponents argue that the subsidy will be an analgesic to the so-called skills crisis by providing an avenue into work experience. Reddy argues that this is unlikely to be the case as the subsidy will largely affect precarious, low-skilled work.

Michelson develops an extensive critique of the present approaches to the recognition of prior learning (RPL) initiative and how these relate to assumptions about individual skills attainment and employability. Chapter 11 shows that these approaches narrow the purview of education to serve technicist and corporatist ends. She provides a 'politically salient and theoretically sound framing of the foundational premises of RPL' focusing on individual aspirations relative to collective ones' and addresses the complex 'relationship among formal and informal cultures of knowledge' in attempting to restore a vision for RPL which emphasises the relationship between epistemological and economic justice to enhance the possibilities for 'a collective recognition of workers' epistemological agency'.

In chapter 12, ***Hamilton*** discusses how the politics of worker education too is not immune from the overweening power of the discourse of 'relevance to the market', even in relation to the educational processes intended to enhance the capacity and power of workers' organisations and trade unions in particular. She maintains that in order for such education to have value it must in the first instance be directed at enhancing the capacity of trade unions and their membership to access educational opportunities which provide the critical knowledge necessary to engage with and resist the power of corporate global regimes and their hegemonic ideologies. This is inconceivable, she argues, without a struggle for the assertion of the rights of workers and their organisations to autonomously control and define its aims and purposes.

Chapter 13 by ***Ngcwangu*** concludes the volume by examining the role of the various actors who were engaged in the formation of the skills policy – the state, labour and capital in particular. He reflects on the limitations of present approaches to skills formation and its conceptualisation. Notwithstanding the contested approaches adopted by these actors the discourse of skills remains largely hostage to the power of corporate conceptions of skill and knowledge. It fails to relate such a discourse to an alternate conception of the economy – a conception not dominated by the power of global corporate regimes and their interests. In part this dominance is maintained by the weaknesses and limited nature of eclectic state interventions, the bureaucratic and contradictory approaches adopted by it towards education and training more generally and the similarly weak and contradictory responses of the labour movement to the power of corporate approaches to knowledge and skill development.

Notes

1. These processes of social exclusion affect not only working class lives but also those of the middle class as casualisation and 'contracted out' work begins to bite deep into the conventional forms of employment.
2. Livingston and Sawchuck (2004:11) focus on the employed workforce and categorise those who are underemployed in this sector in the following manner: 'Credential underemployment includes job holders who have attained at least one credential higher than is required for job entry; performance underemployment includes job holders whose achieved levels of skills and knowledge significantly exceed the levels to do their jobs;

and subjective underemployment includes those whose self-assessment is that they are overqualified for the jobs they have held.'

3. In this regard see the debate between Mike Schussler and Brian Ashley, *Business Report*, 11 June 2012 evincing very different approaches to unemployment and its generative causes.
4. This conundrum is evident in Trevor Manuel's speech at the launch of the National Development Plan, (http://www.thepresidency.gov.za/pebble.asp?relid=6601): 'The third pillar [of the plan to eliminate poverty and inequality] is a growing and inclusive economy. Without faster and more inclusive economic growth, it will not be possible to deliver on the objectives that we have set for ourselves. We need this to help pay for the development of capabilities such as education and infrastructure to improve the life chances of our people. The main change we seek is an economy that is more labour absorbing . . . Our economy is caught in a low growth trap. To reverse this, we require higher investment, better skills, rising savings and greater levels of competitiveness.'
5. The common-sense view is promoted as neutral, objective and ideology-free. The Italian Marxist Antonio Gramsci explained how certain conceptions take on a hegemonic status promoted by the ruling class. These shared views cohere into 'everyday wisdom' and are rarely challenged. Hegemony relies in the first instance on securing some degree of consent from the ruled and primarily on subordination through ideas though it is built on a foundation of economic inequality (Sears 2003).
6. According to Porter and Rivkin (2012:1), writing in the *Harvard Business Review*, 'Competitiveness' is an idea that is often misunderstood. For the US they argue, competitiveness is defined as 'the extent that companies operating in the US are able to compete successfully in the global economy while supporting high and rising living standards for the average American'.
7. We draw here on a paper written by one of the authors, Motala (1998).
8. A similar position is advanced by Easton and Klees (1992:141), in respect of the importance of demand side measures in the education-labour market linkage, rejecting the notion that the mismatch between education and the labour market is an indictment of schooling to be remedied solely by educational reform or improved educational efficiency.
9. The Horatio Alger myth refers to 'rags to riches' messages in books written in the 1860s by Horatio Alger Jr. The moral in his stories consisted of the view that by dint of hard work and effort any poor boy (Alger's stories were aimed at adolescent boys) could ascend from lowly social origins to become a success.
10. Weber had earlier expounded the idea of 'methodological individualism for sociological purposes but as the *Stanford Encyclopaedia of Philosophy* avers, 'It has never escaped anyone's attention that the discipline that most clearly satisfies the strictures of methodological individualism is microeconomics (in the tradition of neoclassical marginalism), and that homo economicus is the most clearly articulated model of rational action' (http://plato.stanford.edu/entries/methodological-individualism/).
11. First published in German in 1908 and translated into English in 1980, with a note by F.A. Hayek (European Institute, Brussels).
12. As well as Robert Subukwe, Fatima Meer, Es'kia Mphahlele and Dennis Brutus.
13. For instance, People's Education (see Motala & Vally 2002), Workers' Education (see Cooper et al 2002) and Education with Production (see van Rensburg 2001).
14. In this regard there is a growing body of writing which refers to the limits of the constitutional discourse which explains how and why legal and constitutional power is

constrained in societies that are characterised by fundamental social inequalities (see, for instance, Madlingozi 2006).

15. Ideas promoted by an interview with Ann Bernstein of the Centre for Development Enterprise (CDE) on SAFM at 12:40 on 31 May 2012.

16. It should also be noted that this demand is not to be confused with the incessant demands made by business and commerce for particular job specific competences and which serve to reinforce their criticisms of state failure on the supply side.

References

Alexander, N., 2012, ' "Race" is skin deep, humanity is not', in H. Vally & M. Isaacson (eds.), *Enough is a feast – A tribute to Dr Neville Alexander*, Foundation for Human Rights, Braamfontein.

Ashman, S., Fine, B. & Newman, S., 2011, 'The Crisis in South Africa: Neoliberalism, Financialization and Uneven and Combined Development', *Socialist Register*, 47, pp.174–195.

Cahill, D. & Paton, J., 2011, ' "Thinking socially" about markets', *Journal of Australian Political Economy*, 68, 8–26.

Castro, C., 1995, 'Training policies for the end of the century', UNESCO, International Institute for Educational Planning, Paris.

Colclough, C., 1998, Towards a human resources development strategy for South Africa, unpublished Memorandum to the Department of Education, Pretoria.

Conner, C. D., 2005, *A People's History of Science: Miners, Midwives and 'Low Mechanics'*, Nation Books, New York.

Cooper, L., Andrew, S., Grossman, J. & Vally, S., 2002, ' "Schools of labour" and "labour's schools": Worker education under apartheid', in P. Kallaway (ed.), *The history of education under apartheid*, Pearson Education South Africa, Pinelands.

Department of Education (DoE), 1997, *Education White Paper 3: A programme for the transformation of higher education*, DoE, Pretoria.

Dolby, N., Dimitriadis, G. & Willis, P., 2004, *Learning to labor in new times*, Routledge Falmer, New York and London.

Easton, P. & Klees, S., 1992, 'Conceptualizing the role of education in the economy', in R.F. Arnove, P.G. Altbach & G.P. Kelly (eds.), *Emergent issues in education: Comparative perspectives*, State University of New York Press, Albany, NY.

Forslund, D., 2013, 'Mass unemployment and the low-wage regime in South Africa', in J. Daniel, P. Naidoo, D. Pillay & R. Southall (eds.), *New South African Review 3*, Wits University Press, Johannesburg.

Gordhan, P., 2013, interviewed at the World Economic Forum and responding to listeners' questions about the high rate of unemployment, SAFM, 'The Forum @eight', 10 May, 2013, podcast: http://iono.fm/channel/1337.

Grier, C., Kim, J. & Uchiyama, J. (eds.), 2002, 'Beyond affluent foragers: Rethinking hunter-gatherer complexity', *Proceedings of the 9th Conference of the International Council of Archaeozoology*, Durham, UK, August 2002, Oxbow Books, Oxford.

Kenway, J., 1998, 'Change of address? Educating economics in vocational education and training', in *Reconstruction, development and the National Qualifications Framework*, Centre for Education Policy Development (CEPD), Braamfontein.

Klees, S., Samoff, J. & Stromquist, N., 2012, *The World Bank and education critiques and alternatives*, Sense, Rotterdam.

Lansley, S., 2012, *The cost of inequality: Why economic equality is essential for recovery*, Gibson Square Books, United Kingdom.

Livingston, D.W. 1999, 'Beyond Human Capital Theory: The underemployment problem', *International Journal of Contemporary Sociology*, 36(2), 163–192.

Livingston, D.W. & Sawchuk, P.H., 2004, *Hidden knowledge*, Garamond Press, Ontario.

Madlingozi, T., 2006, 'Legal academics and progressive politics in South Africa: Moving beyond the ivory tower', in K. Marle, (ed.), *Pulp fictions*, Pretoria University Law Press, Pretoria.

Marsh, J., 2011, *Class dismissed: Why we cannot teach or learn our way out of inequality*, Monthly Review Press, New York.

Meth, C., 2009, Unemployment and poverty halved by 2014?, Working Paper No 56, South African Labour Development Research Unit, Cape Town.

Motala, E., 1998, Unpublished memo on 'A human resource strategy for South Africa', note for the Coordination and Implementation Unit, the Presidency, South Africa.

Motala, S. & Vally, S., 2002, 'People's education: From people's power to Tirisano', in P. Kallaway (ed.), *The history of education under apartheid, 1948–1994*, Maskew Miller Longman, Cape Town.

Pampallis, J., 2012, 'Green paper "not merely meeting the needs of business"', *Business Day*, 27 January.

Porter, M.E. & Rivkin, J.W., 2012, 'The looming challenge to U.S. competitiveness', *Harvard Business Review*, March.

Republic of South Africa (RSA), 1996, *Constitution of the Republic of South Africa, Act No. 108 of 1996*, Government Printer, Pretoria.

Robertson, D., 1998, Some comments on 'Towards a human resources development strategy for South Africa', unpublished memorandum, Pretoria.

Sayers, S., 1988, 'The need to work: a perspective from philosophy', in R.E. Pahl (ed.), *On work: historical, comparative and theoretical approaches*, Basil Blackwell, Oxford.

Sears, A., 2003, *Retooling the mind factory: Education in a lean state*, Garamond Press, Ontario.

Statistics South Africa, 2013, *Quarterly Labour Force Survey (QLFS)*, 1st Quarter 2013. http://www.statssa.gov.za/publications/statsabout.asp?PPN=P0211&SCH=4701.

Stiglitz, J., 2013, 'What is Italy saying?' *Social Europe Journal*, 5 March.

Van Rensburg, P., 2001, *Making education work: The what, why and how of education with production*, Foundation for Education with Production International, Gaborone and Johannesburg.

Vastag, B., 2012, 'U.S. pushes for more scientists, but the jobs aren't there', *Washington Post*, 7 July. http://www.washingtonpost.com/national/health-science/us-pushes-for-more-scientists-but-the-jobs-arent-there/2012/07/07/gJQAZJpQUW_story.html.

Ziman, J., 1991, *Reliable knowledge*, Cambridge University Press, Cambridge.

2

EDUCATION AND ECONOMY:

Demystifying the Skills Discourse

Salim Vally and Enver Motala

Introduction

The relationship between education and the economy is the subject of considerable media discussion, policy deliberation, academic writing and public angst.[1] Yet there appears to be little understanding about the long and contentious history of the claims about the relationship between education and the economy, or more specifically, of education and economic growth.

In reality there are many factors which come into play in any attempt to resolve the complex and multifaceted challenges facing societies and their economic systems. Especially in relation to the potential 'employability' of those who are willing to enter the labour market, factors relating to the muted demand for skills uptake continue to act as a barrier to their participation. This is especially so in societies evincing egregious social and economic inequality and unequal relations of power.[2]

For example, the recent crisis affecting the employment of workers in the clothing and textile industry in South Africa bears grim testimony to the exogenous nature of the conditions impacting on employment, in an industry where even workers who have developed high levels of skills built over many years of employment and training, remain highly vulnerable. For workers in South Africa's bedrock extractive industry, changes in the relative exchange rates, and indeed as the consequences of mineworker resistance to low wage regimes (as in the recent conflicts at a number of mines including at Lonmin's Marikana mine), often mean the difference between employment and unemployment, regardless of the levels of experience, training and skills they possess. Whole towns and villages disappear as producers of particular commodities or mining activities 'disinvest' once extractable ores are depleted or production plants are moved as a consequence of 'labour unrest' or because of environmental factors. Entire cohorts of technologically trained 'human capital' lose their relevance to the labour market once new substitutive technologies are introduced

and skill training simply cannot resolve the resultant unemployment. The implication of this is that unless the underlying structural conditions which produce social and political exclusion are re-examined critically, long-term unemployment is the only likely consequence for those affected by these changes in the external environment as a consequence of changes in the labour process, technological 'innovation', worker resistance or investment boycotts engendered by calculations of profitability alone.

There is a significant body of writing on the subject of education and the economy beginning perhaps as early as Smith's (1957:247) attempt at theorising what he called the 'acquired and useful abilities of all the inhabitants or members of the society' which he regarded as 'talents' acquired through 'study' or 'apprenticeship' useful both for the individual and for society. Tellingly for our purposes he surmised that:

> The improved dexterity of a workman may be considered in the same light as a machine or instrument of trade which facilitates and abridges labor, and which, though it costs a certain expense, repays that expense with a profit (ibid).

Smith's view of economic development was based largely on the notion that 'civilized nations' possessed the most complex division of labour requiring job functions to be broken down into simple functions to increase productivity and consequently the growth of the economy. For him the division of labour had the effect of a 'great increase in the quantity of work' performed and was attributable to

> three different circumstances; first, to the increase of dexterity in every particular workman; secondly, to the saving of the time which is commonly lost in passing from one species of work to another; and lastly, to the invention of a great number of machines which facilitate and abridge labour, and enable one man to do the work of many (Braverman 1974:76–77).

Although Smith agreed that education was important for workers because it has positive benefits in compensating for the effects of labour on their intellectual capabilities, he argued that it was not essential to their work and the division of labour. The division of labour, 'dulled the intelligence of the mass of workers' requiring education to counteract this effect. This argument was refuted by Marx (1977) who argued that the very form of the organisation of labour under capitalism, which resulted in the alienation and exploitation of workers, and not merely the division of labour referred to by Smith, was responsible for limiting the intellectual, social and general development of workers – a theme taken up strongly by Braverman (ibid) in his important sociological account of the labour process under modern capitalism. Braverman (ibid:82–83) equates the process of 'deskilling' that characterised post-War capitalist production with the loss of craft skills in the nineteenth and early twentieth century as follows:

> Every step in the labor process is divorced, so far as possible, from special knowledge and training and reduced to simple labor. Meanwhile, the relatively few persons for whom special knowledge and training are reserved are freed so far as possible from the obligations of simple labor. In this way, a structure is

> given to all labor processes that at its extremes polarizes those whose time is infinitely valuable and those whose time is worth almost nothing. This might even be called the general law of the capitalist division of labor . . . It shapes not only work, but populations as well, because over the long run it creates that mass of simple labor which is the primary feature of populations in developed capitalist countries.[3]

The impact of these tidal changes in the labour process on education and training did not come into focus until the 1960s when ideas about the quality and quantity of skills and productivity became important. Since that time discussions about the value of education and training and what has come to be known as human capital theory (HCT) established itself firmly in the economic and educational literature. This literature has ranged from the 'classical' texts which laid the groundwork for HCT in the 1960s to the subsequent writings in which HCT has come under serious scrutiny. Although we do not digress into the relationship between neoclassical economic theory and HCT (Hodgson 2007; Mirowski 2005)[4] suffice it to say that the influence of the former on the latter lies in its primary assumption about 'rational preferences', the 'maximization of utility and profit' and human choices based on 'full and relevant information'. *Inter alia*, these assumptions informed neoclassical theory's approach to the behaviour of economic enterprises, (the Firm), the demand and supply of consumer goods, consumption and the derivation of labour supply curves. Neoclassical economic theory was concerned with the interactions between supply and demand as this affected and determined equilibrium between the outputs and price for each of the factors of production including importantly, human labour power. Easton and Klees (1992), writing about the relation between education and the economy refer to the extraordinary grip that the 'neo-classical paradigm' exercises in this field. In their view this extraordinary influence results in a 'virtual monopoly on applicable techniques and its competitors are seen to offer little but carping criticism'. Most disconcertingly the effect of this monopoly:

> Inclines (the neoclassical paradigm) toward myopia and even anti-empiricism, in the sense of a lack of interest in 'deviant observations' and refractory data. Neo-classical economists are notoriously disinclined to collect first hand data or to admit the worth of anything qualitative or ethnographic, though their own basic framework is fundamentally microanalytic (ibid:37).

There is of course a wide-ranging critique of neoclassical economics which we do not delve into here, but which is captured in sum by Arnsperger and Varoufakis (2006) who refer to its 'three methodological moves' that are at the heart of neoclassical economics, viz. *methodological individualism, methodological instrumentalism and methodological equilibration,* referred to as its *meta*-axioms (Cahill & Paton 2011) and its discursive power in shaping contemporary ideas. But to take just one example of the many critiques – relevant to the social orientation we adopt in this chapter, Cahill and Paton (ibid:8) argue that:

> With the marginalist 'revolution' of the 1870's and the emergent neoclassical paradigm in the 1890's, greater currency was given to the individualistic theory of competitive equilibrium. Formalising the approach to economic theory also correlated with a narrowing of its focus from long-term growth and distribution to price theory and market equilibrium. *This effectively sidelined the social element in political economy*, leading Polanyi (1947:124)[5] to suggest this was the point at which economic theory 'cut loose from all dependence on society'. As a consequence, the 'science' of economics was strangely remote from the structural changes associated with industrialisation and the turmoil of economic crises that beset the capitalist system during the second half of the nineteenth century [our italics].[6]

Attempts at infusing HCT with 'social' character through the use of the concept of 'social capital' have also been vigorously rebuffed. Fine (2010:17), referring to Becker (1964) whose work was seminal in the development of HCT, argues that: 'Becker's form of economics treats all economic and social phenomena as if they could be reduced to optimizing individuals interacting as far as possible as if a (more or less perfect) market were present'.

Human Capital Theory

In the 1960s in particular, the idea of HCT came into its own and established itself as an area of academic study even though it remained largely an adjunct of labour economics. It countered the idea that labour was simply the homogenous category used by classical economists and argued for a rethinking of the concept of 'capital' to include skill and knowledge which had the potential to produce yields to capital investment.

Scholars in this area generally agree that Schultz (1971) and Becker (1964), Nobel Prize Winners in Economics, set the framework for ideas about human capital and its theorisation. Theirs was a quantitative focus on the role of the 'workforce' in the hope that a study of its attributes would produce greater predictability about the economic value and productivity of workers than other social science studies were capable of. Schultz was concerned to understand the laws relating to the rates of return on the investment, costs and benefits of education and training, while Becker developed HCT, based on Schultz's research on the return-on-investment, and introduced the concept of human capital both in relation to business firms and more generally. Human capital theory suggested that education or training raises the productivity of workers by imparting useful knowledge and skills, hence raising workers' future income by increasing their lifetime earnings. He argued that expenditure on training and education is costly, and should be considered an investment since it is undertaken for the purpose of increasing personal incomes. The consequence of this was to regard education as just such an investment – as distinct from investments in consumption whose benefits were regarded as immediate. Following this line of thinking, human capital theorists argued that 'much of the unexplained increase in productivity, wages

and economic growth recognised by economists could be explained by investments in human capital'.[7] Indeed individuals too would benefit through the growth of their human capital by such investments in education and training. As Psacharopoulos (1987) was to argue, governments too are enjoined to make such investments to enhance economic growth.

Over the next several decades these approaches have been embellished by a number of subsequent writers on the subject, all of whom have basically relied on the assumption that formal education (and training) is both instrumental to productivity increases, useful for individuals and has wider economic benefits. The effect of these approaches on the role ascribed to education and training have been foundational and prescriptive. Especially as an expression of the global dialogue about the necessity of education, its commodification and marketing, and the propagation of the idea of a 'knowledge economy', these approaches have achieved the status of mantra and drowned out virtually all other conceptions about education's social role and purposes. They have subsumed attempts at thinking about the broader remit of education in society (based on the its cultural, historical, linguistic or social context, or the divergent systemic conditions that exist in countries having widely differing histories and trajectories of 'development' and change) as part of the agenda for economic output and growth. Despite any 'internal differences' evinced in the perspectives of those who have used these approaches, this dominating approach to education's instrumental role in economic systems has come to be taken for granted – uncritically.

Local Imitations and Importations

In South Africa, research on the relationship between education, labour markets and the economy more generally has been pursued by a number of well-funded institutions notably the Centre for Development and Enterprise (CDE). The CDE's efforts are replicated by some academics primarily in the economics departments of some universities and other pro-business, 'independent' think-tanks. Their research is reflected eclectically in a wide range of policy documents, strategies, plans and pronouncements, all of which have in the main adopted an uncritical approach to the dominant conceptions about unemployment as well as education and its role in society. In a classic case of dissimulation, the CDE (2011) produced a workshop report titled, 'A fresh look at unemployment-a conversation among experts' which largely re-cycled well-worn yet discredited (as we will show) perspectives. According to the CDE (ibid:2), 'What, we asked [the experts], is preventing us from creating more jobs?' Predictably, the CDE (ibid:7) concluded that:

> we need to address the gap between the poor productivity of young, unskilled, inexperienced workers and their employment costs. This requires a fundamental re-examination of the labour market regime with a view to facilitating the emergence of lower wage industries and businesses . . . Labour market reforms

> of this kind would create opportunities for people who could not expect to find jobs in existing industries and firms.
>
> South Africa needs to learn the lessons presented by Newcastle's clothing industry. In this town (with an unemployment rate of 60%), workers have shown that they are willing to accept wages below the minimum levels prescribed by the industry's bargaining council, and have attracted more clothing factories as a result . . . Events in the Newcastle clothing industry should be seen as a model for a new industrial structure.

In other words, the key 'fresh' solution for the millions of unemployed this august gathering of 'experts' could come up with amounts to support for sweatshop-like low wage industries to compete with cheap imported goods from sweatshops abroad.

A legion of commentators largely employed by financial institutions, tediously feed South Africans a daily diet of market fundamentalism through the print and electronic media. Their mantra is usually a permutation of the following clichés: 'The labour market is too rigid and inflexible'; 'We must be competitive and entrepreneurial'; 'We need more skills'; 'Education fails to provide young people with skills for employment'; 'We need more investment and economic growth'; and 'Labour unrest scares away investors'. Rarely are dissenting voices heard and the simplistic statements and platitudes of these 'experts' are seldom challenged by journalists. The emphasis placed on the relationship between education (schooling and post schooling in the main) is invariably about how education and training both at the individual and systemic level can enhance the possibilities for gainful employment. Gainful employment is invariably a reference to the possibilities for income generating work transacted through a wage relationship. It is regarded as both a consequence of economic development through the growth of the economy and as necessary to stimulate and enhance the very possibilities for aggregate economic growth through education and training. The general orientation of the high-skill discourses in the public domain, and in the media in particular, reflects the view that high-skill formation automatically leads to higher economic growth.[8]

A Critical View of Reductionist Economic Approaches

We hope to show there are serious limitations in the prevailing discourse about education and training's role in society. The approaches we refer to (about the role ascribed to education as essentially an investment of capital) do not acknowledge the scholarship contained in a growing body of literature, empirical studies and analytical writings about this issue. We argue in essence that education might increase employability but is not an automatic guarantee for full employment; that an instrumentalist view of the role of education is unhelpful especially as such a view is always based on a raft of unjustified claims about the outcomes of education and

skills in capitalist societies; that education and training is not simply a handmaiden for resolving the problems of low economic output; and that a wide range of exogenous factors and social relations (inherent in all societies) circumscribe the potential value of education and training.

We point to some of the complex elements and exogenous conditions shaping the relationship between education, labour markets and the economy. We draw on a body of research and writing on the subject that is critical of conventional views about the relationship between education and socio-economic development. What is striking in the relevant literature is the idea that the relationship between education and the economy is not separable from a range of other social, economic, political and cultural conditions in society. The idea that there is a direct and positively causal connection between education and the economy obfuscates the reality that education is not synonymous with 'employability', that is, the possession of 'knowledge', 'skills', 'competencies', 'attributes' and 'understanding' that might be gained through education, and is not a guarantee of employment and participation in the labour market.

The literature on these issues, though it may not always refer directly to the underlying socio-economic pathologies and the structural conditions inherent in the prevailing global economic system, nevertheless points to a number of factors relating to these conditions and suggest that conventional approaches have limited explanatory value. Much of the present research and thinking on these issues simply ignores the importance and deeper analytical implications of this critical literature and the need to think more coherently about the relationship between education and *society* – not the economy alone. Moreover policy makers and analysts in developing countries like South Africa are wont to borrow policies and their prescriptions from developed countries – largely from Europe and North America, regardless of the vastly differing histories, contexts and circumstances under which such policies were developed or the approaches to development that these signified. Even worse is the fact that imitative approaches to the relationship between developed economic systems and education and training policies are adopted quite uncritically and especially without any regard, as we will show, to the disapproval to which such policies have been subjected. In effect although many of the borrowed policies have been shown to be ineffective in the very countries of their origin, they continue to be purveyed as policies and 'best practice' useful to development elsewhere. Such policy borrowing is fostered, regrettably, not only through the work of 'expert' consultants (often from developed economies) but also by 'native' researchers who have little regard for the critical literature on this issue and who are intent on providing 'solutions' based on these ostensible 'best practices' – some of which have been severely criticised by researchers in the very countries of their provenance.

The critique implicit in such research applies moreover to both capitalist and state dirigiste systems that demonstrate high levels of investment in formal education anticipating that its 'products' will meet the demands of modernisation and industrial development having 'developed techniques for selecting and training their members

to fill occupational positions in a hierarchical division of labour'. Indeed as Brown, Green and Lauder (2001:5) argue:

> The increasing tendency for the faith bestowed in the educational system to take the form of a secular religion is manifest in the flood of complaints from politicians and employers about the failure of the educational system to serve the needs of an advanced economy, especially at a time of high youth unemployment.

As early as the 1970s Williamson (1979:11) averred that at best the role of education in relation to economic growth is 'paradoxical'. For him, the argument that growth in economies that is not attributable to fixed-capital investment, must necessarily be attributable to investment in education or any other similar social investment, is untenable as there is little empirical proof about the connection between economic growth and educational investment in poor societies (ibid:20–21). For him:

> Whether, therefore, education can play a role in promoting economic development or in hindering such development is something which cannot be assessed using the crude quantitative techniques of economics . . . Programmes for education cannot be discussed outside of the broader social ends they reflect. Ends themselves are not, however, disembodied; they reflect the interest and power of different social groups. Planning in education is therefore never neutral, never a matter reducible to criteria of technical efficiency . . . The networks of international aid, the increasingly opaque workings of education ministries may mask the political issues but they exist, nevertheless (Williamson 1979: 209).

In the same vein Bowles (1980) points to the phenomenon of retrenchment requiring 'a re-examination of the conceptual bases of the now-faded optimism of the international educational establishment'. He (Bowles 1980:206) was sceptical of the widely held view of economists and other social scientists that in poor capitalist countries

> educational policy can be a major instrument in promoting economic growth and, more recently, in achieving a more just distribution of economic rewards. This putative egalitarian and growth-inducing efficacy of educational policy is based on two fundamental propositions: first, that educational policy has strong direct or indirect effects on the rate of economic growth and the distribution of economic rewards; and second, that educational policy is sufficiently independent of the main economic relations of society to be considered an 'exogenous policy instrument'.

Both Bowles (1980) and Williamson (1979) emphasised the importance of 'exogenous' factors and the underlying conditions of 'interest and power' that frames the possibilities for education. Easton and Klees (1992), stress the importance of social, cultural and political factors on the labour market. They refer to the complementarities between demand and supply sides 'of the educational equation'.

For them arguments about education must be a part of a broader range of social and economic policy interventions to 'yield better quality work opportunities'.

Lewin (1993) points to factors such as 'political instability, economic mismanagement, widespread recession, falling commodity prices, rising interest rates and levels of indebtedness, and increased distributional skews' that are implicated in the 'human resource status' of countries. Without an understanding of these exogenous factors, serious analysis of the relationship between education and the economy is not possible. In a later article, Lewin (2001:4) goes somewhat further arguing that

> it is not possible to prove unambiguously that investment in SET [Science, Engineering, Technology] leads to increased rates of development. Attempts to link participation rates and other indicators of investment in SET with development indicators do not lead to simple associations or clear causal relations . . . This is not surprising given the number of factors that may determine the quality of the investment in SET, the rate of economic growth and improvements in other forms of social well being.

The related issue about the content of high-skills is also poorly understood and is largely glossed over by public commentators on the subject. Knight and Yorke (2003) provide a useful framework for understanding the complex nature of the relationship between skills formation and national economic performance. Writing about the United Kingdom (UK), they refer to both the Robbins Report of 1963, that pointed to four aims of higher education (ibid:1) and the later Dearing Report of 1997 which also emphasised the role of higher education in the modern economy, arguing that 'education and training [should] enable people in an advanced society to compete with the best in the world'. They argue that little is known about the precise nature of these skills and how they may be acquired. A number of important attributes make up the composite of skills that may be necessary for the prospect of 'employability'. These include such attributes, in undergraduates, as abstraction (theorising and or relating empirical data to theory, and/or using formulae, equations, models and metaphors), system thinking (seeing the part in the context of the whole), experimentation (intuitively or analytically), and collaboration (involving communication and team working skills) as well as commentary on skills for employability (ibid).

They also argue that the proportion of graduates in employment is often used to measure the performance of higher education institutions. This measure is 'problematic' since it does not account for changes in the labour market due to factors outside the control of higher education itself. It is inappropriate to confuse the acquisition of skills with 'employability' since the acquisition of particular educational attributes is not itself a guarantee of a job even though it may facilitate its possibility. Employability is largely about a set of attributes exhibited by potential employees relative to the needs of a changing and dynamic economic environment. These capabilities are necessary to 'specialist expertise' and enable such 'specialists' to use their skills in particular situations. Consequently, 'employability is . . . a (multifaceted) characteristic of the *individual*' (ibid:1) and is defined as 'a set of

achievements, understandings and personal attributes that make individuals more likely to gain employment and be successful in their chosen occupations'. This definition implies that employability is 'probabilistic' – it is not certain, the choice of occupations is 'likely to be constrained', and having a job and being successful in it 'should not be conflated'.

Knight and Yorke (ibid) also interrogate the concept of 'skills' given the references to such concepts as 'core', 'common', 'personal transferable', 'key' and 'generic'. They argue that a rounded view of 'skills' implies 'qualities and skills relevant to employment and other situations, which is properly underpinned in theoretical terms [and] could lead to a more valuable – and valued – contribution to the profiles of successful graduates'(ibid:7).

They prefer the term 'understanding' and are critical of the use of the term 'skills' as a key to employability 'believing that it lends itself to the view that skills are determinate achievements that can be readily measured and unproblematically transferred from setting to setting' (ibid:9).

Knight and Yorke deny therefore that there is a fixed relationship between the curriculum and employability since the relationship between these is dependent on a range of variables such as the contexts within which learning takes place, 'student recruitment patterns, envisaged labour markets, and institutional (and departmental) traditions'. To these we might add the complexities of teaching and learning processes, the demands of acquiring deeper disciplinary knowledge in particular educational domains and the problems of assessment. These are related very much to questions about cognitive abilities and a wide range of social, psychological, experiential and other personal factors. Moreover, learning strategies prevalent and successful in one environment are not necessarily transferable to other environments because questions of context, culture and history also play an important role in the development and evolution of knowledge and the systems for its dissemination.

On the issue of 'employer needs', Rikowski (2001:30) argues, following his study of these 'needs' in British Industry, that 'employer's accounts of such needs are typically confused or contradictory'. He questions whether an approach based on employer needs can form a sound basis for the post-16 curriculum; and whether these needs can be taken into account in constructing the curriculum for the future. For him there are 'a number of dimensions' that need to be considered in answering difficult questions about 'skills needs'. These difficulties cannot be resolved by 'entirely inappropriate and simplistic questions of employers regarding their educational needs', since:

> From an employer's perspective, the chaos of educational and training 'needs' flowing from a consideration of various categories and functions of capital is 'coherent'. Capital is anarchistic; the summation of its 'needs' do not make rational sense. From the standpoint of capital (the standpoint of an extra-human social force) the chaos *is* coherent; to try to externally forge coherence out of endemic chaos is – well, *incoherent* (ibid:37).

A way out of the problem of defining 'needs' would therefore be to interrogate the concept of 'need' further, to think of different categories of need, set out the criteria for meeting these needs 'and to conceptually differentiate needs from wants' (ibid). This, in his view would determine the types of 'needs' better and theorise it in relation to 'the production, exchange, and distribution of commodities'. Defining the particular attributes of employees (and potential employees) requires to be clarified. Such clarification cannot be accomplished by 're-interpreting employers' needs statements as statements about labour power, but starting from the position that these statements are expressions of perceived labour-power needs'.

Many of these points are also implicit in Ashton and Green (1996). They too deal with the proposition – 'More and better skills, so the argument goes, and prosperity will follow'. Yet even this consensus 'is deficient' in a number of ways. Firstly, there is 'no linear and automatic connection between skills formation and economic performance'. Secondly, the link between skills and performance 'has to be seen in a social context' which both 'influences the strength of the link, and helps to determine the variables of interest, especially the nature of skill. Furthermore, these have to be viewed in the context of potential political conflict at a national and international level and in the industrial relations system. For them, these considerations are not explained by neoclassical economic theories of skills acquisition – which emphasise 'individualistic utility functions'. Thirdly, despite the acquisition of considerable bodies of data through a number of studies 'there remain significant areas of ignorance' especially as concerns the complex statistical and econometric problems involved in arriving at a scientifically acceptable standard of evidence about education and training effects on the economy.

Building on these criticisms Ahier and Esland (1999) provide a sustained critique of the idea that educational outcomes are reconcilable with the demands of the economy and contest the idea that 'it is the system of education and training which holds the key to national economic improvement and prosperity' – a view that still 'remains the cornerstone of current policy' in the UK. They refer to the widely accepted notion that

> in order to compete in the global economy, the modern nation state requires a highly trained and 'flexible' workforce, in which 'knowledge and people-based skills' form the basis of 'a self-perpetuating learning society' has become the *sine qua non* of the age (ibid:3).

Their critique about the political underpinnings of educational reform in the UK pointed to the tide of similar reforms in other countries like the United States (US), New Zealand and Australia, as collectively providing the main ideological and managerial thrust behind the pursuit of the free market, and the ideas of 'economic globalisation'. Tellingly, in the light of contemporary developments, they argued that the objective of the legislative changes of 1988 and 1992 in the UK, (in respect of higher education) was to 'bring about a reduction in the discretionary areas of professional practice within education and training institutions while strengthening

market and managerial controls over the ways in which teachers performed their jobs' (ibid:1). This represented the politics of the New Right, introduced in the era of Thatcherism and continued by the post-1997 Labour Party government. Although the latter government attempted to mediate some of the extreme characteristics of previous policy 'the neo-liberal promotion of free market economic globalization has continued to provide the overarching framework for Britain's political economy as it enters the new millennium' (ibid).

Similarly, Barnett (2013:1) talks about the 'lack of ideas of the university that are critical in tone, positive in spirit, and with an awareness of the deep and global structures that underpin institutions' against the background of

> massive global forces affecting universities, such as the emergence of a global knowledge economy, marketisation and neoliberalism. More recently, too, global changes in knowledge creation and circulation have been noted, so helping to form cognitive capitalism, as it has been termed. Partly as a result of such global forces, we are witnessing the rise of the entrepreneurial university. This is a university that has come to understand that it is in command of services and products intimately connected with the formation and transmission of knowledge that have exchange value in the market.

Wolf (2002:xiv), reminds us of the importance of education to citizenship and values, the importance of a 'good society' and 'the intrinsic benefits of learning', together with the benefits of education for individual incomes. She warns against the 'two naïve beliefs' (that) have a distorting influence: the belief in a simple, direct relationship between the amount of education in a society and its future growth rate, and the belief that governments can fine-tune education expenditures to maximise that self-same rate of growth. For Wolf (ibid:25), 'the history of public education in any modern democratic state concerns issues of identity and citizenship quite as much as the instilling of more or less utilitarian skills'. The debate about the 'good society' is thriving according to Meyer (2013) largely because of the erosion of trust in the European Union and the need to understand and extend the reach of the ideas about democracy and society.

The education philosopher Greene (1988:12–13) too, in her seminal book, 'The Dialectic of Freedom' suggested, as early as 1988, that the purpose of education was to provoke individuals

> to become empowered to think about what they are doing, to become mindful, to share meanings, to conceptualize, to make varied sense of their lived worlds. It is through education that preferences might be released, languages learned, intelligences developed, perspectives opened, possibilities disclosed. I do not need to say again how seldom this occurs in our technicized, privatised, consumerist time. The dominant watchwords remain 'effectiveness,' 'proficiency,' 'efficiency' and an ill-defined, one-dimensional 'excellence.' Reforms or no, teachers are asked to teach to the end of 'economic competitiveness' for the nation . . . Whether the students are rich or poor, privileged or deprived,

> the orientation has been to accommodation, to fitting into existing social and economic structures, to what is given, to what is inescapably *there*.
>
> Little, if anything, is done to render problematic a reality that includes homelessness, hunger, pollution...even if it includes the amassing of fortunes, consumer goods . . . Little is done to counter media manipulation of the young into credulous and ardent consumers . . . [and] that human worth depends on the possession of commodities, community status, a flippant way of talking, good looks . . . In the face of all this, school people are asked to increase academic rigor, ensure the preparation of a work force for 'high technology' . . . Confronting some of the most tragic lacks in American society, some of the saddest instances of dehumanization, they offer promises of 'career ladders,' 'board certification,' . . . talk resembling what Kundera calls 'kitsch'.

One of the most insightful critiques directly related to the idea of human capital formation is that by Brown, Green and Lauder (2001). In a sub-chapter devoted to addressing 'what's wrong with human capital theory', they set out four core propositions against the 'radical assertion in the 1960s that education was an "investment" for governments and individuals' (ibid:13). They refer to Block's (1990) analysis which provides a basis for the 'widely acknowledged problems' associated with the ideas of HCT. The first of their criticisms is directed at arguments relating to the 'supply side' in which human beings are dealt with no differently from machines and are reduced to no more than a 'bundle of technical skills' useful to the economy, perpetuating the 'mechanistic' role of human beings as no more than 'expensive machines'. The principal problem with this approach they argue was that it abstracted human labour from the conditions of its social development and as independent of the social relations which provide the context for understanding work in capitalist societies. In their view, the more the economy is associated with the 'knowledge rather than the production of simple products, the more social and cultural issues of identity, motivation, and high trust have become central to skills, productivity, and economic competitiveness' (ibid:14). So too, they aver, is the assumption that human beings are driven by a one-dimensional view based on the maximisation of self-interest. Human motives are multi-dimensional and contextual, requiring a much more textured and complex understanding of the requirements of human development including in relation to the concept of 'knowledge' and 'skills'. Moreover, skill is not simply to be regarded as the acquisition of technical capabilities but the very ability to learn continuously and socially, enjoining us especially to understand that, as has been argued by Zuboff's (1988:395) work on computer based technologies, that 'learning is the heart of productive activity . . . learning is the new form of labor'. Far from being a technical activity, learning draws on a wide range of cultural and historical attributes for the development of cognitive abilities.

Brown, Green and Lauder (2001:17) also point to factors on the 'demand side' and especially to the assumption that investments in knowledge and skills will invariably augment its own demand, ignoring the 'complexities of the empirical world in which many factors, including existing management practices, attitudes to women,

or industrial relations, shape the skills content of particular jobs'. While conceding that new technologies have an impact on the demand for skills, these demands arise in the context and circumstances created by capitalism as the 'central driving force' which shapes the demand for and application of technological innovation. In effect a much wider and more complex set of issues arise in which technological innovation is invariably related to the broader and more fundamental goals of profitability and financial gain. At best technological innovation has uneven impacts on skills development since some jobs become quite redundant and 'deskilled' while others require new forms of skilling. Changes in the structure of economic activity accompanying technological change have meant fewer employment opportunities in consumer goods manufacturing. Despite these declines, employment in manufacturing remains critical as even 'post-industrial societies' do not evince the ostensible decline of low-skilled employment. Consequently, they argue that the 'linear model' which presupposes a direct line between technological change, education, skills and high wages 'is inadequate as a description of the route to a high skills economy' (ibid:20).

They also maintain that 'it is notoriously difficult to measure the contribution of human capital to productivity and economic growth' despite the many attempts to do so (ibid:5). The difficulties in doing so (especially in quantitative terms) relate to what is often left out in the measurement of skills, the gendered nature of measurement and the very obsession with the idea of measurement itself which ignores the process of skill formation as having social attributes that are not easily measurable. They point to the exaggerated claims by human capital theorists about the idea that workers operate in a global rather than country specific labour market and the oversimplification of the real lives of workers. So too is the associated idea of the 'end of the nation state', since states continue to have a great deal of power to mediate the problems that impact on workers' lives. Brown, Green and Lauder (ibid:29) argue that:

> Globalization has made it more important to have a democratic political voice that serves the 'national interest'. What is more, there is no other institution apart from the nation state that has the power and moral authority to balance the interests of individuals and social groups.

Notwithstanding these encompassing criticisms, 'human capital' approaches remain undeterred in the public and private discourses about education. Policy makers and other powerful voices continue to rely uncritically on formulaic propositions about how education can 'solve' the multiplicity of social and historical challenges facing developed and developing societies, ignoring these and other analytical perspectives in which similarly sceptical views about the economically determinist role of education and training in society is espoused. As has been shown, these sceptical writings point to a range of contingent factors which affect such a relationship. Their criticism of the conventional 'human capital' approaches is so wide ranging that it is simply inconceivable that its implications can be ignored. Indeed it begs the question about why this literature is ignored and whether that is simply a consequence of

ignorance on the part of policy makers (and their consultants) or is a matter of politically expedient choice.

Human capital theory and its associated explanations have persisted for many decades despite the limitations we have referred to. We can advance at least three possible explanations for this. Firstly, the salience of particular social theories is often an expression of the resilience of the social systems in which they are located and which they seek to validate through their mutually supportive iterations as was exemplified by the obsequious social science produced by academics that supported apartheid. Consequently, despite the contradictions evinced by such ideas they are sustained by the hegemony of the social system they seek to rationalise. As it is becoming more widely accepted that the explanations offered by HCT are inadequate and assailable, its value will decline, and the search for new approaches will gather momentum.

The second reason why HCT has been so resilient is hinted at in our general argument, by reference to its relationship to neoclassical economics, (and especially as an adjunct of labour economics within it) which continues to occupy such a dominant position in the field. Added to this is the fact that many thousands of students worldwide are fed a daily diet of nothing but HCT in their academic coursework in economics, management studies, 'business science' and a host of associated studies. Thus, they have no conception of any alternative framework by which to explain the social and economic phenomena 'captured' by HCT. The decline of HCT is therefore likely in the first place to be predicated on the fate of neoclassical economics itself. Thirdly, and perhaps most injuriously, politicians, social commentators, the captains of industry and their 'human resource managers' and even trade union leaders continue to espouse both the vocabulary and the explanations of human capital discourse in the most unproblematic way, enhancing its spurious status as explanation and providing it with a legitimacy beyond the academic arena in which it is found. The critique we argue suggests an alternative approach which recognises the sociology of skills formation, the relationship between economic performance and skill formation as socially constructed and the wide range of historical, endogenous and exogenous contextual and global factors which are relevant to any meaningful approach to the question of education and society. Skill formation has a wider remit than economic ends alone and concerns political, social, cultural and environmental goals which are inseparable from economic ends and integral to each other.

More generally, there are also a number of issues relating to the very nature of the assumptions which inform the perspectives of those who purvey the relationship between education and the economy as a directly instrumental relationship – more education equals more economic growth and is both a cause and consequence of higher levels of labour market participation. This proposition needs to be examined critically because underlying it is a set of assumptions which are both untested and problematic. We have examined these assumptions more fully in Chapter 1 of this volume.

Conclusion

Our approach is hardly as far-fetched or capricious as might be suggested by the opponents of the critical perspective we espouse here, especially if we recalled that in fact, in South Africa in particular, in the policy pronouncements of government and in the stated missions of many academic institutions, the idea of education and training as essential to economic development has always bounded the importance of an encompassing view of its role and purposes. A raft of democratic and value-based propositions as paramount to the role of education and training systems is almost always emphasised as necessary and valuable both for the collective citizenry and for individuals. This habit of stating the broader remit of the idea of education's 'responsiveness' to both the economy and society is often however no more than a genuflection to the imprimatur of the *Education White Paper 3: Programme for the Transformation of Higher Education* (DoBE 1997) in which transformation and restructuring of the higher education system is informed by the need to realise certain fundamental goals which include, but are not limited to, economic objectives. These arise from the Ministry's Vision 'of a transformed, non-racial, non-sexist and democratic higher education' expressed in the White Paper 3 (ibid:1.14) as the necessity to:

- promote equity of access and fair chances of success to all who are seeking to realise their potential through higher education, while eradicating all forms of unfair discrimination and advancing redress for past inequalities;
- meet, through well-planned and co-ordinated teaching, learning and research programmes, national development needs, including the high-skilled employment needs presented by a growing economy operating in a global environment;
- support a democratic ethos and a culture of human rights through educational programmes and practices conducive to critical discourse and creative thinking, cultural tolerance, and a common commitment to a humane, non-racist and non-sexist social order;
- contribute to the advancement of all forms of knowledge and scholarship, and in particular address the diverse problems and demands of the local, national, southern African and African contexts, and uphold rigorous standards of academic quality.

In other words, the White Paper 3 (ibid) recognises a 'number of different but related purposes for higher education' as part of its transformative agenda. Even while it refers to the need to address the development needs of society and 'provide for the labour market, in a knowledge-driven and knowledge-dependent society, with the ever-changing high-level competencies and expertise necessary for the growth and prosperity of a modern economy', this purpose is circumscribed by the realisation that higher education's purpose is

> To meet the learning needs and aspirations of individuals through the development of their intellectual abilities and aptitudes throughout their lives. Higher education equips individuals to make the best use of their talents and of the opportunities offered by society for self-fulfilment. It is thus a key allocator of life chances, an important vehicle for achieving equity in the distribution of opportunity and achievement among South African citizens (ibid:7–8).

The language of the White Paper 3 does not suggest a reduction of the role of higher education to economic ends alone and there is no reason to believe that the premises it espouses would be different for other forms of post-school education. Its view is more encompassing and wide-ranging. It speaks of a 'growing economy operating in a global environment' together with questions of 'democratic ethos and culture'; 'a common commitment to a humane, non-racist and non-sexist social order'; the 'advancement of all forms of knowledge and scholarship'; 'equity of access and fair chances of success'; 'the development of their intellectual abilities and aptitudes throughout their lives'; 'an important vehicle for achieving equity in the distribution of opportunity and achievement'; 'the socialisation of enlightened, responsible and constructively critical citizens'; and 'the creation, sharing and evaluation of knowledge' amongst its objectives (ibid).

These formulations provide insights into how the critical challenges facing education post-apartheid were interpreted. The White Paper could not, for instance, have been formulated otherwise since it recognised the context of its application in a country emerging from the crisis of late-apartheid capitalism and its attendant characteristics – militarisation and its fiscal consequences, increasing regime illegitimacy, the mounting resistance against the state, international condemnation and isolation of the regime. And these abiding realities themselves were an outcome of the deeper racial and socio-economic structures and the affective socio-psychological outcomes of centuries of oppression and degradation of the majority. Since many of these conditions remain pervasive, even now they imply a continuing relevance in the approach of White Paper 3 to the broader reach and purposes of education systems.

In post-1994 South Africa, the objectives of the higher education system were envisioned as more than 'economic' and emphasised a range of humanising, equity, social access and other just goals. It is in this context that the issue of skills would need to be understood, since the requirement of skill is both an end for individual advancement and a larger social goal, it has both employment related and citizenship attributes. For that reason the White Paper 3 could hardly be interpreted as confirming the 'economic' ends of education alone.

At the present time informed discussion about the relationship between education and the economy is bedevilled by decidedly instrumentalist interpretations of the 'economic role' of education and training. This unhappy reality obliges researchers and analysts to provide alternatives to the pervasive misconceptions on which narrow interpretations of education's role are predicated. Regrettably, outside the select body of academic researchers who have attempted to examine the question of skills formation, very little is known about its complex demands and even less about the

relationship between skills acquisition and employment and this is compounded by the limited appreciation of the complexities of knowledge formation. The critical literature we refer to suggests that there is a profound conceptual problem which pervades the thinking and much of the research in this area because of the untested assumptions that inform the relationship between education, skills development and employment. The implications of these assumptions that pervade public policy and discourse, and market driven academic discussions about education and skills development, is that alternative approaches to these issues are deliberately underrepresented or shut out and the negative implications of the dominant approaches are obfuscated.

The issues raised by the numerous analysts we refer to have profound implications for South Africa too, given the considerably higher levels of un-and-under employment, and the constraints on labour participation rates, the social and historical factors shaping the nature of the labour market and the power of corporate global trade and investment regimes. Accepting the link between education, training and its role in promoting economic capability does not imply that such a relationship is linear or simple and immediate. That relationship needs to be understood in all its complexity. It requires an elucidation of the factors that enter into the relationship and an analysis of the context in which educational systems have evolved, its historical characteristics and the implications of these for systemic change, so that this relationship can be understood more intelligently than through the crude and uninformed formulations that populate the public discourse of some political and business leaders, 'expert' commentators, bankers and economists and unhappily even some higher education leaders and commentators.

In essence the efficacy of educational and training systems (sometimes referred to as SET development) in any country is dependent on a wide range of factors not the least of which is the structure and form of the particular economic system under consideration – its historical and cultural attributes. The *potential* of high level skills for the well-being of society cannot be denied, provided that progressively oriented education institutions conceptualise their role in socially meaningful ways. Such conceptualisations are not neutral and must simultaneously address (through the process of learning) the underlying social reality that provides the context for knowledge acquisition and reproduction. The value of education and training is constrained or enhanced by the social relations that it engenders in the process of knowledge production. Like other social regimes and the institutions through which they find expression, education and training generates relations of power in society. The assumption that its primary role is that of training for a wide range of labour market needs, increasing productivity, local and global competitiveness, for the greater market share of national economies, and that it engenders positive outcomes for all members of society, is disingenuous or naive.

High levels of skill can strengthen economic and social performance but they do so in the context of the prevailing arrangements of property, wealth, incomes, racial and gendered (and other) relations in societies; are contingent on national and global economic and social policy, trade and finance regimes and 'labour relations' policies.

In effect they are dependent on the impact and influence of the deeply structural attributes that characterise any economic system and the attributes of social relations of power inherent in all societies infused with historical inequality and developed social hierarchies of privilege and control. Claims about the availability of education and training based on ability regardless of social status and power (or marginalisation) is misleading since the effects of education and training as expressive of such relations of power continue to reproduce social inequality.

Notes

1. It is also reinforced by a barrage of often disingenuous statements by state officials. An example is the two-page advertisement paid for by Statistics South Africa (*Mail & Guardian* supplement, 'The World of Work', 24–30 May 2013). While the banner headline on both pages of this advertisement reads 'Unemployment figures show education is key' the contents of the article refer to the tenuous link between education and unemployment in a brief and curiously contradictory manner. It reads: 'In terms of education level, among 15–24-year-old youth with no education, three out of every five are not in education, employment or training (NEET). At the higher end of the education spectrum, among 15–24-year-olds with tertiary education, 41.5% are NEET. The problem here is clearly the lack of employment opportunities, although it may also reflect a mismatch of skills in the labour market' (Page 1). The only other mention of the relationship between education and unemployment is a few lines at the end of the article where the Statistician General Pali Lehohla is quoted as saying, 'A quarter of the labour force cannot find a job. The youth make up 71% of the unemployment figures. Of the pool of labour supply, 51.2% has not completed matric and 82.6% do not have a tertiary education. It is clear education is the key to a productive labour force' (Page 2).
2. In their book, 'The Spirit Level' Wilkinson and Pickett (2009) provide revealing empirical data that show more unequal countries and more unequal regions within countries attain lower educational outcomes than more equal ones.
3. For a more detailed account of the processes of 'deskilling' in various industries see Zimbalist (1979).
4. Neoclassical economics is a term variously used for 'approaches to economics focusing on the determination of prices, outputs, and income distributions in markets through supply and demand, often mediated through a hypothesised maximisation of utility by income-constrained individuals and of profits by cost-constrained firms employing available information and factors of production, in accordance with rational choice theory. Neoclassical economics dominates microeconomics, and together with Keynesian economics form the neoclassical synthesis which dominates mainstream economics today.' Although there are many summaries defining neoclassical economics, we find this Wikipedia example particularly useful (http://en.wikipedia.org/wiki/Neo-classical_economics). See also interview with Philip Mirowski (2005).
5. In *The Great Transformation*, Karl Polanyi (1947) problematised the commodity status of labour. He described it as 'fictitious' and asserted the human aspect of labour necessitates 'protection'. In bringing Polanyi's mature works to bear on these claims, this chapter uses the 'fictitious commodity' concept to highlight the tension in neoclassical theory between concrete reality and its idealist construction of the economy. This contradiction directly challenges the veracity of the self-regulating market. The chapter develops two related themes. The first is Polanyi's critique of the neoclassical conception of 'the economy' as an ideal (market) construct which gave rise to the notion that labour could

be regulated by the forces of supply and demand. The second is the lack of logic in the notion of a 'self-regulating' market and Polanyi's appreciation of the concrete tendencies of capitalist economies to develop institutional arrangements that ensure the economy is always, and necessarily, more than 'the market'. The reference is from Paton (2010) whose reference is to Polanyi (1947).

6. See also Reinert (2012:2) in which he argues that the financial crisis of 2008 is attributable to 'a type of theory that converted the economics profession from a study of real world phenomena into what in the end became mathematized ideology'. Also interesting is the description of development of economic theory in the website of the Post-Autistic Economic Network http://www.paecon.net/StrangeHistory.htm titled 'The Strange History of Economics' which describes neoclassical economics as a model that grows out of the 'image of Newtonian mechanics'.
7. In a paper on the relationship between curriculum, educational expansion and economic growth, Benavot (1991) has argued that the curricular content of mass schooling, as distinct from its quantitative expansion, is related to national economic growth, although not for all subject areas usually thought to be economically relevant and not across all types of countries.
8. On occasion a debate occurs such as the one between Leon Louw, perhaps the best known proponent of 'free market' ideas, Zwelinzima Vavi (General Secretary of COSATU), and Mike Schussler (an academic economist) (2 May 2005, SAFM). The debate was illustrative of the wide divide in social thinking about these issues since it actually advanced three different and competing conceptions about these issues. Louw of the Free Market Foundation was predictably of the view that freeing the markets of all restraints over the 'price' of labour was the panacea to the problems of the economy, while Schussler argued the case for 'skills' as the critical factor, and Vavi remained skeptical about both these views which he regarded as much too simple given the complex array of factors which had to be dealt with in South Africa, such as high unemployment, poverty and inequality and the history of employment practices under apartheid regardless of human rights violations.

References

Ahier, J. & Esland, G., 1999, *Education, training and the future of work, social, political and economic contexts of policy development*, Routledge, London.

Arnsperger, C. & Varoufakis, Y., 2006, 'What is neoclassical economics? The three axioms responsible for its theoretical oeuvre, practical irrelevance and, thus, discursive power', *Panoeconomicus*, 1, 5–18.

Ashton, D. & Green, F., 1996, *Education, training and the Global Economy*, Edward Algar, Cheltenham, UK.

Barnett, R., 2013, 'Wanted: New visions of the university', *University World News* Global Edition, 16 March, p. 263.

Becker, G.S., 1964 (1993, 3rd ed.), *Human capital: A theoretical and empirical analysis, with special reference to education*, University of Chicago Press, Chicago, IL.

Benavot, A., July 1991, Curricular content, educational expansion and economic growth, PRE Working Papers, The World Bank, Washington, DC.

Block, F., 1990, *Postindustrial Possibilities: A Critique of Economic Discourse*, University of California Press, Berkeley.

Bowles, S., 1980, *Education, class conflict and uneven development*, Pergamon, Oxford.

Braverman, H., 1974, *Labor and monopoly capital: The degradation of work in the twentieth century*, Monthly Review Press, New York, NY.

Brown, P., Green, A. & Lauder, H., 2001, *High skills, globalization, competitiveness and skill formation*, Oxford University Press, New York, NY.

Cahill, D. & Paton, J., 2011, '"Thinking socially" about markets', *Journal of Australian Political Economy*, 68, 8–24.

Carnoy, M., 1980, 'Can education alone solve the problem of unemployment?', in J. Simmons, (ed.), *The education dilemma: Policy issues for developing countries in the late 1980s*, Pergamon, Oxford.

Centre for Development and Enterprise (CDE), 2011, 'A fresh look at unemployment – A conversation among experts', Parktown, www.cde.org.za.

Department of Basic Education (DoBE), 1997, *Education White Paper 3: Programme for the Transformation of Higher Education*, DoBE, Pretoria.

Easton, P. & Klees, S., 1992, 'Conceptualizing the role of education in the economy', in R. Arnove, P. Altbach & G. Kelly (eds.), *Emergent issues in education: Comparative perspectives*, State University of New York Press, Albany, NY.

Fine, B. 2010, *Theories of social capital: Researchers behaving badly*, Pluto Press, London.

Greene, M., 1988, *The dialectic of freedom*, Teachers College Press, New York, NY.

Hodgson, G.M., 2007, 'An institutional and evolutionary, perspective on health economics', *Cambridge Journal of Economics*, Advance Access, 24 October 2007, 1–22.

Knight, P. & Yorke, M., 2003, *Learning, curriculum and employability in higher education*, Taylor & Francis, London and New York.

Lewin, K.M., 1993, 'Education and development: The issues and evidence', Education Research Paper No. 6, Department for International Development, London.

Lewin, K.M., 2001, *Linking science education to labour markets: Issues and strategies*, World Bank, Washington, DC.

Marx, K., 1867, 1977, *Capital*, vol. 1, International, New York, NY.

Meyer, H., 2013, 'The good society debate is thriving in Europe', *Social Europe Journal*, 3 May.

Mirowski, P., 2005, 'A revisionist's view of the history of economic thought', *Challenge*, 48(5), 79–94.

Paton, J., 2010, 'Labour as a (fictitious) commodity: Polanyi and the capitalist "market economy" ', *Economic and Labour Relations Review*, 21(1), 77–88.

Polanyi, K., 1968, 'Our obsolete market mentality', in G. Dalton (ed.), *Primitive, archaic, and modern economies: Essays of Karl Polanyi*, pp. 59–77, Doubleday, New York, NY.

Psacharopoulos, G. (ed.), 1987, *Economics of education: Research and studies*, Pergamon, Oxford.

Reinert, E.S., 2012, 'Neo-classical economics: A trail of economic destruction since the 1970s', *Real-World Economics Review*, 60, 2.

Rikowski, G., 2001, 'Education for industry: A complex technicism', *Journal of Education and Work*, 14(1), 20–49.

Schultz, T.W., 1971, *Investment in human capital: The role of education and research*, Free Press, New York, NY.

Smith, A., 1957, *The wealth of nations*, vol. 1, J.M. Dent and Sons, London.

Wilkinson, R. & Pickett, K., 2009, *Why greater equality makes societies stronger*, Bloomsbury, New York, NY.

Williamson, B., 1979, *Education, social structure and development*, MacMillan, London.

Wolf, A., 2002, *Does education matter?: Myths about education and economic growth*, Penguin Books, London.

Zimbalist, A. (ed.), 1979, 'Case studies on the labor process', *Monthly Review Press*, New York, NY.

Zuboff, S., 1988, *In the age of the smart machine: The future of work and power*, Basic Books, New York, NY.

3

UNIVERSITIES AND THE 'KNOWLEDGE ECONOMY'[1]

Neville Alexander[2]

Cometh The Time, Cometh The Book

Associate Professor David Cooper (2011) of the Department of Sociology at the University of Cape Town has serendipitously published a book on the changes that are taking place in higher education, especially in South Africa, which has made my task much easier than it might otherwise have been. My analysis and some of the suggestions I will make in this chapter are heavily dependent on Cooper's paradigm, the evolution of which he has so carefully described in a work that, in my view, should become essential reading for all university managers and academic leadership. Having been involved with universities throughout my adult life, it is natural that I have developed a few deeply held prejudices and preferences, some of which will undoubtedly force their way through my effort to present as thoughtful an *Impulsreferat* as I am capable of doing.

Without beating about the bush, let me get to the essential issues. According to Cooper (2011), what he calls the 'second academic transformation', which is manifest in the 'third mission' of the university, is causally related to the 'third capitalist industrial revolution'. This fact has very clear and specific consequences for the structures and the institutional culture of the university in both the North and the South of the economic globe. In particular, the university has – potentially and in many cases actually – become a key component of what is called the 'knowledge economy'. To put it in simple narrative terms: to the first mission (teaching) and the second mission (curiosity driven basic research) of the university, starting in the late 1960s and early 1970s in the United States (US), a third mission (economic development, with its institutional corollary of use inspired basic research) has been added as the result of the symbiotic relationship that developed between knowledge production and transnational corporate requirements and modalities.

The intricate relations between technological developments after World War II; the micro-electronic and molecular biology revolutions; and the economic dominance of trans-national corporations with the corollary vulnerabilities for national sovereignty, all in the context of the hegemony of the monetarist neo-liberal economic orthodoxy after 1973, more or less, are meticulously recorded in Cooper's (2011) study. For the purposes of this chapter, the most relevant aspect is the fact that the traditional research and teaching unit, which goes back to Wilhelm von Humboldt`s idea of the post-French Revolution university and is focused on pure basic research under the guidance of a tenured professor at the head of an institute encompassing post-docs, PhD students and assistants began to give way to differently structured centres of networked researchers at one or more universities, working in partnership with government and industry within a paradigm he calls use-oriented basic research. Paradoxically, it is at research-intensive universities rather than at more application orientated institutions such as South Africa's universities of technology, where this approach has borne most fruit.

To approach the matter from a slightly different angle, the pressures for the deployment of scientific and scholarly knowledge emanating from the discoveries and innovations made possible through the above-mentioned technological revolutions, drew university researchers, departments and whole faculties into the orbit of business, especially industry. This necessitated the 'triple helix' phenomenon involving university, industry and government (U-I-G), initially in the US and Canada, gradually also in Europe, Asia, Latin America and, eventually, in Africa; although it should be noted that given the nature of modern communications and academic networks, this was, and is, not a linear process. This second academic transformation, as Cooper calls it, is dialectically, hence causally, related to the third capitalist industrial revolution, based on the micro-electronic, molecular biology and telecommunications revolutions referred to already.

In response to those who question the empirical evidence for the reality of the second academic transformation, I believe that Cooper (2011:52) is correct when he sums up the position in the following terms:

> the first academic transformation, which began in Germany in the early 1800s, spread slowly across universities of Western Europe and the USA over a period of nearly a century; the second academic transformation of the late 1900s – itself linked closely to current technological transformations – will probably take at least half a century to consolidate itself internationally.

The U-I-G triple helix has come to characterise and inform the research objectives and the institutional structures of the affected departments and faculties. In this chapter, I shall focus on the philosophical and dispositional aspects of the third mission of the universities rather than on its architectural and administrative consequences. I shall, therefore, briefly address the question of the knowledge economy and its implications for academic scholarship, the emphasis placed on the science, technology, engineering and mathematics (STEM) disciplines as opposed to the liberal arts and human

sciences and, finally, the question of the missing 'fourth helix', that is, the socio-economic and cultural dimension of the second academic transformation, one which is of special significance for South African and other African scholars.

The Knowledge Economy

Much has been written on the meaning and the implications of the so-called knowledge economy. In the South African context, the views of Castells on the knowledge-based economy and the information society have been especially influential. At a descriptive level, the notion of Mode 2 knowledge production in university and non-university contexts captures what is happening in many different parts of the world. As indicated earlier, the third capitalist industrial revolution has brought about a symbiotic, mutually reinforcing, relationship between university researchers, especially in the STEM disciplines, and trans-national corporations that are heavily dependent on the knowledge produced in the relevant research centres. Cooper (2011:350) cites Etzkowitz's hypothesis that 'universities in the new knowledge economy are being "transformed from a secondary to a primary institution"'. In order to maintain international competitiveness, these corporations push for governments to design national systems of innovation.

However, in most such analyses, there is a glaring absence of a philosophy of history based critique of these practices. Such critique as has been forthcoming has tended to be articulated from the angle of vision of the traditional second mission of the university and is usually formulated in anti-managerialist terms. While this is relevant and useful especially as it relates to the issue of the relative autonomy of university research and researchers, it does not penetrate beneath the surface phenomena. It does not question the paradigm within which the third mission is restricted to the U-I-G triple helix. A few voices have recently begun to pose the issues differently. By way of example, I cite the South African Minister of Higher Education, Dr Blade Nzimande (2011):

> The first concept that needs to be problematized is that of 'knowledge economy'. This is an idea that economies today are based on knowledge, often capturing the shifts in the North away from manufacturing into services, especially financial services and information technology. Indeed there is no doubt that knowledge is important and has increasingly become so. But the question is whose knowledge and in the service of which classes? A close interrogation of the meanings embedded in the concept of a 'knowledge economy' today is that knowledge is a commodity, to be bought and sold, rather than as something that should be in the service of the people. As I sat and reflected on the debates at the conference in Cuba, I was wondering whether we should be talking about a 'knowledge economy' or about harnessing and developing knowledge in the struggle for a just and equitable world, free from poverty and ignorance. These are debates we urgently need in our country.

From the point of view of someone who is committed to a different kind of world, one where the abysmal, indeed vulgar, gap between the rich and the poor is progressively and rapidly eliminated, the crucial questions involved in this matter are twofold. Firstly, is it morally and politically defensible to use public revenues, dispensed via government and universities, to maximise profits for corporate entities which appropriate such profits for their shareholders? Cooper (2011:49) points out that the, usually implicit, assumption of some 'trickle-down effect' on the part of apologists for the 'market university' by which they justify their activities, has no evidence to back it up. In the face of the global reality that more than two-thirds of humanity are excluded from these circuits, this is culpable naivety at best and intellectual dishonesty at worst. If, as I am persuaded to believe after reading Cooper's work, the university or at least some of its (STEM) faculties have become an essential component of the knowledge economy at the beginning of the 21st century, this means that it has acquired unprecedented leverage which, if it takes a wider view of the third mission, it can use to very good effect precisely in order to narrow the gap referred to above. It is my view that at the very least, there should be some built-in provision that a large proportion of profits emanating from the work of university based researchers should be channelled back to the universities concerned so that the socio-cultural investments of the universities can be funded from these profits.[3] Of course, this raises issues of intellectual property and I am fully aware of the fact that this has become one of the holy cows of the 'entrepreneurial university'. For now, I shall simply state that this is a cow that needs to be re-examined worldwide precisely from the point of view of where it would stand in relation to a world that is differently conceptualised and constructed if for no other reason than that of the ecological imperative that has become so abundantly obvious except to those who will not see.

The second issue that arises from this critique is the assumption that the university's third mission is exhausted in the construction and maintenance of partnerships with business and government. To the extent that government is supposed to be representative of 'the people', it could be argued that civil society is indirectly included in the triple helix. However, this fiction is difficult to sustain in an age of scepticism about the democratic integrity of governments across the globe. Cooper (2011:46–47), therefore, proposes strongly that a 'fourth helix', representing the socio-economic and cultural aspects, be added to the U-I-G linkage. With reference to Castells' critique of the knowledge economy, Cooper (2011:46–47) asks:

> what will happen to the millions across the globe who remain disconnected from the networks of the knowledge society? . . . Manuel Castells . . . refers to Africa's 'black hole' of exclusion, calling it a 'Fourth World' – a world that I would view as outside the reach of any triple helix research relations. Castells asserts, moreover, that 'the notion that this [new global economic] system can proceed forever, while excluding two-thirds of humankind, is simply naïve'.

This question has never been far from the surface of the many debates about the managerial or corporatised university that have shaken all institutions of higher education in South Africa since the late 1990s. Civil society or, more precisely, the disempowered mass of the people, in some sense is one of the main constituencies to which any university, especially in the South, has to be accountable. This is so, even if there is no financial contribution that flows from this category to the university. In the South African context, as Cooper and others have noted, there is a strong tradition of university academics and post-graduate students working closely with civil society, understood as the ensemble of people's organisations and grassroots structures, including trade unions; civic, faith based and sports associations; student bodies; rural and women's groups; and many others. This was never really theorised and after 1994, the national system of innovation guided and guarded by the Department of Arts, Culture, Science and Technology, the Department of Education and other research focused structures proceeded on what can only be called the pathways pioneered and consolidated by scholars in the North.

STEM Disciplines and the Humanities

In an elegantly written work published in 2010, Nussbaum has spoken out against the commodification and vulgarisation of knowledge through the assault on the liberal arts curricula especially in Europe. Essentially, her thesis – one with which I agree totally – is that democratic societies *need* the scholarship associated with the humanities. Universities, instead of educating and training clients and service providers, which is what tends to happen increasingly today, ought to have it as their main objective the education of global citizens. According to Nussbaum (2010:93–94), global citizenship

> requires a lot of factual knowledge and students might get this without a humanistic education – for example, from absorbing the facts in standardized textbooks . . . Responsible citizenship requires, however, a lot more: the ability to assess historical evidence, to use and think critically about economic principles, to assess accounts of social justice, to speak a foreign language, to appreciate the complexities of the major world religions . . . World history and economic understanding . . . must be humanistic and critical if they are to be at all useful in forming intelligent global citizens, and they must be taught alongside the study of religion and of philosophical theories of justice. Only then will they supply a useful foundation for the public debates that we must have if we are to cooperate in solving major human problems.

In a globalising world, where everybody is virtually a neighbour, the current tendency to downsize and marginalise the humanities and the liberal arts is a certain recipe for increasing alienation and mutual incomprehension. Instead of human beings trying to see what is common among people and individuals, the tendency is strengthened to view people as potential clients and exploitable entities which can be instrumentalised

for their own personal benefit or for that of their in-group. Difference, instead of constituting a bridge towards understanding the intrinsic value of diversity – biological, cultural and political – becomes a springboard for xenophobic stereotyping and latent social conflict. To put it differently, the emphasis which is, justifiably, placed on the STEM disciplines in the context of the systemically determined desire to be innovative and to remain competitive runs the danger of throwing out the baby of humanity with the bathwater of 'irrelevant' subjects and knowledge. The emphasis that is, consequently, put on the quantifiability of outcomes and of knowledge itself simply sweeps away all nuance, all understanding of complexity and contradiction and creates the illusion of a simple, linear universe in which, once anything has a number, it is in some sense 'valuable'. This is not a mere issue of curricular adaptation; it requires a complete rethink of the meaning of the curriculum in both its global commonalities and its regional, national and local peculiarities. It requires a rethinking of the relationship between tradition and modernity if we in the economic South are not simply to become economode photocopies of the 'advanced' North. Although I might use a slightly different turn of phrase, I believe that Nussbaum (2010:143) puts the matter as clearly as it is possible to do:

> If the real clash of civilizations is, as I believe, a clash within the individual soul, as greed and narcissism contend against respect and love, all modern societies are rapidly losing the battle, as they feed the forces that lead to violence and dehumanization and fail to feed the forces that lead to cultures of equality and respect. If we do not insist on the crucial importance of the humanities and the arts, they will drop away, because they do not make money. They only do what is much more precious than that, make a world that is worth living in, people who are able to see other human beings as full people, with thoughts and feelings of their own that deserve respect and empathy, and nations that are able to overcome fear and suspicion in favour of sympathetic and reasoned debate.

The Centrality of the Language Question in South African Universities

Arising directly out of this statement by Nussbaum, I should like to end off with a brief reference to one of the most avoided questions in South African scholarship, namely, the language question. In recent discussions about the position of the humanities and social sciences (HSS) in South Africa, I have repeatedly pointed out that unless this question is addressed as a matter of urgent priority, then the current classist, elitist scholarship that floats on a sea of mediocrity will simply continue to be anchored. I shall put the matter succinctly and point out that the latest version of my train of thought, 'The centrality of the language question in the social sciences and humanities in post-apartheid South Africa' can be found on www.litnet.co.za (2012) and the *South African Journal of Science* (2012). Because of strong leadership coming from the Ministry of Higher Education, for the first time in decades, important

policy and strategy documents are being seen to move the language question closer to the centre of academic scrutiny, where it belongs. It has always been strange to me that in spite of the linguistic diversity that characterises human social formation, most scholars, by ignoring the language question, have merely swum along with the tide of unthinking humanity, unable to see the rocks towards which their blind spot was propelling them. The *Report on the Charter for Humanities and Social Sciences*, issued in June 2011, and the *Consensus Study of the State of the Humanities in South Africa: Status, Prospects and Strategies*, published in August 2011, are two of the most significant documents in this regard. In the present context, they should be viewed in terms of the implications of the fourth helix. Certainly, in most of Africa, this issue cannot be avoided much longer. And, it has to be analysed in global terms, since the global hegemony of English is putting massive pressure on some of the most consolidated standard languages in the world, including especially German, French and Russian. In Europe, as everyone is aware, the debate is raging continuously, but in Africa and elsewhere in the South, what Tollefson (1991:201) wrote remains essentially unchanged:

> The hegemony of English, or of other languages, is not merely tolerated in the 'developing' world; it is considered a legitimate model for society. In many newly independent states, a tiny English-speaking elite controls state policy-making organs while the masses of the people remain excluded . . . A world system that is more just and equitable depends upon an understanding of how people can gain control of their own institutions. A key issue is the role of language in organizing and reproducing those institutions.

It is a mammoth task because Africa, including South Africa, is today subject to the intensified pressures of 'globalisation', and the pressure to adopt English, which is incontestably *the* global language, as the only legitimate language is exceptionally strong in 'Anglophone' territories. The focus on English, the 'language of globalisation', is also one of the corollary implications of the prioritisation of the STEM disciplines in South Africa, as it is in most other countries today. The HSS disciplines, conversely, have, as part of a counter-hegemonic strategy, to ensure that the local languages are not marginalised and endangered. Indeed, in a modern African country, these languages should be at the heart of all development, including also in the formal economic sector.

It is one of the most urgent tasks of the 'African Renaissance', seen as a cultural revolutionary programme and not as mere political rhetoric, that this situation be changed in the direction of the valorisation of African languages. I can do no better in this regard than to draw the reader's attention once again to the devastating statement by Mazrui and Mazrui (1998:64–65):

> [An] important source of intellectual dependence in Africa is the language in which African graduates and scholars are taught . . . (Today), in non-Arabic speaking Africa, a modern surgeon who does not speak a European language is virtually a sociolinguistic impossibility . . . (A) conference of African

> scientists, devoted to scientific matters and conducted primarily in an African language, is not yet possible . . . It is because of the above considerations that intellectual and scientific dependence in Africa may be inseparable from linguistic dependence. The linguistic quest for liberation . . . must . . . seek to promote African languages, especially in academia, as one of the strategies for promoting greater intellectual and scientific independence from the West.

While there's many a slip between the cup of policy and the lip of implementation, my inveterate optimism wants me to say clearly that both of the diagnostic and strategic essays referred to above promise exciting and forward-looking perspectives with regard to acknowledging and integrating in significant ways the foundational importance of language in general and African languages in particular to an appropriate, modern (South) African social science and humanities theory and practice. Since their publication the Ministry of Higher Education has initiated other processes in this direction, all of which augur well for the transformation of South African universities.

In conclusion, I believe it would be really important to study and/or re-read all policy documents, green papers, white papers and laws pertaining to the higher education sector, especially in South Africa, in the light of the insights which Cooper's study has afforded scholars. This is not the occasion to interrogate the *Green Paper for Post-school Education and Training* (DHET 2012). It is an excellently written, ambitious document and I have no doubt that an analysis of the kind I propose will add much value to it. Scholars should take up the implicit challenge in Cooper's work to give a scholarly and theoretically sound delineation of the fourth helix. Without such a project, the triple helix will continue to reproduce the inequalities and elitist dispositions that characterise most states and societies today.

Notes

1. 'Change by exchange: Higher education and research transformation in South Africa and Germany', keynote address delivered at the DAAD-Alexander von Humboldt Alumni Gathering, 13–15 April 2012.
2. Alexander, who passed away on 27 August 2012, agreed to publish his talk in this volume and it is done with the kind agreement of Alexander's literary estate and Karen Press.
3. Alexander wrote, 'Since I am not a university administrator, so it is quite possible that such provisions already exist, in which case they need to be made known publicly, a move that would win many friends for the triple helix!'

References

Alexander, N., 2003, 'Language policy, symbolic power and the democratic responsibility of the post-apartheid university', *Pretexts, Literary and Cultural Studies*, 12(2), 179–190.

Alexander, N., 2012, 'The centrality of the language question in the social sciences and humanities in post-apartheid South Africa: Revisiting a perennial issue', *South African Journal of Science*, 108(9/10), 1–7.

Cooper, D., 2011, *The university in development. Case studies of use-oriented research*, HSRC Press, Cape Town.

Department of Higher Education and Training (DHET), 2012, *Green Paper for Post-school Education and Training*, DHET, Pretoria.

Mazrui, A. A. & Mazrui, A.M., 1998, *The power of Babel. Language and governance in the African experience*, James Currey, Oxford.

Nussbaum, M., 2010, *Not for profit. Why democracy needs the humanities*, Princeton University Press, Princeton, NJ.

Nzimande, B., 2011, 'Universities, knowledge production and people-centred development: Reflections from Cuba', *Umsebenzi*, 11(6), 23.

Tollefson, J., 1991, *Planning language, planning inequality. Language policy in the community*, London and New York, Longman.

4

GOING AROUND IN CIRCLES:

Employability, Responsiveness, and the Reform of the College Sector

Volker Wedekind

Introduction

Scarcely a day goes by in South Africa without a statement by a senior political leader or official focusing on the need to strengthen South Africa's education system, and more often than not there is mention of the central role of skills development and Vocational Education and Training (VET). Education is seen as central to the 'fight' against poverty and unemployment. In a speech at the University of Witwatersrand the Deputy President, Kgalema Motlanthe (BuaNews 2013), made the following statement:

> Economic productivity is the fruit of long-term investment in the national education system. Short of an education system geared to the particular developmental needs of the country, we will be hard put breaking into high-level economic productivity that can extricate us from the inter-generational cycle of poverty.

This faith in the investment in human capital as a means for addressing South Africa's economic and social challenges is widespread, not only in government but also in wider society. Inevitably, South Africa's Further Education and Training (FET) colleges (soon to be renamed Technical and Vocational Education and Training (TVET) Colleges) are mentioned as part of the solution.

A recently published survey once again highlighted the acute crisis South Africa faces with respect to unemployment: 28% of South Africans are unemployed and looking for work with only thirty eight per cent employed either full-time or part time (IPSOS 2013). The authors of the report note that in all surveys conducted since

1994, the year the first democratic elections were held, 'unemployment and the slow process of job creation are mentioned as some of the biggest problems in South Africa' (ibid:1). The fact that after almost twenty years of democracy there is still such a high unemployment rate is a major political and social challenge that remains top of the government's stated agenda. Since a significant proportion of the unemployed are under the age of 25 poses an additional risk, as these young people comprise the 'new dangerous class' (Standing 2010). Various estimates suggest that there are as many as 3.5 million people who are not in employment, education or training – the so-called not in education, employment or training ([NEET], Cloete 2011).

International comparison has often provided the basis for an argument that vocational education can provide a solution to this problem. Technical and vocational education has resurfaced within the discourse of the World Bank and other international agencies such as the United Nations Educational, Scientific and Cultural Organisation (UNESCO), and has been a feature of all the developing economies that have experienced growth. For example, the 5th BRICS[2] Summit held in Durban in 2013 included for the first time a study group on vocational education skills development. Investment in VET is seen as a key part of the success of emerging economies.

It is little wonder then that over the past two decades education and training as strategies for addressing job creation and unemployment have been central to the government's stated priorities. Particularly the vocational education system, centred on the colleges, and the Sector Education and Training Authorities (SETAs) have been the focus of the strategy. In March 2013, the President of the Republic of South Africa signed the Further Education and Training Colleges Amendment Act (No. 3 of 2012) into law. This marked the latest stage in a series of reforms to the South African technical, vocational and occupational education and training system. These reforms have introduced major changes to the institutional landscape, the qualifications, the curriculum, and the demographics of the system. While the reforms have been premised on a notion of making the college system more responsive to the needs of the labour market, and to a lesser extent the wider developmental agenda of the state, there have been a range of countervailing forces at play that have made the reform process contested and the outcomes uncertain.

This chapter will trace the key reform moves over the past 20 years and explore the underlying impetus behind the reforms. As each reform was implemented (whether partially, wholly or not at all) new pressures arose that have resulted in a seeming circularity to the reforms. However, the need for the system to respond to urgent societal pressures, along with the demands of the labour market, has remained in an uneasy tension. What is clear is that a single refrain has directed the policy orientation: FET colleges must be more responsive to the needs of the economy in order to make their graduates more employable.

The chapter will firstly examine the concept of responsiveness and how this relates to employability of learners. Then the reforms of the past two decades are explored through the lens of these concepts. The chapter concludes by examining

alternative forms of responsiveness that reassert the critical role of education in the VET system generally and FET colleges specifically.

Responsiveness and Employability

The notion that the vocational education system should be 'responsive' has been a recurring theme over the period under discussion, and can be traced back into the 1970s and 1980s in South Africa as well as internationally. What underpins this notion is a critique of vocational education that suggests that it is too school-like, outmoded and disconnected from the world of work. Given the rapid pace of change, socially and technologically, vocational education must be flexible and adaptable by responding to the changing demands of employers. Colleges are expected to be responsive by developing partnerships with industry; to determine the curriculum in collaboration with employers; and to link their staff and students to workplaces (Badroodien & Kraak 2006; DoE 2004). In South Africa, there is an additional imperative in that educational institutions need to also be responsive to the wider transformation goals of the society and address the legacies of apartheid and gender discrimination by ensuring that young people who have been historically disadvantaged are given access to the skills that will meet the needs of industry and employers.

While the discourse of responsiveness focuses on the education system and its curricula and institutions, there is a linked discourse of employability that focuses on the 'product' of the system, namely, the student or learner (Cleary, Flynn & Thomasson 2006; Fejes 2010; Hillage & Pollard 1998; McQuaid & Lindsay 2005). Like the responsiveness discourse, employability often starts with an analysis of what employers look for when they make decisions about prospective employees. This is often translated into a check-list of attributes and skills that people need in order to be employed (and also to stay employed and progress in employment) (see Hillage & Pollard 1998). Boltanski and Chiapello (2005) argue that the concept of employability emerged as definitions about the nature of work shifted from an emphasis on security (within a firm; along a career path; backed up by state benefits) to one of 'autonomy' and defining work as projects. It is the 'capacity people must be equipped with if they are to be called upon for projects' that defines employability (ibid:93). Transitions between projects increase employability and individuals must manage and mobilise their personal capital through these transitions. If the way work is experienced has shifted from a career to a series of projects, this has been coupled with the idea of the self as a 'project' under continuous construction and this provides the basis for discourses of lifelong learning, adaptability and articulation (Young 2008). What this 'projectivism' highlights is the way in which the discourse of employability shifts responsibility for employment to the individual.

While there are many different definitions of employability, and the concept has evolved historically, these can broadly be divided into supply side and demand side definitions (McGrath, Needham, Papier & Wedekind 2010b). On the supply side,

which is the dominant approach, the focus is on the individual and the set of skills that he/she brings to the employment equation. There is much debate as to what constitutes these skills and how these should be categorised. Increasingly the focus is on generic skills that are linked to attitudes, dispositions and personal characteristics rather than the specific skills required to carry out the tasks associated with the job. This has led to a growing focus on communication and presentation skills, career guidance and such like, rather than job specific skills. Indeed, this is in part a consequence of the hollowing out of skills required for specific jobs.

On the demand side, there are a range of social and economic policies and conventions that enable employability. For example, a social contract between unions and employers around training, or government employment schemes to enable young people to gain work experience, may be understood as enhancing employability. In the South African context, both approaches are relevant and for the purposes of this chapter employability will encompass both demand side and supply side notions.

Both the concepts of responsiveness and employability can be linked to human capital theory (HCT) (ie, the investment in education and training that raises productivity, leads to economic growth, and improves individual life chances), which dominates discussions about education and development. Much of the debate about the role of VET is framed by this approach. Human capital theory is part of what Boltanski and Thévenot (2006) describe as a 'city' or 'polity' – broadly understood as an order of worth or a normative fulcrum – based on the market.[3] Essentially these 'cities' are discursive practices based on a particular set of principles that exist parallel to other discourses. The 'market city' privileges economic development over all else. As shall be discussed later, through critique it is possible to communicate between different 'cities' (eg, the civic, inspired, industrial, domestic 'cities') and open up spaces for different views of the role of the colleges in South Africa. In order to do that, the next part of the chapter briefly locates the colleges and the VET system in their historical context, before describing the key policy developments over the past two decades.

A Brief Historical Review

Like almost all aspects of South African society, VET and the development of the colleges are inextricably bound up with the history of colonialism, apartheid, and the particular form of racial capitalism that developed on the southern tip of Africa. The college system inherited by the first democratic government had evolved primarily out of a technical training system that had, in turn, emerged in the first quarter of the 20th century as a response to the mineral revolution and the development of the apartheid state (Badroodien 2004; Motala, Vally & Spreen 2010). The system was designed as a vehicle for artisan training linked to apprenticeships, where the colleges provided the theoretical components, and the practical training was largely done on the job or in training centres attached to large companies. Though small,

this dual system (parallel learning on the job and in formal educational institutions) was effective at providing the skills needed in the economy and in the public sector, with the bulk of training happening in state owned enterprises, large corporates and municipalities. With the economy moving into recession in the mid-1970s, and political and economic pressure to broaden the skills base and create a black middle class, the system was slowly opened up to young people of other races but became increasingly disconnected from the work-based apprenticeship system (Chisholm 1983). By the time the first democratic elections were held in 1994, the technical college system consisted of more than 150 institutions with very uneven quality, delivering a dated curriculum, and producing fewer and fewer qualified artisans.

The Initial Vision: 1990–1998

Green (2012), drawing on the literary device of 'future history', has suggested that any analysis of curriculum should take more seriously the imagined futures that were envisaged by the policy makers at the time. In other words, historical analysis should not just describe the consequences of the policies over time, but take the vision of the future seriously. The present day outcomes of policies were often not the intended futures envisaged by the policy makers, and revisiting the original vision provides a different view of the present one.

One of the striking features of the early educational policy is that it was shaped primarily outside the education community. One explanation may be that educationists were not as well organised as the human resource development and labour activists in competing policy networks (Fataar 2006). Another reason may be that the country might have been preoccupied with ensuring economic development and thus training related discourses dominated the education terrain. What is clear is that one of the earliest pieces of legislation shaping the education system emerged out of a process that had predated the new democracy. Arising from worker struggles in the 1970s and 1980s, followed by strategic planning by the National Union of Metalworkers of South Africa (NUMSA), a proposal for an integrated education and training system was developed that would ensure formal recognition of skilled workers and associated pay increments. Various state and employer driven initiatives in the 1980s and early 1990s to reform the outmoded training system combined with the NUMSA concept provided the basis for the integrated training system that was envisaged. A meeting between the Department of Manpower and the trade unions in 1992 saw the establishment of a working group that developed the proposal that eventually saw the passing of the South African Qualifications Authority (SAQA) Act (No. 58 of 1995). This established the qualifications authority that was to oversee the National Qualifications Framework (NQF). Not only did the NQF seek to map out all existing and new qualifications in one framework, but it also described the entire education system on eight levels, divided into three bands.

The vision of the NQF designers was a radical one. Driven by a desire to enable the recognition of skills and to encourage training for workers in order to improve their employability, the NQF resulted in far reaching changes to both the schooling and college systems, and also to a lesser degree the university system. The rationale for this system is spelled out on SAQA's website under the heading 'Why has SA chosen a National Qualifications Framework?' It is worth quoting from this section at some length as it clearly demonstrates the centrality of employability as a concept (and Boltanski and Chiapello's (2005) description of the project nature of work) that underpins the basic architecture of the South African system:

> Many countries all over the world are looking for better ways of educating their people and organising their education and training systems so that they might gain the edge in an increasingly competitive economic global environment. Furthermore, the world is an ever-changing place, politically, geographically and technologically. Indeed, the rapid technological advances of the twentieth century have placed education systems under extreme pressure as they try to adapt and incorporate these changes in an effort to produce more creative, effective and adaptable people. Success, or even survival, in such a world demands that South Africa has a national education and training system that provides quality learning, is responsive to the ever-changing influences of the external environment and promotes the development of a nation that is committed to life-long learning.
>
> When learners know that there are clear learning pathways which provide access to, and mobility and progression within education, training and career paths, they are more inclined to improve their skills and knowledge, as such improvements increase their employment opportunities. The increased skills base of the workforce has a wider implication namely the enhancement of the functional and intellectual capability of the nation, thereby increasing our chances for success in the global community.
>
> Sir Christopher Ball (1996) in describing the kind of learner profile that is suited to the 21st century, spoke about 'flexible generalists'. Ball maintained that such people are needed to realise the goal of life-long learning which, with the ever-increasing human longevity, will characterise the successful citizenry of the next millennium. 'Flexible generalists' are people equipped with the necessary knowledge, skills and values to adjust readily to multiple career changes and make, through their own personal development, a significant contribution to the life of this country and the world. The shift in thinking is from education for employment – developing the ability to do a specific job – to education for employability – developing the ability to adapt acquired skills to new working environments. The new education and training system must be able to support the notion of an adaptable workforce.

Perhaps the most widely critiqued aspect of the NQF was the fact that qualifications and part qualifications had to be specified in terms of their exit level outcomes rather than in terms of duration of time or content to be covered. This was necessary so

that the adopted principle of recognition of prior learning (RPL) would be possible, but it meant that the entire education system also needed to be specified in terms of outcomes.[4] The vocational education and training system had to be dramatically overhauled as a consequence of the new logic of the NQF. All forms of training were to be encoded on the NQF as part or whole qualifications. Knowledge had to be described in discrete units (known as Unit Standards) that could be separately assessed. The question was; who should be setting the standards? Was this the task of the educational institutions, professional bodies or the employers?

The training system that was established under the Skills Development Act (No. 97 of 1998) sought to incentivise, fund and quality assure skills development through the introduction of a skills levy, which was collected by the revenue services and allocated to a National Skills Authority (NSA) and one of a number of Sector Education and Training Authorities (SETAs). These new entities replaced all the various Training Boards that had existed previously, and required employers to submit annual training reports and workplace skills plans for which they would receive a portion of the levy back. The SETAs in turn were responsible for quality assuring training providers and for convening standards generating bodies (SGBs) which were responsible for developing new qualifications and unit standards relevant to the sector (Barry & Norton 2000). The Skills Development Act also introduced the notion of a learnership, which was meant to replace the outdated and declining apprenticeship system by widening the types of occupations covered, by reducing the employer cost by funding the learner directly from the SETA, and by making it possible to gain workplace experience at more than one employer.

By the year 2000 a sophisticated system of skills development based on the notion of stakeholder participation coupled with incentives and new qualifications systems was in place. The intention was that those in employment would become more productive and also better rewarded for their skills, while employers would employ more people because the increased productivity would result in economic growth. A decade later this vision had not been achieved and government policy proposals were still focused on reforms to the skills system. One of the focal points was the FET colleges which were foregrounded as key institutions. The question that needs to be explored is what happened to the colleges between 1994 and 2000, and from 2000 through to 2012, that resulted in their apparent failure to deliver on the promise of the skills system envisaged by its architects?

The First Phase of Reform in the Colleges: 1998–2006

The Further Education and Training (FET) Band on the NQF, comprising Levels 2–4, was the critical space within which much of the vocational education system was nested. The two main institutional components of this band were the last three grades of school, and the 150 odd former technical colleges. The schooling system had a high profile in the public eye, with the high stakes Grade 12 exit point being a

focal point for celebration and anguish as young South Africans awaited their results. By contrast, little was known about technical colleges other than that they produced artisans and hairdressers and were an option for those that did not achieve a university entrance pass.

In order to align these two components to the new educational landscape the Departments of Education and Labour established a joint process for envisaging the new FET Band. The *Green Paper on Further Education and Training: Preparing for the Twenty-first Century Through Education, Training and Work* (DoE) was released in 1998 after a process of consultation led by a ministerial committee. Like the Skills Development Strategy and the Skills Development Act, the 1998 Green Paper linked the FET Band to a 'range of government policies . . . (including) macro-economic, industrial, labour market and human resource development policies'.[5] The 1998 Green Paper was aligned with notions of lifelong learning, increased productivity and employability.

The vision put forward was a dramatic reorganisation and reorientation of the FET Band. The 1998 Green Paper presented a critique of the inherited system that highlighted the lack of coherence, the lack of articulation, poorly co-ordinated funding mechanisms, poor linkages to industry, a distorted labour market and a system that was marked by low morale, poor work ethic and low professional self-esteem amongst educators. What was proposed was an expanded and revitalised college system that was responsive to the local economic conditions:

> some colleges may choose to focus their energies on self-employment, small business, entrepreneurial, community development and self-improvement programmes relevant to their local communities. Other colleges, more closely integrated into the formal economy, may concentrate on the provision of intermediate to high-level skills required by an increasingly export-competitive manufacturing economy. The different institutional missions and relationships to the economy will evolve in local and regional contexts, driven by local and regional needs (DoE 1998).

The actual implementation flowing from this policy framework did not deliver on all aspects of this vision. One of the striking features of the process of educational reform in the first decade of democracy was the lack of co-ordination across and within government departments. Part of the complication was that the South African constitution, forged out of a negotiated settlement, was marked by a series of compromises that resulted in a quasi-federal system that vested some key authority, notably in respect of education and health, with the nine provinces. Thus, while education policy and salary negotiations were national competencies, the actual institutions and their staff were the responsibility of the provinces. At a national level the skills system described above reported to the Minister of Labour, while the colleges and their curriculum were the responsibility of the Minister of Education.

The consequences of these overlapping competencies were that reforms in the FET college system were often out of alignment with the stated vision. The initial

changes prioritised the institutional dimension, with significant energy and resources focused on the merging of colleges. The 152 public technical colleges and training centres were merged into 50 multi-campus FET colleges under the authority of the provinces and governed by Councils (Wedekind 2010). The major imperative behind the mergers was a desire to overcome the segregated nature and the differential resourcing of the historical institutions. New senior managers were appointed, in some cases from outside the vocational system, to lead these new institutions. These mergers and the new governance structures that accompanied them were extremely stressful and time consuming, lasting from 2001 to 2006, and drawing national and local resources away from critical tasks of improving the teaching and learning process.

Recapitalisation: 2006–2009

The second major intervention in the system was close to R2 billion worth of investment in the recapitalisation of colleges between 2006 and 2009. This was a response to the critique that the colleges did not have the infrastructure or equipment to play the role that was envisaged for them in the various policy documents. Significant sums of money were allocated to infrastructure development, procurement of equipment and staff development. The difficulty was that the recapitalisation predated the full implementation of curriculum reforms (discussed below) and so the expenditure was not focused on the needs of the new curriculum. Recent interviews with lecturers who were involved in the colleges at the time revealed that infrastructure expenditure was focused on the development of state of the art administration buildings, equipment was often not appropriate to the training needs of a college, and staff development was generic rather than subject specific (Wedekind, Watson & Buthelezi 2011).

During this period, the FET Band functioned only in name. The notion of an integrated band straddling school, colleges and the workplace was not seriously developed at institutional, conceptual or curriculum level. Within the national and provincial education departments the officials responsible for FET schools and FET colleges had little to do with each other. The idea of a common exit certificate was abandoned when the curriculum for the schooling system was revised. In 2006, the Department of Education passed the Further Education and Training (FET) Colleges Act (No. 16 of 2006). This legislation provided for a clear separation of the FET schooling component from the FET colleges, and introduced a new governance structure that vested significant powers in the College Councils. Critically, staff were now meant to be employed directly by the council, rather than the provincial government, in order to enable the college to respond more immediately and flexibly to local needs. Once again the stated intention was to make colleges more responsive, but the consequences were far more complex. Many long serving lecturers were unwilling to forego their government pensions and other benefits by transferring to the council, and so had to be redeployed within the education system. College

funding models, based on enrollment, did not make adequate provision for the staff requirements of the college and so most new appointees were contracted in on a short term or casual basis. The entire college sector became increasingly dependent on contracted staff, often not sufficiently experienced and qualified to teach the programmes on offer (Akoojee 2008).

Curriculum Reform: 2006–2009

The FET Colleges Act also set in place a new curriculum framework and clarified a problem of legacy programmes that were historically offered at colleges but did not fall into the FET Band. The National Certificate (Vocational) (NCV), which had initially been called the FET Certificate, was envisaged as a full-time qualification on three levels of the NQF that essentially provided for an alternative pathway to the schooling system. This qualification was a completely new type of offering, incorporating both subject specialisation in a vocational field as well as generic skills in communication, mathematics and life skills. The intention was that learners would exit the college system with a good general vocational education, with some specialisation, but would have had significant practical experience as part of the programme through work in college-based workshops and exposure to workplaces. It was not designed as an apprenticeship linked curriculum, although it was often associated with the new learnerships that were being introduced.

Coupled with the introduction of the NCV was the clarification in the FET Colleges Act that colleges should not focus beyond level 4 on the NQF. Up to this point, many of the colleges had continued to offer the qualifications linked to the old NATED Report 191 – courses commonly referred to as the N-courses. The N-courses were the old courses linked to the apprenticeship system and offered in a trimester structure that allowed students to complete their training whilst working through block releases from companies. For most of the first decade of the democracy the colleges had simply continued to offer the old curriculum, with support from industry and the Department of Labour. While the courses were dated, and had already been critiqued in the 1980s, they were familiar to industry and their mode of delivery suited students already in employment. Thus, colleges had continued to offer these courses as a direct response to the demands. The directives to implement the new NCV and phase out the N-courses came from the Department of Education, but were not supported by the Department of Labour affiliated bodies. Colleges were caught between the competing imperatives of the two departments and had to manage these tensions. The Department of Education controlled the subsidy funding, and so it directed colleges to enroll students into the NCV and they only received subsidies for these students. Indeed, a cap of 20% was placed on non-NCV enrolments. Colleges that were already committed to offering N-courses or other skills programmes tended to maintain these programmes because they were funded directly by the SETAs or through partnerships with industry, and in some cases the colleges were able to bring

in sizeable income through these non-subsidy programmes, with some colleges simply ignoring the 20% cap. However, where colleges followed the directives and focused on the enrolment of NCV students, it quickly became apparent that the funding per student was not adequate, and the colleges came under financial pressure. It also became apparent, as the new curriculum was implemented, that the recapitalisation process had not been focused sufficiently on the requirements to deliver the new curriculum. Colleges often did not have sufficient workshops and equipment to offer the practical components of the curriculum.

The process of developing the NCV was perceived by many lecturers as having been rushed (Wedekind et al 2011). The process from conceptualisation to implementation took less than a year, with the framework gazetted in March 2006 and the curricula for the 11 FET priority programmes published in July. Although the curriculum was 'workshopped' and stakeholders were involved in the process, there was very little preparation time and professional development and support for lecturers before the curriculum was implemented in January 2007.

The aims of the NCV as articulated by the Department of Education ten years after the publication of the 1998 Green Paper align once again to the overall focus of the vocational education sector: The NCV is a qualification which 'aims to solve the problem of poor quality programmes, lack of relevance to the needs of the economy, as well as low technical and cognitive skills of the FET college graduates' (DoE 2008:11). Linking to definitions used by UNESCO and the International Labour Organisation (ILO), the 2008 plan for colleges defined vocational education as being a general education that prepares people for occupational fields so that they have a basis for effective participation in the world of work, that it produces environmentally aware responsible citizens, and that it increases employment opportunities and alleviates poverty (DoE 2008). Thus, clearly the intention of the system remained framed by a strong employability dimension, but the overall definition of vocational education recognised the wider social and general education dimensions.

The curriculum that was developed for the NCV carried the features listed above in its design. The basic skills of literacy and numeracy were accommodated by the inclusion of two compulsory subjects, languages and mathematics or mathematical literacy, while the general social skills (and computer literacy) were included in a life orientation module. This also mirrored the structure of the FET curriculum at school level, suggesting the equivalence between the two curricula. The remaining subjects constituted the occupational learning, with students selecting three subjects from a specialised field in each of the three years of the NCV. The major fields in the NCV included tourism, primary agriculture, safety and society, marketing, management, information technology, finance economics and accounting, engineering, electrical infrastructure, and construction. The intention was that learners would choose these subjects after completing their Grade 9 and exit the FET Band with a useful qualification that would make them employable. On paper the NCV seemed to be addressing the critical problems that had been identified by various role players.

The actual implementation between 2007 and 2010 needs to be understood in the context of the other changes discussed above. There was a range of internal institutional factors that made successful delivery of the curriculum a problem. As has already been suggested, college lecturers were already suffering from low morale linked to the changes in their work environment and their conditions of service. Secondly, colleges were not used to dealing with young students who had just completed Grade 9. There was inadequate provision for the pastoral dimensions needed for young adolescents, and lecturers had no experience of the discipline strategies required to manage classrooms. Equipment and facilities were inadequate.

The external factors presented even greater challenges. Public understanding was weak and there had been no advocacy campaign to promote the NCV qualification. While there had been some consultation, there was a lack of understanding amongst employers as to the nature of the qualification. Because its introduction was linked to the phasing out of the N-courses, there was an assumption that the NCV was replacing the N-courses. This was not the intention. New skills courses linked to learnerships were supposed to replace the N-courses, while the NCV represented a completely new orientation of colleges to full time general vocational education. This misapprehension about the purpose of the NCV meant that it was compared and critiqued against a programme that it was not designed to replace. Employers were critical of the full time three-year nature of the qualification, which they argued made it unsuitable for apprentices. The NCV also did not prepare people for a trade test, unlike the N-courses, and so it was viewed as unsuitable for the training of artisans.

The general public also did not understand its purpose, and so it was viewed as a programme for those not able to cope with FET school curriculum demands. Principals of high schools actively advised their academically less able pupils to transfer to colleges, reinforcing a stigma about the colleges, but also creating a huge problem with pass and retention rates in the colleges. While the curriculum was vocationally oriented, it was not academically less demanding than the school curriculum. Indeed, Umalusi, the quality assurance agency responsible for both colleges and schools, undertook comparisons between similar subjects at schools and colleges and found that the requirements in vocational subjects were similar and in some instances more demanding than the equivalent school subject (Houston, Booyse & Burroughs 2010).

As the NCV progressed the demographics of the enrolment shifted. Increasingly students were opting for the NCV after completing their Grade 12 and there was concern that this meant that they were not progressing in terms of NQF Levels. Overlaps between the school curriculum and the NCV constituted wasted resources as students were repeating much the same material. And while numbers were increasing, colleges were not able to place students in workplaces for their practical components and thus students were not able to complete the qualifications. With growing attention on VET, the FET colleges once again came under the national spotlight.

The Post-Polokwane Phase: 2010–2013

When Jacob Zuma was inaugarated as President and Head of State in June 2009, the administration was significantly reformed, with a particular emphasis placed on the problems in education. The tensions that had existed between the departments of Labour and Education with respect to the skills system, and the failure at provincial level to focus resources on the colleges in the context of more high profile attention on schools, resulted in the decision to split the Department of Education in two by creating the Department of Basic Education (DBE) and the Department of Higher Education and Training (DHET). The DHET was given responsibility for all post-school education as well as Adult Education, including the FET colleges. It also was given those skills development responsibilities previously attached to the Department of Labour and became the ministry responsible for the National Skills Development Strategy (NSDS), the National Skills Agency, the SETAs and the National Skills Fund (NSF). For the first time all the components of the skills development system were housed under one ministry.

It has taken some time for the DHET to draw together the various components of the system and put in place the necessary legislation, including an amendment to the constitution that removes colleges from the provinces. This shift at a governance level was a major reversal on the mechanisms proposed only a few months earlier in the *National Plan for Further Education and Training Colleges in South Africa* (DoE 2008) where it was envisaged that the Heads of Education Departments Committee (HEDCOM), a body bringing together the provincial and national heads of education departments, would be the forum through which colleges would be co-ordinated. The new DHET summarily removed the role of the provinces, and went further to also shift the functions of the college councils as the employers. Henceforth, and with a new round of associated stress in the system, college lecturers were to become employees of the DHET itself.

By bringing the SETAs and the NSF under the authority (if not the control) of the DHET, the government thought to take over more direct control over the funds available in the skills system that were not being utilised. Both the NSF and the SETAs were reported to have accumulated vast funds as a result of under expenditure and employers not claiming their levies. The approach of the DHET was to try to ensure that more of these funds were spent on programmes that produced qualified workers, and specifically where these programmes were offered at public institutions. Supporting students at FET colleges and supporting the development of programmes at the colleges became a priority, and this was expressed clearly in the *National Skills Development Strategy III* (hereafter NSDS III, DHET 2011) released in 2011. The NSDS III places a great deal of emphasis on the FET college system as a central plank of the strategy. The strategy once again foregrounds the need for 'partnerships' between public education institutions such as colleges, private providers and SETAs with employers. The NSDS III attempted to align the skills development strategy to a plethora of government initiatives emanating from other departments such as the New

Growth Path, the Human Resource Development Strategy and the Industrial Policy Action Plan, as well as a new political commitment to address rural development.

The NSDS III lists the following as pressing challenges to which it is responding:

- inadequate skill levels and poor work readiness of young people entering the labour market, compounded by inadequate linkages between institutional and workplace learning 'thus reducing the *employability* [my emphasis] and work readiness of the successful graduates from FET and HET institutions';
- the plight of the longer term unemployed who lack basic numeracy and literacy, entry-level skills, work experience and work-based training;
- specific skills shortages in artisanal, professional and technical fields;
- an over emphasis on learnerships without progression. 'Substantial programmes that improve qualifications, support career pathing, enable greater flexibility and mobility and increase productivity' are needed;
- the failure of business to equip their workforce;
- systemic blockages within the skills system;
- absence of planning strategies at sectoral level;
- an urban bias to economic development with associated bias in skills development (DHET 2011: 6).

The NSDS III attempts to address these 'pressing challenges' through focusing the resources more coherently via better planning and co-ordination. As far as the colleges are concerned, the strategy places them as central to the skilling and re-skilling of youth and adults. Colleges are to be supported directly to build capacity, as well as through greater alignment with the SETA system. Lecturers are identified as requiring occupational and teaching qualifications and specifically need to be in touch with industry needs.

As far as the curriculum goes, the much criticised NCV is to be reviewed, while the N-courses, which previously had been scheduled to be phased out, are to remain a part of the programme mix, and be updated where necessary.

Once again FET colleges were seen to be central to addressing serious social and economic problems. Curricula that had been introduced too hastily were to be revised, and the programmes that had been withdrawn were to be reintroduced. In order to improve learner employability, the colleges needed to be responsive to and in touch with industry needs. College lecturers and the programmes they taught continued to be represented as the weak links in the system, in need of greater responsiveness to industry needs.

The National Planning Commission's (NPC) recently released and somewhat controversial *National Development Plan* (2011) laments the quality, size and output of the college system, and argues that urgent attention needs to be focused on the quality of the system in order to improve the employability of the graduates. Indeed, in the view of the NPC, improving educational outcomes is the first of five factors

that are necessary in order to raise employment. With respect to the college system, the NPC proposes to increase the size of the system to about 1.25 million learners by 2030, but makes the point that not 'focusing on quality is likely to be expensive and demoralising for young people, further stigmatising the system' (NPC 2011:18). The NPC proposes four action steps related to colleges:

- Improve the skills planning system.
- Develop strong qualifications.
- Strengthen and expand the colleges.
- Expand adult education in the colleges.

At the time of writing the most recent policy intervention has been the *Green Paper for Post-school Education and Training* (DHET 2012). The 2012 Green Paper's purpose is to provide a vision for the integrated post-school system that is implied in the creation of the DHET, that is, the consolidation and co-ordination of the educational institutions as well as the skills development entities that comprise the system. FET colleges are once again a central feature of the 2012 Green Paper. The assessment of the colleges is frank: 'FET colleges are varied and diverse but, with some notable exceptions, they are mainly weak institutions. With their present capacity, colleges can neither absorb significantly larger numbers of students nor achieve acceptable levels of throughput' (DHET 2012:10).

There is acknowledgement that many of the prior reforms, such as the decentralisation of governance, the recapitalisation programme, and curriculum reforms were not successful either because they were premature or because they were inadequately conceptualised. This is a frank assessment of the reality of the state of the system and a recognition that many reforms were not successful, though there is no real reflection on the original intentions. This is noteworthy primarily because many of the proposed reforms are very similar to previous iterations with some symbolic differences. For example, the confusing alignment between the last three grades of school and the FET colleges associated with the FET Band is to be dealt with by renaming the FET colleges as TVET colleges.

The 2012 Green Paper recognises that the public college system must be prioritised and the colleges under the control of other government departments (Health, Agriculture, Provinces, the Military) need to be integrated and aligned to the system. The strategies proposed for dealing with the colleges include improved systems and management, adjustments to programmes and qualifications, and strengthened teaching. In terms of systems and management, the proposed approach allows for differentiation between colleges based on the uneven strengths and weaknesses in the system. This will enable the DHET to provide support and where necessary manage weaker colleges directly while greater autonomy is envisaged for those colleges that have demonstrated capacity. Colleges will also be required to develop better operational and strategic plans and conditions of service will be standardised with the DHET becoming the new employer.

These changes to governance and management are coupled with a new vision of what the colleges will do. Instead of the constantly shifting mandate that has been described in earlier parts of this chapter, the proposed mandate is relatively broad. Colleges will be the primary sites for vocational and occupational qualifications focused on fields such as engineering, construction, tourism and hospitality, business administration and educare. The colleges will offer both general vocational qualifications, such as the NCV, and focused programmes for specific occupations. A range of options are discussed in the 2012 Green Paper related to the nature of the NCV and the introduction of new NCV programmes at Level 5 of the NQF, changes to the NATED 191 courses, offering skills courses and short courses, a possible role in the delivery of a new National Senior Certificate for Adults, and the need to ensure progression into and articulation with higher education programmes both in terms of existing programmes and new bridging programmes.

In order to achieve all of the above, according to the 2012 Green Paper, FET colleges need to be open longer hours and operate on more days in the year, and lecturers need to be better equipped to offer the programmes, both in terms of their content knowledge and work experience, as well as their pedagogic abilities. New requirements for lecturer qualifications that have been under discussion for more than a decade will be finalised and lecturers will need to be trained. Students too will be better supported financially, and through other on-campus and curriculum support mechanisms. A critical factor in the plan is the need for closer linkages and relationships between colleges and industry, which will need to be 'encouraged and strengthened' (DHET 2012:26).

While many of the proposed strategies are responses to the perceived weaknesses in the system, it is clear that college lecturers and managers are faced with another round of reforms that will place extreme pressure on their working lives. For example, lecturers who have been in the system for more than ten years will be going through the third change-of-employer process (provincial Department of Education to College Council to Department of Higher Education and Training), each time involving the stresses of having to navigate new conditions of service. The proposed changes to the curriculum, and the addition to the range of courses and qualifications on offer, will be another pressure on lecturers, who have already been through periods of new qualifications being introduced, old ones being phased out and then reintroduced, and now new courses at different levels being added. When these changes are coupled with the proposed tenfold expansion of the system in terms of student numbers, there is little doubt that colleges are not going to be settled for a while yet.

The picture that emerges from the 2012 Green Paper suggests that not much has been achieved since the first policies were being drafted almost two decades ago. The colleges appear not to have achieved what was envisaged and remain a weak link in the overall development plan of the country. The solutions and interventions remain largely the same, namely: improve the lecturers; improve the qualifications on offer; and build partnerships and linkages in order to be responsive and enhance

the employability of students. This apparent circularity requires further analysis, as set out in the next section.

Responsiveness, Employability and the Need for Competence: Towards a Conclusion

One of the striking features of reforms in the FET college system is the continuity of the discourse employed to justify the reforms. When placed next to each other, the 1998 Green Paper, the various skills and economic development strategies that have followed, and the 2012 Green Paper all have similar intentions. The FET system has consistently been viewed as a vehicle for solving critical social problems and specifically for addressing a crisis in employment. Across the 15 years under discussion in this chapter, policy texts and commentators have focused on the need for colleges to be responsive to the needs of the employer, and for colleges to produce learners who are employable. As new policies have been developed, they lament the same problems in the colleges: poor quality, lack of articulation, poor alignment with economic priorities and poor linkages with industry. The responses over the years have attempted, albeit in different ways, to address these concerns. Yet, if the analysis presented in the 2012 Green Paper and the NDP is correct, it would suggest that there has been little or no progress at all in the college sector, and possibly that the system has deteriorated.

There has been consistent critique of the failure of the state to deliver on its promises in education and more generally. These extant explanations have focused on factors such as: the lack of capacity in the colleges themselves; poor preparation in the basic education system; lack of management capacity; and insufficient funding, amongst others, that make the implementation of generally good policies problematic (Motala, Vally & Spreen 2010). This type of explanation resonates with the description of the implementation of reforms detailed above. But, as Motala et al (2010) point out, focusing only on the endogenous characteristics of the education system and the state more generally are inadequate for making sense of this recurring reform process. By drawing on other 'orders of worth', Boltanski and Thévenot's (2006) 'cities' referred to earlier, one is able to open up a space for critique that breaks out of the circularity of this endogenous explanation.

If a political-economy lens is adopted, then the failure of the college sector to improve the employability of their graduates and to significantly reduce unemployment may have less to do with the poor quality of the colleges and their weak linkages to industry and is more likely a feature of the structure of the economy and how economic policies have been implemented that privilege a particular model of growth. A comprehensive discussion is not possible here, but there is significant evidence to suggest that there has been no attempt to fundamentally restructure the economy and that transformation has focused on the formation of a small black elite (Maharaj, Desai & Bond 2010). That is not to suggest that colleges cannot improve,

but colleges cannot be held responsible for the limited creation of new jobs in the economy. This raises questions about the simplistic assumptions made about human capital theory and the nature of the relationship between education and economic growth where there is a persistent belief that skills shortages are a major constraint on economic growth (Allais 2012; Wheelahan 2010). Whether this belief is based on naivety or on a symbolic necessity that has little to do with fundamental change is debatable (Young 2008).

The second issue that is beyond the control of colleges is the wider societal perception of blue-collar work. Akoojee (2013) and Wedekind (2013a) have separately argued elsewhere that apprenticeship and artisan development in South Africa has to overcome serious socio-cultural legacies linked to the system of colonialism and apartheid as well as the specific English class legacy that has generated a racialised stigmatisation of manual labour, which JM Coetzee (2009) describes as a taboo akin to the Indian caste system. This valuing of white-collar work over blue-collar work results in a stigmatisation of many of the courses on offer at colleges as well as an intellectual snobbery that privileges a university education over vocational programmes. The inverted pyramid of enrolment where there are far more university students than students at vocational institutions is a structural manifestation of this. While improved quality and genuine work opportunities arising from college qualifications may begin to change perceptions, this is not a short-term process as the roots of the issue are woven into the fabric of the figurations that make up South African society (Dunning & Hughes 2013; Elias 1978). Attempting to overlay a vocational education system onto a society without due cognisance of the socio-genesis of the attitudes and values held by people in the society is likely to fail.

The third area of critique relates to the narrow understanding of responsiveness that dominates the policy debate. Responsiveness cannot be understood as focused solely on meeting the needs of industry. Employers tend to focus on their immediate needs and few have long-term orientations. Given the rapidity of change, being responsive requires anticipation of developments and planning and risk. Colleges cannot depend on this coming from industry. Responsiveness needs to also take account of wider societal issues that may at times be at odds with the perceived needs of employers. Educating citizens that are aware of their rights in society and the workplace may not be a priority for employers but is a crucial contribution to society. And focusing on the needs of students while they are at the college during a formative period of their lives is also a dimension of responsiveness.

In much the same vein, a more nuanced understanding of employability needs to be developed. Employability skill sets need to be differentiated between those required to access work, those required to do the work, those required to function in the workplace and those required to progress (Wedekind 2013b). Some of these skills are ‘hard’ and some are ‘soft’, some can be formally taught while others are related to the social and cultural capital that students need to access through employers. Colleges need to understand the learning and teaching experience in more complex ways than is usually associated with projects that aim to enhance employability

such as industry partnerships or work experience programmes (McGrath, Needham, Papier & Wedekind 2010a).

The fourth aspect of the analysis presented here that needs some exploration is related to the tension between skills training and education that has marked much of the debate and lies behind some of the tensions that developed between the Department of Labour and the Department of Education, and more recently in relation to the scope of the work of the Quality Council for Trades and Occupations (QCTO). The HCT approach, with its associated discourses of responsiveness and employability, places great store on skills, understood as a 'practice' or 'task', rather than a wider understanding of education that encompasses knowledge, skills, values and dispositions. Skills tend to be understood in discrete units (whether soft or hard) and can be separately assessed in no particular sequence. This has been the basis for much of the logic of the NQF and the system of unit standards and skills courses (Allais 2007). While this approach makes sense from the perspective of accreditation of certain skills, it fails to grasp the complexity of the interface between knowledge, skills, occupational commitment and identity (what Rauner and colleagues refer to as 'competence' (Jude, Hartig & Klieme 2008; Rauner 2005)). This notion of competence is premised on an understanding that in order to develop real expertise in an aspect of the work process, a worker needs to understand the context, the underpinning knowledge and the socio-cultural and environmental impact of the work. This defines 'skilled workers' as being able to function in a complex setting and be able to understand the work they do holistically, rather than as a fragmented set of practices (Gamble 2009). The implications for a training system run counter to much of the logic of the employability discourse. As Allais (2012:633) puts it:

> In order for education to meet the long term needs of the economy, there should be less focus on what employers say they need from employees in the short-term, and more focus on strengthening the educational side of vocational education – building strong curricula based on well-defined areas of knowledge, and developing a better understanding of how to assist students to acquire this knowledge.

There is an important dimension of mentorship within the educational process that inducts a learner into a particular social community with an occupational identity based on knowledge and expertise that goes beyond the notion of 'skill' (Young 2008).

There have been attempts at various points in the period under discussion to strengthen the educational dimensions of the vocational system. The introduction of the NCV was a case in point, where the qualification included general education components alongside occupation specific modules. The critique of the NCV has often focused on the time it takes and that it includes too much general education (numeracy, literacy and life skills) and not enough hands-on practical aspects. Yet, if done well, this is precisely what learners should be getting. What is absent from the discourse on skills is an in depth engagement with what vocational *education*

is: its inner structure and demands. The vocational education systems that are most highly regarded internationally all have a strong formal education dimension that complements the work-based and practical components. This recognises that preparation for work does not have to be only about work. Formal educational spaces open up possibilities that cannot be realised in the workplace. In order to develop an education system that goes beyond training requires an educational theory of vocational education, which is largely absent in South Africa.

Current reviews underway may well focus on the lack of recognition that the NCV has amongst employers and may attempt to reform it in order to meet the requirements of employers. Yet, while employers' views and recognition are crucial, they cannot have a monopoly on what should be in a vocational curriculum. Employers are focused on immediate needs, but in the long term, as Rauner and Maclean's (2008) work shows, both employers and future employees benefit from workers with a wider competence. This competence approach emerges from a Germanic context where there are different social structures and histories. Winch (2006) has described how this tradition views vocational education as part of a wider civic education, one where the induction of young people into the world of work is widely seen as a collective responsibility. This contextual point of course highlights the need for caution in imagining the implementation of similar approaches in South African colleges. The conditions are very different and any curriculum would need to build towards a contextually appropriate wider competence. But there are parallels and collectivist traditions in South African culture that could form the basis for an approach where colleges don't service employers, but are in a collaborative project in which colleges educate in a wider sense than is usually imagined as 'responsiveness'.

Viewed through a different theoretical lens that makes a similar point, what is required is a shift that sees education as enhancing capabilities in the learners for a broader development agenda. McGrath (2012) has sketched out in broad strokes what new theories of development may offer vocational education theory. Drawing on the capabilities approach and other human centred approaches, McGrath (ibid:630) suggests that we need to get 'beyond current narrow conceptions of VET' and widen the debates about its purpose through non-technicist research.

This analysis has attempted to show that the dominance of the responsiveness and employability framework, nested within HCT, has led to circularity in the reform process. From the earliest policy documents to the current debates and proposed reforms, there has been little change in the discourse. Vocational education and the lead institution, colleges, are seen as fundamental to solving a problem that is not primarily an educational problem. There is a continual anxious hand wringing at the failures of the colleges and the VET system generally, followed by a new set of reforms that repeatedly aim at the same thing: making the colleges more responsive through curriculum reforms, capital investment and training. The latest proposals are not significantly different to previous reforms and it is likely that they will fail again because they do not and cannot address the underlying problems. This is not to suggest that investment in the system, upgrading of facilities, funding students and

improving the quality of lecturers is not needed. Indeed, there is significant need in all of these aspects. However, what needs to be changed are the measures against which these investments and reforms are judged. They cannot reduce unemployment or be judged solely by the degree to which the curriculum meets employer needs. Rather, by looking at colleges as being located not just in the market 'city', but seeing them in the 'civic city' and the 'inspirational city' and the 'projective city', the different discursive constructions for their justification become apparent. What needs to be foregrounded is the educational role of the college in deepening knowledge, developing capabilities (including the hard and soft skills required to work) and strengthening (occupational and wider social) identities that enable learners to become both workers and citizens.

Notes

1. I want to acknowledge the editors and my colleagues, Wayne Hugo and Adrienne Watson, whose comments on an earlier draft greatly strengthened the argument.
2. A group of 'developing' countries comprising Brazil, Russia, India, China and South Africa.
3. The French term *cité* has been translated as both city and polity. I will follow the convention of the most recent translation.
4. The consequences for schooling, which are beyond the scope of this chapter, have been widely debated in South Africa (see, for instance, Jansen 2004)
5. Minister SME Bengu, Foreword, page 3.

References

Akoojee, S., 2008, 'FET college lecturers: The "devolving" link in the South African skills development equation', *Journal of Vocational Education and Training*, 60(3), 297–313.

Akoojee, S., 2013, 'The virtues of an inglorious South African past: Premise, promise and pitfalls of apprenticeship development', paper presented at the 5th International Network on Innovative Apprenticeship (INAP) Conference, Johannesburg, South Africa, 23–24 April.

Allais, S.M., 2007, 'The rise and fall of the NQF: A critical analysis of the South African national qualifications framework', PhD dissertation, University of Witwatersrand, Johannesburg.

Allais, S.M., 2012, 'Will skills save us? Rethinking the relationships between vocational education, skills development policies, and social policy in South Africa', *International Journal of Educational Development*, 32, 632–642.

Badroodien, A., 2004, 'Technical and vocational education provision in South Africa from 1920 to 1970', in S. McGrath, A. Badroodien, A. Kraak & L. Unwin (eds.), *Shifting understandings of skills in South Africa: Overcoming the historical imprint of a low skills regime*, pp. 20–45, HSRC Press, Cape Town.

Badroodien, A. & Kraak, A., 2006, *Building FET college responsiveness: The role of linkages and programmes units*, HSRC Press, Pretoria.

Barry, B. & Norton, D., 2000, 'The Skills Development Act: Transforming education and training for workers', *South African Labour Bulletin*, 24(2), 6–11.

Boltanski, L. & Chiapello, E., 2005, *The new spirit of capitalism*, trans. G. Elliot, Verso, London.

Boltanski, L. & Thévenot, L., 2006, *On justification: Economies of worth*, trans. C. Porter, Princeton University Press, Princeton, NJ.

BuaNews, 2013, 'Education key to growing economy – Motlanthe', retrieved 14 May 2013, from http://www.polity.org.za/article/education-key-to-growing-economy-motlanthe-2013-05-14

Chisholm, L., 1983, 'Redefining skills: Black education in South Africa in the 1980s', *Comparative Education*, 19(3), 357–371.

Cleary, M., Flynn, R. & Thomasson, S., 2006, *Employability skills: From framework to practice – an introductory guide for trainers and assessors*, Commonwealth of Australia, Melbourne.

Cloete, N., 2011, 'The waste of talent in South Africa', *IIEP Newsletter*, XXIX(2), 9.

Coetzee, J. M., 2009, *Summertime*, Harvill Secker, London.

Department of Education (DoE), 1998, *Green Paper on Further Education and Training: Preparing for the Twenty-first Century Through Education, Training and Work*, DoE, Pretoria.

Department of Education (DoE), 2004, *The new FET professional: The challenge of staffing responsiveness*, National Business Initiative, Johannesburg.

Department of Education (DoE), 2008, *National Plan for Further Education and Training Colleges*, DoE, Pretoria.

Department of Higher Education and Training (DHET), 2011, *National Skills Development Strategy III*, DHET, Pretoria.

Department of Higher Education and Training (DHET), 2012, *Green Paper for Post-school Education and Training*, DHET, Pretoria.

Dunning, E. & Hughes, J., 2013, *Norbert Elias and modern sociology: Knowledge, interdependence, power, process*, Bloomsbury, London.

Elias, N., 1978, *What is sociology? European perspectives*, Columbia University Press, New York, NY.

Fataar, A., 2006, 'Policy networks in recalibrated discursive terrain: School curriculum policy and politics in South Africa', *Journal of Education Policy*, 21(6), 641–659.

Fejes, A., 2010, 'Discourses on employability: Constituting the responsible citizen', *Studies in Continuing Education*, 32(2), 89–102.

Gamble, J., 2009, 'The relationship between knowledge and practice in curriculum and assessment', Umalusi Occasional Papers, Umalusi, Pretoria.

Green, B., 2012, 'Re-thinking curriculum history: A post-reconceptualist in(ter)vention', paper presented at the International Association for the Advancement of Curriculum Studies IV, Rio de Janeiro, Brazil, 2–5 July.

Hillage, J., & Pollard, E., 1998, 'Employability: Developing a framework for policy analysis', Research Report RR85, Department for Education and Employment, London.

Houston, J., Booyse, C., & Burroughs, E., 2010, 'The "F" in NC(V): Benchmarking common subjects in the NSC and the NC(V)', Umalusi, Pretoria.

IPSOS, 2013, 'IPSOS Survey: 19 years after democracy South Africans still have to deal with slow progress in terms of job creation, unemployment and inequality', http://www.ipsos.co.za/SitePages/Latest%20Press%20and%20News.aspx.

Jansen, J., 2004, 'Importing outcomes-based education into South Africa: Policy borrowing in a post-communist world', in D. Phillips & K. Ochs (eds.), *Educational policy borrowing: Historical perspectives*, pp. 199–220, Symposium Books, Oxford.

Jude, N., Hartig, J., & Klieme, E. (eds.), 2008, *Kompetenzerfassung in pädagogischen handlungsfeldern: Theorien, konzepte und methoden*, Bildungsforschung Band 26, 153–160, Bundesministeriums für Bildung und Forschung, Berlin.

Maharaj, B., Desai, A., & Bond, P. (eds.), 2010, *Zuma's own goal: Losing South Africa's 'war on poverty'*, Africa World Press & The Red Sea Press, Trenton, NJ.

McGrath, S., 2012, 'Vocational education and training for development: A policy in need of a theory?', *International Journal of Educational Development*, 32(5), 623–631.

McGrath, S., Needham, S., Papier, J. & Wedekind, V., 2010a, 'Employability in the college sector: A comparative study of England and South Africa', Education Partnerships for Africa (EPA), Nottingham, Cape Town and Pietermaritzburg.

McGrath, S., Needham, S., Papier, J. & Wedekind, V., 2010b, 'Reworking employability: Reflections from the English and South African public further education (and training) college sectors', paper presented at the IVth World Congress of Comparative Education Societies, Istanbul, Turkey, 14–18 June.

McQuaid, R.W. & Lindsay, C., 2005, 'The concept of employability', *Urban Studies*, 42(2), 197–219.

Motala, E., Vally, S. & Spreen, C.A., 2010, 'Reconstituting power and privilege or transforming education and training?', in B. Maharaj, A. Desai & P. Bond (eds.), *Zuma's own goal: Losing South Africa's 'war on poverty'*, pp. 241–260, Africa World Press and The Red Sea Press, Trenton, NJ.

National Planning Commission (NPC), 2011, *National Development Plan: Vision for 2030*, Government Printer, Pretoria.

Rauner, F., 2005, 'Work process knowledge and the development of vocational competence', lecture for Oman Conference, Muscat, Oman, 17–18 September.

Rauner, F. & Maclean, R., 2008, 'Vocational education and training research – an introduction', in F. Rauner & R. Maclean (eds.), *Handbook of technical and vocational education and training research*, pp. 13–20, Springer, Berlin and New York.

Standing, G., 2010, *The precariat: The new dangerous class*, Bloomsbury, London.

Wedekind, V., 2010, 'Chaos or coherence? Further education and training college governance in post-apartheid South Africa', *Research in Comparative and International Education*, 5(3), 302–315.

Wedekind, V., 2013a, 'Rearranging the furniture: Shifting discourses on skills development and apprenticeship in South Africa', paper presented at the 5th International Network on Innovative Apprenticeship (INAP) Conference, Johannesburg, South Africa, 23–24 April.

Wedekind, V., 2013b, 'Towards responsiveness and employability in the post-school sector', a review of the field, *Labour market intelligence project concept paper*, HSRC Press, Pretoria.

Wedekind, V., Watson, A. & Buthelezi, Z., 2011, *Lecturers in distress: Fractured professional identity amongst FET college staff in South Africa*, University of KwaZulu-Natal, Pietermaritzburg.

Wheelahan, L, 2010, *Why knowledge matters in curriculum: Social realist argument*, Routledge, London.

Winch, C., 2006, 'Georg Kerschensteiner: Founding the dual system in Germany', *Oxford Review of Education*, 32(3), 381–396.

Young, M., 2008, *Bringing knowledge back in: From social constructivism to social realism in the sociology of education*, Routledge, London.

5

BUILDING A TRANSFORMATIVE PEDAGOGY

in Vocational Education

Ivor Baatjes, Uthando Baduza and Anthony Tolika Sibiya

Introduction

Vocational education[1] has been highlighted as a key vehicle in the socio-economic development of South African society and is gaining almost unprecedented prominence in government policy, plans and public debate. The importance of vocational education in post-apartheid South Africa is underscored in national skills formation policies related to the Further Education and Training (FET) sector, the National Skills Development Strategy (NSDS) as well as increases in funding. The importance of the vocational education sector has more recently been emphasised in pending policy as set out in the *Green Paper for Post-school Education and Training* (DHET 2012a). The key public institutions for vocational education are 50 FET colleges that accommodate 400 000 students and are staffed by 16 000 educators (DHET 2013).[2]

The escalating interest in vocational education is driven, amongst others, by the marginal status of vocational training and the selective inclusion of students and workers in non-formal education and training programmes historically. Over the last decade, the importance of vocational education came into sharp focus as radical changes in the global economic system, combined with scientific and technological innovation and transfer, demanded new (largely formal) ways of preparing youth and adults for the labour market. The role of vocational education is increasingly attached to increasing the supply of human capital for the economy, premised on the idea that this would address the problem of higher rates of unemployment amongst the youth in South Africa (DHET 2012a; NPC 2011a). Policy development for vocational education is shifting rapidly in ways that are intended to build a closer connection between vocational education for the youth and the provision of strongly regulated, institutional pathways from school to work. This policy (as it pertains to vocational

education in particular) is framed within a context of: (a) an increase in the levels of 'formal' unemployment above 25%; (b) a call for an 8–9% economic growth requirement set as the target for creating employment; (c) an acknowledgement of perpetual crises in education marked by fiscal constraints, teacher strikes and student unrest; (d) the relentless socio-economic struggles of the poor manifested in service delivery protests; and (e) South Africa as the society that evinces the greatest level of inequality in the world with a Gini coefficient of 0.7.[3]

The evolution of vocational education in South Africa remains complex and multifaceted. As a consequence of the power of neoliberal ideology which gained traction in South Africa from the late 1970s (Baatjes, Spreen & Vally 2012), the meaning of vocational education has been reduced to the 'exclusive acquisition of a relatively narrow band of employment-related or job-specific skills and competencies' (Anderson, Brown & Rushbrook 2008:234). As such, human capital formation and instrumental learning are perceived to be the panacea for unemployment and inequalities created by the present national and global economic order. Human capital learning trumps democratic learning (discussed later in this chapter) because it maximises 'returns on investment' as it supposedly provides students and workers with the necessary skills and knowledge for economic success within the prevailing labour market (Hyslop-Margison & Sears 2010:3). For the purveyors of human capital policies and practices, a good economic outcome for vocational education is education determined by the labour market. In a recent background briefing on vocational education to the United Nations Educational, Scientific and Cultural Organisation (UNESCO), Tikly (2013:4) argues that human capital approaches emphasise the 'instrumental role of skills in relation to economic growth, lack a normative basis and do not take account of the environmental, social or cultural dimension of skills'. The latter includes the skills gap within and between countries, the social context and different forms of marginalisation based on social class, rurality, gender and ethnicity.

This chapter argues that vocational and instrumental learning (based on human capital theory) while oriented to narrow economic interests also inculcates a particular philosophical orientation significantly shaping and affecting how educators view their roles and the purpose of vocational education; the beliefs they hold about their students; the way in which they select, use and design curricula; as well as how they facilitate learning. One of the central concerns within this discourse is the role of vocational education institutions as democratic sites of learning in educating citizens and encouraging a commitment to social change and increasing levels of social equality.

The philosophical orientation towards any sub-sector of education determines not only the meaning and purpose of that sub-system, but also shapes the curricula and pedagogy in relation to beliefs about its learners. Engagement with an alternative orientation of vocational education also becomes necessary and urgent at a time when current instrumentalist notions of vocational education are ostensibly tied to a role in addressing poverty, inequality and unemployment without reference to the

complexities of deeply-rooted economic systems underpinned by the ideology of neoliberal globalisation and the wide-spread failures of free-market economic systems (Anderson et al 2008; Brown, Lauder & Ashton 2011; Weis 2008). These realities require us to engage more rigorously with liberatory forms of vocational education that offer much better and broader learning outcomes than the dominant mechanistic and technicist perspectives that drive this important sub-system of education in South Africa. We argue that as an alternative approach, a philosophical orientation should be adopted as foundational to the pedagogy used by vocational education educators, the curricula they design, the way in which they perceive their learners, as well as the way in which they support the development of democratic institutions. The argument presented in this chapter regards vocational education as a much broader educational endeavour for which such an alternative orientation is necessary (Hyland 1993; Hyslop-Margison & Sears 2010; Reid, Gill & Sears 2010). We suggest that vocational education needs to be reclaimed as part of broader democratic learning that restores the emancipatory possibilities of vocational education. In order for this to be effective, vocational education educators require engagement with theoretical approaches and pedagogical practices within a progressive and transformative philosophical framework that aids the development of democratic vocational education. We commence with a brief historical overview of the evolution of vocational education under apartheid and later consider its development in the post-apartheid period.

From Apartheid to Neoliberalism – Emulating the Failed Approaches of Human Capital Theory

Vocationalism and job training do not appear to be the preference of youth in South African society. Currently, 400 000 (DHET 2013) youth are enrolled in FET colleges and participation in NSDS-related programmes such as skills programmes and learnerships remains low. Government plans are directed at a significant increase in student enrolment in vocational education to four million by 2030 supported by investment in infrastructure and student financial aid. The expansion of vocational education is further based on newly proposed Community Education and Training Colleges that may also offer a variety of both formal and non-formal vocational programmes. This plan builds on the failure of skills development legislation of the late 1990s intended to channel more working class and unemployed youth into industrial and technical education.

South African youth seem to continue to favour university-based higher education and are likely to continue to do so given their aspirations and the seemingly inferior status of vocational education. Resistance to participation in vocational education comes at a time when there are not enough jobs, including increasing numbers of students with vocational qualifications and university degrees.[4] Increasing joblessness and underemployment amongst graduates is now being explained as a failure of curriculum models, including the lack of proper work-based learning or work-

integrated tools that fail to provide the proper skills required by the labour market. Yet the dominant discourse of policy argues for the massification of vocational education as an emancipatory instrument to address the phenomenon of stubbornly high unemployment.

The Minister of Higher Education, Blade Nzimande,[5] echoing the viewpoint of David Snedden, a contemporary of John Dewey, (Bettis & Gregson 1993; Hyslop-Margison 2000) often argues that vocational education is essential to the success of an industrial economy (see Bettis & Gregson 1993; Hyland 1993; Hyslop-Margison 2000). Educators in vocational education are required to accept the values of and promote the prevailing socio-economic system and its class structure as an inevitable fact of society and channel their energies toward ensuring its effectiveness. Scholars who are critical of this dominant approach have warned against the implications of an approach based on a narrowing orientation to vocational education as technical training which, amongst others, teaches and produces skills that limit the type of employment possible to youth. Most importantly, their criticism relates to the 'warehousing effect' it has on the working class resulting from a technocratic accountability and rational control model of vocational education. Baatjes and Hamilton (2012) too have highlighted the warehousing of thousands of youth, particularly working class youth, who struggle to make their way into employment in the formal labour market. These youth, like their counterparts in countries such as Portugal, Spain, Greece and Italy where youth unemployment is estimated to be as high as 52%, seek a progressive and democratic vocational education system that affords youth training, dignity, adequate remuneration and socially useful employment (McKinsey 2012:11).

Arguments in favour of a progressive vocational education system are important to consider if the role of vocational education is to respond to disadvantaged South Africans who Pampallis (2012) has argued must be important beneficiaries of vocational education. This 'disadvantaged' group refers to the predominantly black working class who remain largely excluded by the formal economy and its limited absorptive capacity. Whilst Pampallis' concern is recognised by critics of the dominant instrumental approach to skills development, they remain highly critical about the limits of such an approach of placing working class youth in vocational tracks where they are trained for low-status and low-paid jobs.

The history of the development of vocational education, in countries such as the United Kingdom (UK) and the United States (US), is a history of narrowing instrumentalist training largely for black working class men and women (Bettis & Gregson 1993; Hyland & Musson 2001; Kincheloe 1999; Shor 1988). In South Africa too, vocational education remains confronted by the stigma of a system generally characterised by: (a) programmes for students who work with their 'hands and not their heads', that is, programmes that do not train students to think conceptually and critically; (b) programmes for poor black youth and adults who do not have access to high-skill, prestigious jobs and careers; (c) skill provisions that are obsolete in a rapidly changing economy; and (d) institutions that fail to provide students with an alternative to schooling. As an instrumentalist focus on vocational education

increases, the historic 'race'/class inequities are likely to be reproduced under this subsector of education in particular.

A closer examination of the literature (Badroodien 2004; Chisholm 1984; Kraak 2002) on the evolution of vocational education in South Africa suggests that it is reproduced for a subordinated working class under changing economic policies. The section below reflects on three main shifts that show to the links between economic policy and vocational education.

TVET under apartheid capitalism

Badroodien (2004) has showed that the term 'technical and vocational education and training' (TVET) has come to encompass a wide variety of practices in South Africa – its content and meaning having shifted and changed many times. This historical context of technical and vocational education provision has shaped the nature and extent of such provision for different social classes and social groups in this country (ibid:21). He argued that vocational education has always been preoccupied with racialised social conceptions related to 'indigence, social and education inferiority, and mental backwardness'. Characteristic of apartheid education, the provision of TVET was located within a 'salvation paradigm' for the white working-class-poor, and to regulate and socialise 'poor white', 'african' and 'coloured' urban workers. Moreover it was to ensure that impoverished learners in the rural areas developed the skills and knowledge to prosper there, and not migrate to the cities (ibid).

What is clear is that skills development and TVET provision were shaped according to the prevailing system of apprenticeships at the time and the kind of jobs available for various learners in a racially segregated human resource development system. Moreover its history is located within a framework of serving the interests of an avaricious capitalist market economy driven by the desire to maximise profits (Chisholm 1984). Badroodien (2004) further argues that even when it was solely reserved for whites, TVET was stigmatised as 'kaffir work' and disparaged by white workers as degrading and unacceptable. This is partly because the predominant focus of TVET provision before 1900 was on the African and 'coloured' workers as part of colonial ideology. After 1900, TVET came to be directly associated with the social rehabilitation of 'poor white' youth, and particularly the depressed economic conditions and poverty of large sections of the white population (ibid:23–25). In the immediate aftermath of World War II as the result of the pressures of post-war reconstruction the 'liberal' United Party authorised more and more 'africans', 'coloureds' and 'indians' to work in skilled positions in industry (Terreblanche & Nattrass in Badroodien 2004:36). But this was short-lived because when the white volunteers returned from the war they were trained in these same skilled positions. The government struggled to cope with these contradictions, as education policymakers soon focused on simply teaching black youth to work. The period after World War II was characterised by policies that sought to entrench racialised TVET provision which was contradicted by the ever-expanding economy which needed skilled workers. The apartheid system

was adept at creating these racialised hierarchies in the interest of protecting a racist social order. In effect apartheid TVET provision and delivery shows its reproduction through the bureaucratic centralised education system anchored in the economic structure of apartheid capitalism.

TVET under 'embryonic' neoliberalism

There were further developments in the period between 1977 and 1982 resulting in a great expansion of TVET, which saw capital's unprecedented intervention in the South African education system driven by reformist initiatives dominated by narratives of 'skills shortages' (Chisholm 1984:387). As Chisholm (ibid) argues, these developments were precipitated by the recessionary economic conditions that had taken hold since the mid-1970s, with the country facing a mounting balance of payment problem, growing inflation, the limits of a white consumer market and the high structural unemployment of blacks. This expansion of TVET developed at the time of the neoliberalism regimes engineered by Prime Minister Margaret Thatcher and President Ronald Reagan in the UK and the US, respectively. Responding to the emergence of this regime South Africa too had to prepare for capitalist modernisation, economic growth and global competitiveness and consequently to advance its 'human capital' for increased productivity and economic growth.

The Human Sciences Research Council (HSRC) Commission of Inquiry (also known as the De Lange Commission) that was established in 1980, sought partly to address these 'deficiencies' in the South African education system's response to the economy. At the same time, the apartheid state faced the tumultuous and unstable political situation after the student uprising of 1976 and subsequent school boycotts that introduced a renewed militancy to the struggle for equality in the country.

Chisholm (ibid) argues that despite the De Lange Commission's call for a 'new meritocratic, non-racial and technicist education ideology' to meet the 'manpower' needs of the country, the Commission's report did very little to deviate from stated government policy of providing inferior education to blacks. She further argues that, in fact (quoting Sharp & Hartwig 1983), the narratives of skills shortages were a 'result of the trend towards mechanisation, reorganisation and rationalisation of the labour process to enhance capital's national and international competitiveness' (Chisholm 1984:389). The use of capital-intensive technology led to job-fragmentation, deskilling and reskilling, which resulted in the notion of 'skills' becoming a contested one. The militancy of the trade union movement was another factor that eroded capital's ability to act freely and which instigated a fiercely contested discourse around the nature of the skills shortage in South Africa.

The emergence of the Congress of South African Trade Unions (COSATU) in 1985 was a watershed moment in the political and economic landscape of South Africa. Its 1987 Congress was critical of workers' education that was individualistic, based on competitiveness and careerism and resolved that education should promote a collective outlook and working class consciousness (Cooper et al 2002:122–123).

The Congress argued that education should be part of an emancipatory process and it should be creative and liberating as opposed to being an instrument for exploitative practices against workers. The Congress further resolved that education should ensure maximum participation and democracy and build a leadership for societal transformation (ibid).

Despite job reservation legislation and the industrial colour bar, black workers under the apartheid regime performed skilled work from which they were legally excluded and for which they were not certificated – those skills were neither recognised nor rewarded. Workers' education at the time did not concern itself with what has now come to be defined as workplace learning.

The evolution of particular approaches and attitudes towards skills over a century and its relationship to labour market structures and the economy had, by 1994, resulted in a seriously dysfunctional skills development system. McGrath (2004:16) argues that inevitably the post-apartheid state was faced with a profoundly racialised and gendered (ie, black, especially female) skills regime in which South Africans had been denied access to meaningful skills development. He further argues that the 'absence of consensus and co-operation around skills development was not simply about issues of race', but rather that 'the state had abandoned much of its responsibility for building skills' and business seemed incapable of developing a strategic position (ibid).

The possibility of establishing social partnerships to create economic policy through co-operation, consultation, negotiation, and compromise was almost non-existent in one of the most conflictual industrial relations systems in the world. In addition McGrath (ibid) refers to South Africa's apartheid-driven industrial development path that led to an intense polarisation of the high skill versus low skill approach. He pointed out that a serious underdevelopment of the intermediate skill segment was a barrier to successful industrialisation and international competitiveness (ibid:17).

TVET under neoliberalism

The post-apartheid state adopted the Reconstruction and Development Programme (RDP) as its cornerstone macro-economic programme and as a means to address the challenges facing the country. The RDP was portrayed as a long-term strategy, a national strategic vision, a philosophy, a way of life and the ideal redistributive socioeconomic policy to address the interrelated problems of basic services, housing, unemployment, education, health and other inequalities (Baatjes 2002:187). It was regarded as an empowering policy that was inherently progressive and emancipatory, concerned with people-centred development, ecological safeguarding, gender equality, self-reliant economics, inclusivity and empowerment.

The RDP was short lived and was relegated to a project-based intervention when government could not apply the necessary resources to achieve the unachievable (Baatjes 2002:188; Bond 2000). It was quickly replaced by the neoliberal Growth,

Employment and Redistribution (GEAR) strategy which departed from the former RDP in many respects. Its strategy emphasised a set of macro-economic strategies which, in turn, emphasised 'economic growth' as the way to precipitate employment opportunities for a more equitable distribution of the country's wealth (for a detailed discussion see Bond 2000). All other policies – education, labour and social – would be streamlined according to the imperatives of this policy regime.

The development of a skills policy in post-apartheid South Africa was intended to provide 'greater co-ordination and planning; greater stakeholder consensus; and improved funding arrangements which cede to the state and the Sectoral Education and Training Authorities (SETAs) real leverage over the direction of training initiatives' (Kraak 2004:16).

The National Skills Development Strategy (NSDS) has been through two further cycles since its implementation in 2001. Its current version widens and deepens a skills development system and architecture that seeks to respond to the needs of the labour market as it is presently constituted. The NSDS III seeks to establish and promote closer links between employers and training institutions and between both of these and the SETAs (DHET 2011:3).

The NSDS III further aims to increase access to high quality and 'relevant education and training' and skills development opportunities, including workplace learning and experience, ostensibly to enable effective participation in the economy and society by all South Africans and reduce inequalities (ibid). Its primary focus, however, is placed on training for employment, that is, developing relevant technical skills or adequate reading, writing and numeracy skills to enable employability.

In effect, the post-apartheid state has created a plethora of policies that seek to address the challenges posed by 'skills shortages' at the intermediate levels ostensibly to address the challenges of poverty, unemployment and inequality, but in reality to respond to the demands of the prevailing labour market.

A further state policy, The New Growth Path, has been developed around the understanding that creating decent work, reducing inequality and defeating poverty are aims that can only be achieved when the South African economy improves its performance in terms of labour absorption as well as the composition and rate of growth. The proclaimed intention of this policy is to bring together the Industrial Policy Action Plan (IPAP II) as well as policies and programmes in rural development, agriculture, science and technology, education and skills development, labour, mining and beneficiation, tourism, social development and other areas (Baduza & Yankey 2012:5). Whether this will be achieved is dependent on a range of factors and can hardly be taken as a given.

The Diagnostic Overview developed by the National Planning Commission (NPC) identifies the main challenges confronting the country and examines the causes with reference to the number of aspects that need attention. Unemployment, education, infrastructure development, public health, inequality and service delivery are again identified as requiring the most urgent attention and are outlined in the National Development Plan ([NDP], NPC 2011b). At the most recent State of the

Nation address, the President indicated that this would be the overarching plan that would drive government programmes and interventions going forward (GCIS 2013).

As various chapters in this book have argued that the skills policy regime in South Africa has been dominated by the false assumption that higher economic growth will make a significant dent to high levels of unemployment. TVET is increasingly being centred as the sites of skills formation that can develop the human capital for increased economic growth and to address the unemployment crisis. There is an urgent need to map an alternative theory of skills formation that is not hostage to human capital theory (HCT) and its application since it has been a manifest failure (Sears 2003). This requires a closer analysis and a deeper understanding of the historical continuities shaping the government's skills development policy and its continued orientation largely to the demands of the corporate sector of the economy.

The Failure of Human Capital Theory

The defining feature of economic debate in recent decades is the importance economists have attached to human capital as a determining factor of economic success and competitive advantage (Brown, Green & Lauder 2001). The argument that education was 'the most important single determinant' of economic growth was initially advanced through the work of human capital theorists Gary Becker and Theodor Schultz in the 1960s and 1970s. They reduced human behaviour to 'calculational rationality' – human beings as purposeful and goal-oriented individuals who will invest in education in order to maximise their opportunities. The growth in post-World War II economies was responsible in part for the emergence of an HCT as these 'new economies' needed highly skilled workers. Following Schultz, Baptiste (2001:187) argued that 'what is commonly labelled consumption is really human capital investment'. Schultz (in Olssen, Codd & O'Neill 2004:147) had argued at a meeting of the American Economic Association in 1960, which may be considered as 'the inauguration of the human investment revolution in economic thought', that it was necessary to

> treat education as an investment in man and to treat its consequences as a form of capital. Since education becomes a part of the person receiving it, I shall refer to it as human capital – it is a form of capital if it renders a productive service of value to the economy.

Schultz (in Baptiste 2001:187) argued further that:

> This investment . . . includes direct expenditure on education, health, and internal migration; earnings foregone by mature students attending school and by workers acquiring on-the-job training; the use of leisure to improve skills and knowledge; and so on – all of which constitute measures aimed at improving the quality of human effort and, ultimately, workers' productivity.

Baptiste (2001:185) defines *human capital* as 'knowledge, attitudes, and skills that are developed and valued primarily for their economically productive potential'. More specifically it refers to 'the productive capacities of human beings as income-producing agents in an economy . . . and to the present value of past investments in the skills of people'. For HCT, investment in education accounts for economic growth. This economic rationale for education regards investment in human beings as no different to investment in land or machines as they all represent part of the technological enhancement of the economy. As Dale (in Hyslop-Margison & Sears 2010:3) puts it: 'education in the national interest takes the pupil as raw material to be transformed into an efficient worker by means of a vocationally dominated curriculum'.

Schultz argued that human capital was the sum total of skills, talents and knowledge embodied in its population and an investment in education, skills and training that directly impacts on economic productivity. This view was congruent with the linear model to a high skills economy suggesting that technological advancement requires education and training that produces high skills as a pre-requisite to higher earnings. In simple terms, 'the more you learn, the more you earn'.

The HCT model therefore suggests the following: (a) education should be regarded as a private good that is a tradable commodity in the market place for money and status; (b) the private return on human capital investment (education) provides an incentive to progress to further education; (c) further education should be oriented towards the labour market (supply and demand); and (d) more education can be translated into higher productivity which results in higher earnings.

This thesis has since been criticised in a growing body of research and writing and the limitations of HCT have become even more obvious as a result of the global economic crises (see the two chapters by Motala and Vally in this volume; Brown et al 2001; Brown et al 2011; Marsh 2010; Weis 1990). The continuous and uncritical adoption of HCT and its associated practices for education suggests the need for considered alternatives (Baptiste 2001; Brown et al 2011; Hyslop-Margison 2005; Hyslop-Margison & Sears 2010; Lakes 1997; Marsh 2011; Olson, Codd, & O'Neil 2004; Weis 1990). The wide ranging critique of HCT includes its: one-dimensional view of human beings; narrow understanding of skill and labour; exacerbation of social inequalities; development of underdevelopment; blaming of the victims; and the privatisation of social problems (Baptiste 2001:197).

Despite the claims of HCT, that more, better and higher education and skills will translate into economic growth for most developed and especially developing countries, the promise is yet to be fulfilled. Through the different phases of its 'screening' approach (which focused on the credentials, not the cognitive attributes of the educated worker), the structural adjustment policies and the effects of new technologies, it has failed to produce the desired results and has instead perpetuated skewed skills training and economic growth. At the same time, the neoliberal assault on vocational education is associated with: (a) deep funding cuts; (b) the introduction of business management techniques and the cult of efficiency; (c) the application of

market-driven approaches to skills acquisition; and (d) the introduction of 'choice' and 'user fees', all of which have simply exacerbated the problem of 'under-development'.

Very importantly, as Baptiste (2001:197–198) has argued, 'every education practice is profoundly influenced by theories of human and social behaviour . . . but some theories are so flawed that they are likely to exacerbate rather than alleviate social ills'. This is clearly applicable to HCT whose reductionist view of human beings as *homo economicus* (human beings as social agents singularly concerned with the pursuit of self-interests) is oppressive, alienating and the antithesis of our ontological vocation to become more human (Freire 1970). HCT gives rise to a range of pedagogical practices that seek to domesticate and impede the development of human freedom. This is particularly relevant to a discussion of educator development in vocational education given the asymmetrical status it has in comparison to formal schooling or higher education in South Africa. Governments around the world have adopted this orientation to education which subjugates all forms of education including vocational education to HCT, the redefinition of learners as 'human resources' or 'clients', and educators as 'service providers'. The neoliberal appropriation of HCT, which first appears in South Africa in the 1990s, placed even greater emphasis on the importance of private individual investment in education spawning ideas about the privatisation of education in the country.

As in other countries, South Africa is reorienting its TVET system in order to harness TVET to national economic objectives as set out in NSDS III, the NDP and various skills projects intended primarily to serve business and industry interests, and to meet the singular interests of a largely unreconstructed labour market. As a result the prevailing human capital policy in South Africa promotes an education and training culture marked by perpetual training (as seen in learnerships, skills programmes, and training schemes for the unemployed) which is meant to bring improvements to support industry's need for a highly skilled and flexible workforce necessary for competitiveness in the global economy. Hence, the modernisation of the skills development regime in South Africa advocates infinite reskilling and perpetual and rigorous training programmes as the solution to economic problems. Investment in the education of individuals is therefore seen as the solution to all the structural problems of the economy and the labour market.

The Challenge for Vocational Educators in South Africa

Educators in the vocational education system in South Africa form part of a group of marginalised educators (alongside other adult educators and early childhood development teachers) because of their social position within the educational field. Their status is further reinforced by the instrumentalist and technicist orientation to education that suppresses criticality. Many educators in vocational education in the

South African context have limited pedagogical training and equally limited exposure to work-based experiences in the vocational fields they teach in FET colleges. More than 60% of FET College lecturers do not have a professional qualification (DHET 2012b). Moreover, most universities do not offer such qualifications, and where they do, the programmes lack any serious orientation to the philosophical debates about education and training and their relationship to curriculum design and classroom practice. Like their counterparts in schools, adult and vocational educators are under pressure to implement predetermined instructional procedures and standardised content – a deskilling process that discourages educators to think critically and creatively about their practice. In her research in an Australian context, James (2002) showed how competency-based education and training (CBET) approaches emphasise 'procedural, technical knowers' rather than 'reflective problem-solvers', and 'standardized adaptable workers' rather than 'innovators' or 'initiators' (James 2002:371). She further raised the disempowering effect and alienation experienced by practitioners brought about by the imposition of standardisation (ibid:385). James also asserts the importance of curriculum models and a theory of learning for vocational educators.

Collins' (1991) critique of the broader contemporary field of adult education, including vocational education, provides a meaningful basis for the development of a transformative pedagogy of adult and vocational education. Collins (ibid) warns against these fields of education being shaped by a psychological, individualised orientation that is dominated by a 'professionalised psychologistic pedagogy'. Besides his critique of the professionalisation of adult and vocational education, he argues that these educators have succumbed to the measurement and techno-bureaucratic techniques and the ideological demands of a cult of efficiency. His critique is also about what he calls a 'technicist obsession' which reduces adult learning to situations managed by technical formulations such as formal standardised pre-packaged curricula and preconceived needs assessment instruments expressed in the form of simplistic behavioural objectives (ibid:90). Collins adds to a body of literature that critiques competency-based strategies founded on behaviourist principles. He also advances a number of moral objections to the behaviourist position which stresses the instrumental value of learning, thus fostering an impoverished view of educational activity and human potential (Hyland 1993). For Collins, the technicist obsession and the 'cult of efficiency' are obstacles which prevent students thinking critically and disable them from evaluating everyday life experience independently. These technical formulations of education serve to usurp independent, reflective thought and subvert the critical powers of insight and imagination (Collins 1991:5). Collins' critique is largely based on a careful and systematic analysis of CBET which has come to dominate vocational education over the last few decades under what is generally known as the standards-based approach to vocational curriculum.

For Collins (ibid:16), this human capital induced tradition of adult education which is now most prevalent in vocational education, undermines the prospects of achieving an emancipatory, critical practice of both adult and vocational education.

At the heart of his critique is a concern about the deskilling effects on educators brought about by an uncritical embrace of technicist formulations and training models and the reduction of educators to mere facilitators of learning and training or 'corporate drones'.

Kilminister (1997) also attacks competency-based notions of vocational education, which, she argues, deny students the opportunity to gain socially useful education (knowledge that is more inclusive and integrative) which could lead to the development of critical consciousness or awareness. The construction of socially useful knowledge through vocational education can only be useful if it is practical and relates directly to the lives of students, while simultaneously enhancing their role as citizens in society. Consequently the only way vocational education can be more revelatory and 'factual' is through initiatives and the critical pedagogical practices of educators. Vocational educators are therefore trapped in an oppressed-oppressor dichotomy: They are oppressed by their social position, but in turn are oppressors because they deliver vocational education that suppresses criticality.

In more recent times, educators in vocational education have been recast as 'training entrepreneurs' or 'service providers' whilst students have been reframed as 'customers'. Given the critical turn to market-driven vocational education, the urgency to retrieve, renew and advance education as a vocation has become imperative. He proposes a vocational education which arms educators with the ability to create and exercise a more holistic and democratic practice. A focus on building a transformative pedagogy of vocational education is important, particularly in South Africa, because of the lack of robust debate about a philosophical orientation towards vocational education in post-school education. There is generally very little discussion about education and its relationship to curriculum development and teaching practice. This is compounded by the limited education programmes for educators of vocational education. South African universities offer little or no professional programmes for educators in vocational education. In order to address this void, this chapter sets out some key considerations of an emancipatory practice with a focus on educators in vocational education.

Towards an Emancipatory Practice of Vocational Education

Progressive educators take democracy seriously, thus, progressive vocational educators should play a key role in building democratic institutions and pedagogical practices linked to a vision of a society that embraces social justice, economic equality and sustainable development. The larger project of progressive vocational education is therefore framed as education that fosters fundamental democratic learning principles and the preparation of students for active democratic citizenship. Vocational education should therefore not limit the vocational aspirations of students to narrow technicist interests but rather increase their range of social and occupational

possibilities. Vocational education in a democratic society should therefore support all citizens with the opportunities for intellectual growth, vocational enrichment and social improvement. Democratic vocational education should therefore also oppose the reproductive and anti-democratic outcomes of narrowly conceived occupational education by responding to the needs of students rather than those of the economy to the exclusion of all else. In fact, democratic vocational education should foster intellectual capability in students to change an industrial infrastructure, rather than having their lives and work determined by labour force requirements. It is well-known that the present orientation to vocational education generates class divisions and reproduces economic and social inequality. The development of vocations should therefore be seen as part of a broader democratic vocational education that engages with critical issues such as the relationship between vocational education and (a) a humane vision of a democratic society; (b) the nature of social and power relations and especially how these relate to political and economic systems and their organisation; and (c) work and social livelihoods beyond the limits of the present economic system.

Progressive vocational educators have an important role to play in building an emancipatory vocational education through democratic institutions, curriculum design and classroom pedagogy. Building an emancipatory vocational education requires a mission for vocational educators associated with a sense of vocation (as opposed to a livelihood), which calls for emancipatory strategies within a transformative and critical pedagogy, or as Collins (1991:41) puts it, an 'ethically transformative critical self-reflective practice'. The vocational educator in this case has to play a crucial role in building his or her vocation as well as supporting students to develop their vocations as both workers and citizens. A vocation is a calling involving a meaningful activity. For educators, irrespective of their practice, developing one's vocation is a thoughtful and ethical commitment to a critical and ongoing self-reflective practice. Dewey's view that connects vocation with purpose is summarised as: 'A vocation means nothing but such a direction of life activities as renders them perceptibly significant to a person, because of the consequences they accomplish, and also useful to his associates' (Dewey cited in Higgins 2005:445).

Educators in vocational education are involved in pedagogical processes of developing citizens who, in the vocational sense, are concerned with connecting one's ability with the requirements of serving society. In the Deweyan sense, work is meant to provide meaning to one's life as it transforms one's life; it should be a form of self-creation rather than a blind technical process (Kincheloe 1999:14). For Dewey, the pedagogical project of vocational education for both the educator and the student, is concerned with building vocations rather than preparing them merely for jobs. The process of 'making a living' or producing products should also be life enriching. As part of building vocations amongst students, this requires forms of vocational education that are not limited to narrowly-conceived skills education but aimed at the general preparation of students for all aspects of democratic citizenship. Hyslop-Margison (2005:28) argues that a vocational education programme 'that encourages uncritical student acceptance of prevailing economic and labor market conditions

constitutes inadequate preparation for participatory democratic citizenship because it fails to entertain alternative social visions'. This, he further argues is inconsistent with the principles of a democratic learning framework because vocational education programmes omit important content such as the history of human rights, cultural and environmental issues and a critique of the present global market economy (Hyslop-Margison 2005:84). Democratic vocational education recognises the legitimate right of students to critique the material conditions that shape their vocational lives and provides the tools to help transform their condition through praxis. Students should therefore not be educated or trained to conform to corporate aspirations through the acquisition of skills, attitudes and dispositions required by industry to the exclusion of all else.

A number of theorists and scholars have expressed the significance of critical thinking as integral to a democratic vocational education. Shor (1988) points to how 'social efficiency' vocational education ignores the importance of critical thinking and how students and educators could develop a resistance to critical thinking and transformative pedagogy. He argues for the need to 'de-vocationalise' the thinking of students, especially those who find themselves in dilapidated schools, overcrowded classrooms and generally poor conditions in which their education takes place (Shor ibid:102). Poor public education, according to Shor, depresses students' and teachers' desire for deep learning and serious intellectual commitment. These conditions, combined with consumerism and a culture of material need, feelings of inadequacy, insecurity and the failure of technical job training in a hostile and unpredictable job market, reduces the life and work possibilities for working class youth in particular. A democratic vocational education should therefore guard against resistance to critical and intellectual enquiry amongst both students and teachers. Shor offers a number of values that should underpin a problem-posing vocational programme. These include: (a) active participation in the learning process; (b) the critical nature of classroom learning and the development of a critical approach to social issues; (c) the situatedness of learning and the importance of a learner-centred curriculum; (d) learning and teaching as a dialogic and mutual exchange where students are viewed as curious, inquisitive, enterprising, co-operative and communicative beings; (e) the importance of education as a democratic process; (f) interdisciplinary curricula; and (g) developing an activist orientation that encourages political activity and agency to effect social change.

The role of vocational educators as critical public intellectuals and practitioners becomes crucial at a time when general crises across educational institutions have become common. FET colleges, just like schools and universities, continue to experience ongoing crises as seen in student protests, inadequate finances and its consequences and strike action by its employees. The role of progressive educators in vocational education becomes particularly relevant as these institutions are increasingly directed to calibrate supply to demand thus connecting curricula more closely with the skills needs of the demands of the private sector in the economy. At risk is the cultivation of an informed, critical citizenry capable of actively participating

in the shaping and governing of a democratic society. As public intellectuals, vocational educators need to advance a broader conception of vocational education rather than uncritically adopting narrow conceptions of it. Therefore, progressive vocational educators as public intellectuals are integral to advancing the kind of transformative pedagogy defined by Collins and others. A number of critical theorists and scholars (Giroux 2012; Roberts & Peters 2008) have highlighted the important role of educators as public intellectuals.

For the purpose of this chapter we highlight a few pertinent aspects that apply to vocational educators. Firstly, FET colleges are currently addressing what has been described as the problem of 'mission drift'. As these institutions are being restructured as part of a 'turn-around strategy', they fall victim to corporate culture and managerialist practices resulting in a drift away from their stated missions and visions. The displacement of democratic culture by corporate culture has been the subject of a wide ranging body of critical writing (see Giroux 2003). Progressive vocational educators need to engage with the consequences of uncritically applying business models to institutions whose mandate is to serve the public good. Secondly, progressive educators need to engage intellectually with curriculum models and pre-packaged learning programmes that subjugate their pedagogy to instrumental rationality. It is imperative that they protect socially interactive pedagogies through which useful knowledge, critical thinking and problem-solving is encouraged and promoted. Thirdly, institutions of vocational education should be positioned to service young people and in particular the socially marginalised black working class youth in search of an education that could realise their aspirations. With high levels of youth unemployment and social resistance, we are at risk of losing a growing generation of youth to a system of exclusion, intolerance and repression. Progressive educators need to play a critical pedagogical role to counter the criminalisation and surveillance of youth and help nurture a culture of social responsibility and compassion.

Finally, progressive educators need to connect their knowledge, experience and expertise more firmly with important public issues. It is important that progressive educators participate more actively in community projects and encourage their students to do the same. Giroux (2012:8) encourages both educators and students 'to act on their beliefs, reflect on their role as engaged citizens, and intervene in the world as part of the obligation of what it means to be a socially responsible agent'.

Adopting Democratic Learning Principles and Approaches

A society based on the ideals of an inclusive democracy, which provides citizens with the tools needed to participate in creating the conditions for their occupational and vocational experience as future workers and citizens, should inform a national vocational education system for South Africans. All citizens should therefore be provided with the opportunity for a lifetime of intellectual growth, vocational

enrichment and social improvement. It is therefore important that vocational education, which consists of a combination of career education and citizenship education, should be based on the principles of democratic learning. We believe that vocational education, when appropriately conceived and implemented, can actually contribute to creating participatory and critical reflective citizens (Hyslop-Margison & Sears 2010: 57). In order to achieve this, it is necessary to: (1) create democratic spaces for learning and teaching; (2) ensure a pedagogy that fosters active participation; and (3) ensure that learning respects divergent views.

Three critical principles of democratic learning should inform both career and citizenship education. These include (a) respect for student rationality and knowledge; (b) entertaining alternative perspectives; and (c) appreciation for the distinction between social and natural reality. Allman (2001) adds additional principles of a democratic learning framework to those suggested by Hyslop-Margison & Sears (2010). She draws from Freirean education and critical pedagogy and proposes principles specific to classroom practice. These principles offer meaningful guidance for people involved in community learning and education and include: (a) mutual respect, humility, openness, trust and co-operation; (b) a commitment to learning to 'read the world' critically; (c) vigilance of one's own and the group's progress in developing a deeper and more critical understanding of whatever aspect of reality they are co-investigating; (d) honesty and truth – an 'ethics of authenticity' – this involves the sharing of feelings and is part of the 'openness and trust' and 'commitment' listed above; and (e) passion – its inner connection with critically 'reading the world'.

Allman (2001) further lists the aims and objectives of this approach for education and the process that is essential to it. These include:

- critical and creative thinking which together lead to realistic hope;
- transformation of self and the social relations of learning and teaching;
- democratisation – learning to live and act in co-operation with others;
- embracing and internalising these principles;
- an unquenchable thirst for understanding or genuine critical curiosity;
- solidarity and a commitment to self and social transformation and the project of humanisation.

These principles are intended to enhance citizenship, technical, work-oriented and vocational education that supports the development of informed, reflective and politically-empowered citizens.

Tikly (2013) building on the work of Amartya Sen and Martha Nussbaum around the concept of human capabilities and social justice also expounds on an expanded and alternative approach to understanding the role of vocational education in relation to the contemporary challenges of development. Usefully, Tikly draws out the practical implications and potential possibilities of the capabilities approach. An approach that heeds context, issues of disadvantage and is attentive to institutional and cultural barriers and wider social relations of power.

Conclusion

This chapter has argued that the training of progressive vocational educators is an important pedagogical activity in the emerging Post-school Education and Training (PSET) landscape of South Africa. Regrettably, however, the current vocational education based on the 'social efficiency' or instrumentalist model is narrowly-focused and driven by technocratic rationality, a cult of efficiency and narrow economic interests. This narrow view of vocational education, is problematic and mutes engagement with a philosophical tradition and orientation that embraces more holistic approaches and practices which are capable of developing integrated and broad-based forms of useful knowledge, life skills and attitudes in the service of the broader society. We believe that it is imperative to move beyond narrow human capital-driven and instrumentalist learning and that its logic should be interrupted because of its far-reaching consequences for a national system of vocational education.

This chapter has looked at the ideological framework of vocational education in South Africa and introduced the need for a progressive philosophical orientation and practice as essential to the development of critical awareness about vocational education and its social value. This need is becoming important given the emphasis placed on educator development for vocational education institutions and the danger of embracing narrow behaviourist learning approaches that impede the full intellectual and social meaning of vocations.

A progressive and emancipatory pedagogy is required to reorient vocational education as a vehicle for building substantive democracy. The current ideological orientation of vocational education is driven by HCT which inculcates particular belief systems about the purpose of vocational education, unproductive views about students, as well as the way in which curricula are structured. We argue that vocational education in South Africa continues to deepen the historic reproduction of vocational education as education for the working class – the main constituency for vocational programmes. This, we argue, is a legacy of apartheid capitalism and is in danger of being reproduced in post-apartheid South Africa. Expansion of vocational education in its present form will further reinforce the stratification of education in which under-privileged youth are tracked into under-privileged positions. It appears inevitable that poor curricula based on meritocratic approaches and taught by unreflective and uncritical vocational education educators can only result in class, gender and racialised and other inequalities. Vocational education educators and their students need to understand why economic security and meaningful work remain so elusive in South Africa. Vocational education based on critical and transformative pedagogy could produce more effective educators and become a tool for social change rather than social control. Progressive educators as public intellectuals need to engage with a transformative vocational education pedagogy that could build a democratic and humane society.

Notes

1 For the purpose of this chapter, we use the term vocational education to refer to Technical Vocational Education and Training (TVET). We also use this term to refer to vocational education provided by FET centres in South Africa. According to emerging legislation, South Africa is likely to adopt the term Vocational Continuous Education and Training (VCET) to refer to vocational education offered by a variety of institutional types in the country.

2 Whilst the FET colleges remain the key sites for vocational education, South Africa has 403 private FET colleges that provide vocational programmes to more than 140 000 students. Vocational education is also provided across the various economic sectors and funded through SETAs as key drivers of the NSDS. The number of workers and unemployed individuals enrolled in learnerships, internships, skills programmes and bursary programmes was 135 000 in 2011/2012.

3 The Gini coefficient is commonly used as a measure of inequality of income or wealth. For OECD countries, in the late 2000s, considering the effect of taxes and transfer payments, the income Gini coefficient ranged between 0.24 to 0.49, with Slovenia and Chile the lowest. The countries in Africa had the highest pre-tax Gini coefficients in 2008–2009, with South Africa having the world's highest at 0.7.

4 There are no reliable data on unemployment rates for graduates from FET colleges. According to the Labour Force Survey (Stats SA 2012), 255 000 (6%) persons with a tertiary diploma/degree were unemployed. This does not include data about FET College graduates. FET College qualifications are equivalent to matric. Current data QLFS suggest that 60% of South Africans with a matric (Grade 12) are unemployed.

5 Blade Nzimande, Minister of Higher Education and General Secretary of the South African Communist Party reiterated the central role of vocational education to industrial and economic development of which partnerships between educational institutions (ie, FET colleges) and employers ought to be strengthened, see http://7thspace.com/headlines/412383/south_africa_vocational_education_needed_to_make_ngp_a_reality.html.

References

Allman, P., 2001, *Critical education against global capitalism: Karl Marx and revolutionary critical education*, Bergin and Garvey, Westport, CT.

Anderson, S., Brown, M. & Rushbrook, P., 2008, 'Vocational education and training', in G. Foley (ed.), *Dimensions of adult learning: adult education and training in a global era*, Open University Press, Berkshire.

Baatjes, B. & Hamilton, S. 2012. 'Blade's paper fails to make the cut', http://mg.co.za/article/2012-01-20-blades-paper-fails-to-make-the-cut/.

Baatjes, I., 2002, 'The new knowledge-rich society: Perpetuating marginalization and exclusion', *Journal of Education*, 28, 179–204.

Baatjes, I., Spreen, C. & Vally, S., 2012, 'The broken promise of neoliberal restructuring of South African Higher Education', in B. Pusser, K. Kempner, S. Marginson & I. Odorika (eds.), *The university and the public sphere: Knowledge creation and state building in the era of globalization*, Routledge, New York, NY.

Badroodien, A., 2004, 'Technical and vocational education provision in South Africa from 1920–1970', in S. McGrath, B. Badroodien, A. Kraak & L. Unwin (eds.), *Shifting*

understandings of skills in South Africa: Overcoming the historical imprint of a low skills regime, HSRC Press, Cape Town.

Baduza, U. & Yankey, K., 2012, 'Notes towards the developing of a research agenda for rural development in the Eastern Cape', CIPSET/NMI, Port Elizabeth.

Baptiste, I., 2001, 'Educating lone wolves: Pedagogical implications of human capital theory', *Adult Education Quarterly*, 55(3), 184–201.

Bettis, P.J. & Gregson, J.A., 1993, 'Democratizing secondary vocational education: Examples of critical pedagogy', *Journal of Vocational and Technical Education*, 10(1), 4–14.

Bond, P., 2000, *Elite transitions: From apartheid to neoliberalism in South Africa*, University of Natal Press, Pietermaritzburg.

Brown, P., Green, A. & Lauder, H., 2001, *High skills: Globalization, competitiveness and skill formation*, Oxford University Press, New York, NY.

Brown, P., Lauder, H. & Ashton, D., 2011, *The global auction: The broken promises of education, jobs, and incomes*, Oxford University Press, Oxford.

Chisholm, L., 1984, 'Redefining skills: Black education in South Africa in the 1980s', in P. Kallaway (ed.), *Apartheid and education*, pp. 387–409, Ravan Press, Johannesburg.

Collins, M., 1991, *Adult education as vocation*, Routledge, London.

Cooper, L., Andrew, S., Grossman, J. & Vally, S., 2002, ' "Schools of labour" and "Labour's schools": Worker education under apartheid', in P. Kallaway (ed.), *The history of education under apartheid 1948–1994: The doors of learning and culture shall be opened*, 111–133, Peter Lang, New York, NY.

Department of Higher Education and Training (DHET), 2010, *Nationals Skills Development Strategy II*, DHET, Pretoria.

Department of Higher Education and Training (DHET), 2011, *National Skills Development Strategy III*, DHET, Pretoria.

Department of Higher Education and Training (DHET), 2012a, *EMIS data*, DHET, Pretoria.

Department of Higher Education and Training (DHET), 2012b, *Green Paper for Post-school Education and Training*, DHET, Pretoria.

Department of Higher Education and Training (DHET), 2013, *Statistics on post-school education and training*, DHET, Pretoria.

Department of Labour (DoL), 2009, *Quarterly Labour Force Survey*, DoL, Pretoria.

Department of Trade and Industry (DTI), 2010, *Industrial Policy Action Plan 2012/13–2014/15*, DTI, Pretoria.

Department of Trade and Industry (DTI), 2011, *New Growth Path*, DTI, Pretoria.

Freire, P., 1970, *Pedagogy of the oppressed*, Penguin Books, London.

Government Communication and Information System (GCIS), 2013, 'State of the Nation Address by His Excellency Jacob G Zuma, President of the Republic of South Africa on the occasion of the Joint Sitting of Parliament Cape Town', GCIS, Pretoria http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=34250&tid=98676.

Giroux, H.A., 2003, *Public spaces, private lives: Democracy beyond 9/11*, Rowman & Littlefield, London.

Giroux, H.A., 2012, *Education and the crisis of public values: Challenging the assault on teachers, students and public education*, Peter Lang, New York, NY.

Higgins, C., 2005, 'Dewey's conception of vocation: existential, aesthetic, and educational implications for teachers', *Journal of Curriculum Studies*, 37(4), 441–464.

Hyland, T., 1993, 'Vocational reconstruction and Dewey's instrumentalism', *Oxford Review of Education*, 19(1), 89–101.

Hyland, T., 1994, 'Silk purses and sows' ears: NVQs, GNVQs and experiential learning', *Cambridge Journal of Education*, 24(2), 233–243.

Hyland, T. & Musson, D., 2001, 'Unpacking the new deal for young people: Promise and problems. *Educational Studies*, 27(1), 55–67.

Hyslop-Margison, E.J., 2000, 'An assessment of the historical arguments in vocational education reform', *Journal of Career and Technical Education*, 17(1), 23–30.

Hyslop-Margison, E.J., 2005, *Liberalizing vocational study: Democratic approaches to career education*., University Press of America, Landham, MD.

Hyslop-Margison, E.J. & Sears, A., 2010, *Neo-liberalism, globalization and human capital learning: Reclaiming education for democratic citizenship*, Springer, Dordrecht.

James, P., 2002, 'Discourses and practice of competency-based training: Implications for worker and practitioner identities', *International Journal of Lifelong Learning*, 21(4), 369–391.

Kallaway, P., 1984, *Apartheid and education*, Ravan Press, Johannesburg.

Kallaway, P. (ed.), 2002, *The history of education under apartheid, 1948-1994: The doors of learning and culture shall be opened*, Maskew Millar Longman, Cape Town.

Kilminister, S., 1997, 'Vocational education and really useful knowledge', paper presented at the 27th Annual SCUTREA Conference: Crossing borders, breaking boundaries: Research in the education of adults, University of London, UK, July.

Kincheloe, J.L. 1999. *How do we tell the workers? The socioeconomic foundations of work and vocational education*, Westview, Boulder, CO.

Kraak, A., 2002, 'Discursive shifts and structural continuities in South African vocational education and training, 1981–1999', in P. Kallaway (ed.), *The history of education under apartheid, 1948–1994: The doors of learning and culture shall be opened*, Maskew Millar Longman, Cape Town.

Kraak, A., 2004, 'Training policies under late apartheid: The historical imprint of a low skills regime', in S. McGrath, A. Badroodien, A. Kraak & L. Unwin (eds.), *Shifting understandings of skills in South Africa: Overcoming the historical imprint of a low skills regime*, HSRC Press, Cape Town.

Lakes, R.D., 1997, 'The new vocationalism: Deweyan, Marxist and Freirian themes', ERIC. Information Series No. 369 (ED 408508).

Marsh, J., 2011, *Class dismissed: Why we cannot teach or learn our way out of inequality*, Monthly Review Press, New York, NY.

McGrath, S. 2004. 'Introduction: The shifting understanding of skills in South Africa since industrialization', in S. McGrath, A. Badroodien, A. Kraak & L. Unwin (eds.), *Shifting understandings of skills in South Africa: Overcoming the historical imprint of a low skills regime*, HSRC Press, Cape Town.

McKinsey Center for Government, 2012, 'Education to employment: Designing a system that works', www.mckinsey.com/mcg.

National Planning Commission (NPC), 2011a, *National Development Plan*, NPC, Pretoria.

National Planning Commission (NPC), 2011b, *Diagnostic Overview*, NPC, Pretoria.

Olssen, M., Codd, J. & O'Neill, A., 2004, *Education policy: Globalization, citizenship and democracy*, Sage, London.

Pampallis, J., 2012, 'Green Paper not merely meeting the needs of business', http://mg.co.za/article/2012-01-27-green-paper-not-merely-meeting-the-needs-of-business/

Reid, A., Gill, J. & Sears, A., 2010, *Globalisation, the nation-state and the citizen: Dilemmas and directions for civics and citizenship education*, Routledge, London.

Roberts, P. & Peters, M.A., 2008, *Neoliberalism, higher education and research*, Sense, Rotterdam.

Sears, A., 2003, *Retooling the mind factory-education in a lean state*, Garamond Press, Ontario.

Shor, I., 1988, 'Working hands and critical minds: A Paulo Freire model for job training', *Journal of Education*, 170(2), 102–121.

Tikly, L., 2013, 'Reconceptualizing TVET and development: A human capabilities and social justice approach' in *Revisiting global trends in TVET: Reflections on theory and practice*, pp. 3–39, UNESCO-UNEVOC, Bonn.

Weis, L., 1990, *Working class without work: High school students in de-industrializing economy*, Routledge, London.

Weis, L., (ed.), 2008, *The way class works: Reading on school family and the economy*, Routledge, London.

6

SKILLS? WHAT SKILLS? JOBS? WHAT JOBS?

An Overview of Research into Education/ Labour Market Relationships

Stephanie Allais and Oliver Nathan

Introduction

The relationship between education and the economy is of ongoing concern around the world. Attaining ever-higher levels of education is widely believed to be essential for economic growth, and the idea of a 'knowledge economy' is frequently invoked, sometimes as an ideal to which people should aspire, and sometimes as an imminent reality. Livingstone and Guile (2012: iii) note that today the existence of a 'knowledge-based economy' is 'widely taken for granted by governments, mass media, public opinion, and most scholars today. The idea of the 'knowledge economy' is a major contributor to contemporary questioning of the role of secondary education and the curriculum. This questioning has also, in part, been caused by the relatively recent and rapid expansion of secondary education internationally.

In South Africa, both the education system and the economy have particular problems, largely originating in the apartheid system. On the one hand, there are exceptionally high levels of unemployment (Marais 2011; Mohamed 2010). On the other hand, millions of young people leave the schooling system with inadequate education, and there is very little provision of education and training outside of the school and university systems (DHET 2012). A skills shortage is widely regarded as a major contributor to South Africa's high unemployment levels. In some quarters an allegedly inflexible labour market is also blamed, and it is sometimes seen as a paradox that South Africa can have both a skills shortage and high levels of unemployment. Young people frequently leave their education institution with no possibility of attaining a well-paying job, or, in many cases, any employment at all, in the context of pervasive structural unemployment in South Africa. More broadly,

the South African economy has experienced what has commonly been referred to as 'jobless growth' with capital rather than labour intensive forms of economic growth being the order of the day (Mohamed 2010). This is coupled with a prevalent argument from employers that they cannot find people with the 'right skills'. Policy makers and researchers question the suitability of school subjects and 'traditional' disciplinary bases for curricula in schools, and even more so in colleges, where new courses and programmes often are developed in the absence of a traditional disciplinary base, see Wedekind's chapter (Chapter 4) in this book for an elaboration.

Transitioning From Education to the Labour Market

This chapter explores some of the complexities with regard to the transition from education and training into the labour market. It starts by examining transition research in South Africa, giving a brief overview of the findings of the research and a critique of the methodologies and theoretical underpinnings of using longitudinal and panel surveys as the primary means to attaining useful insights into transitions. This is followed by an examination of international literature, and the state of transition research more generally. This leads to a consideration of some of the complexities involved in understanding this relationship, and understanding the relationships between education systems and economies. Brief consideration is given to different theoretical frameworks which attempt to account for this relationship. We conclude that an analysis of the broader social and economic structures must come before an analysis of transitions, of transition systems, and of education/labour market relationships more generally. This has substantial analytical and prescriptive implications for transition research in South Africa.

One way to attempt to understand the relationship between education and jobs is through what has been called *transition studies*. Such studies attempt to describe the 'connection between an educational programme and its destinations, mediated by a set of institutional arrangements that include qualification systems, curriculum content, labour market arrangements and information and advice systems' (Sweet 2001:11); in other words, the pathways between education and labour, and the systems that support these pathways. Transitions studies look at education-to-work transitions, but also encapsulate myriad education-to-work transitions as well as so-called 'micro transitions' between unemployment and employment; self-employment and employment; full-time work and part-time work, and permanent work and casual work.

Longitudinal studies and panel surveys in South African transitions studies, although limited in number, have provided insight into the patterns of enrolment, throughput, completion, transition to the workplace and basic assessments of labour market outcomes. For example, a graduate tracer study performed by Cosser, McGrath, Badroodein and Maja (2003) traced the transition of graduates from Further Education and Training (FET) colleges between 1999 and 2001. The tracer

study consisted of three principle research thrusts. The first thrust of the research briefly profiled 3 503 respondents in terms of their biographies, showing variables such as province, population group, gender, age, and parental/guardian education levels. The second thrust extended this profile to a consideration of respondents' college education and employment status, focusing, in the first part, on the graduates' qualifications, including the fields in which they achieved their college certificates, and in the second part, juxtaposing these with their current employment situations and their employment experience between 1999 and late 2001. The third research thrust considered so-called 'quasi-behavioural' evidence regarding respondents' experience of their college education; language of learning; the provision of career guidance; work experience during college studies; and first employment experiences. In addition, an analysis of respondents' attitudes regarding their college education was performed.

Cosser et al (2003) found that only 34% of FET college graduates reported being either employed or self-employed (whether full-time or part-time) after graduation, between 1999 and 2001; and by 2001, 35% of the sample was found to engage in further studies and 31% of the sample were unemployed or economically inactive for other reasons. While for Cosser et al (ibid), the overall picture of student labour market placement remains negative, they argue that this needs to be placed in the context of both massive South African youth unemployment and falling international rates for college to employment transition. In terms of the actual training received by college graduates, Cosser et al (2003) reveal that 45% of those employed indicated that their job was not appropriate to their college qualification; 38% claimed that they took the job because they could not find employment better linked to their level of education. Moreover, 36% of respondents who were self-employed (albeit a small group) cited not being able to find a job in the field in which they were trained as their chief reason for working for themselves. The analysis of the research is presented primarily in terms of individual agency in determining employment outcomes: the survey results, and thus the conclusions reached are based on FET college graduates' responses to questions around the choices they made, and the outcomes of their forays into the jobs market. Socioeconomic factors are considered but are not linked explicitly to the graduates' agency in order to explain why education-to-work transitions are so fragmented and contingent.

Gewer's (2010) tracer study sought further insight into the factors that impact on the transition of young people from college to work. The study traced a cohort of FET College students from 2003 and compared the cohort to a sample of college learners from 2009. There were four main findings. Firstly, while socioeconomic conditions and the role of the family were important factors in determining the choices in education, working class parents often deferred educational choices to their children. Thus, it was the interests of the individual learner and the affordability and accessibility of colleges that were the prime determinants of choice. Secondly, learners believed that FET colleges were not actually playing a meaningful role in exposing them to the workplace or providing linkages to employers; instead, they

felt that colleges provided them with abstract preparation in the classroom. Thirdly, learners felt that the colleges provided no actual workplace experience. Fourthly, all of these factors led to a situation in which, because of limited links between FET graduates and relevant places of employment, learners relied on personal contacts, family relations, and newspaper advertisements to find jobs (Gewer 2010). None of these effectively guaranteed meaningful employment.

The Centre for Development and Enterprise (CDE 2007) performed a survey in Johannesburg, eThekwini, and rural and urban areas of Polokwane. While the survey revealed important challenges that youth face in school-to-work transitions, it also revealed some of the intricacies of other types of transitions, namely: transitions from self-employment (usually the informal sector) to waged employment (the formal sector); and from waged employment to unemployment. It revealed dismal figures for school leavers (with a Matric) as only 40% of them found full-time employment in the formal sector; however, this was much worse for those without a Matric, who were far more likely to end up either unemployed or self-employed in the so-called informal sector: 21% of the sample without a Matric found jobs in the formal sector. Similarly, Sheppard and Cloete (2009), in a nation-wide survey commissioned by the Centre for Higher Education Transformation (CHET) and the Further Education and Training Institute (FETI) found that holding a Matric certificate increased the likelihood of finding formal employment by as much as 60% compared to having less than a Matric qualification.

The CDE (2007) study shed light on other types of transitions over and above education-to-work transitions. In transitions between informal sector activity, formal sector employment, and unemployment, the survey revealed that only 8% of the sample was able to make a transition from informal sector activity to formal employment, whereas 32% made a transition to unemployment from the formal sector. The report argues that transitions to formal employment often never happen because many young people only have the option of attending local rural schools of poor quality. This may convince young people that education is futile, and thus many young people drop out of school to help support their families.

In much of the South African literature on transitions, the transition outcomes are understood largely in the context of the individual education choices that young people make. While broad socioeconomic issues and structural constraints to successful transitions are considered (to varying degrees), these are not explicitly linked to the overall explanatory models developed to understand why so many transitions are unsuccessful. Much of the research makes suggestions, such as promoting the creation of a conducive policy and an institutional environment in which education can be functionally linked to employment opportunities, or that fostering 'social capital' is an important means to creating and sustaining successful transitions. Individuals and their choices in education and training often seem to be implicitly assumed to be more important than broader social and economic structures.

Many pathways and transitions systems research in the international comparative literature use longitudinal cohort panel studies, tracking processes and outcomes

over real time, from school into a range of forms of education, training, and skills development, and into the workplace or unemployment (Austen & Macphail 2010; Cruz-Castro & Conlon 2001; Howieson, Croxford, & Howat 2008; Raffe 2003; Russell & O'Connell 2001). Howieson et al (2008) conducted a longitudinal study of work to school transition in Scotland which revealed that young people's transitions changed fundamentally from the late 1970s onward, from a position where most school leavers left school at the end of the compulsory period of schooling, and only 37% remained in the schooling or moved into the post-schooling education sectors. By 2006, this was the case for 76% of young people. This change relates to the change in the nature of the Scottish labour market more broadly, where entry jobs available to young people are more often casual jobs, where highly skilled, 'thinkers' rather than 'workers' are valorised by employers and prospective young employees prospectively. Concomitantly, there have been several policies that have advocated longer periods of schooling and training so that young people can become thinkers rather than just workers. The study concluded that young people's transitions are becoming more protracted, more diverse and more complex where pathways in education and the labour market are becoming more flexible. In a similar vein, an Australian study by Buchanan, Yu, Margison and Wheelahan (2009:12) found that while school-to-work transitions were becoming much more complex and less linear, transitions between 'standard' and 'sub-standard' jobs became particularly fragmented, contingent and far less contiguous:

> the connection between education and work often involves either taking sub-standard work or a severe compromising of discretionary time . . . spells of unemployment [between further studying or between jobs] more often than not are linked to job churn through casual, low paid work . . . the flows are fragmented, and more often [than] not marked by deep inequalities.

Other panel studies have allowed researchers to analyse differentiation in participation and outcomes-earnings, occupational mobility, promotion and so on – by gender, ethnicity, social class, or location over time (Curtis 2008; Dumbrell 2003; Figgis 2001; Harris, Rainey & Sumner 2006; Marks 2006; McMillan, Rothman & Wernert 2005).

Some international research and theorisation has produced ideal type transitions systems as exemplified by the work of Raffe (2008; 2011), and Iannelli and Raffe (2007). The ideal type transitions systems are characterised by the relative strength of links between vocational education and employment, and governed respectively by an 'employment logic' and an 'education logic'. According to Iannelli and Raffe (2007), national transition patterns can be explained by the strength of linkages between education and labour markets. In countries with strong linkages, employers and trade unions have a larger role in the design, delivery and assessment of vocational programmes. There is also frequent contact between educational and labour market institutions. Skills developed in vocational programmes reflect employers' demands and are more likely to allow for the development of recruitment networks for young

people. Thus, this type of transition system is understood as an ideal type characterised by the 'employment logic'. Transitions systems which are characterised by weak linkages between vocational education and employment, and where the strong links exist between labour markets and universities, are characterised as exhibiting the 'ideal features' of the 'education logic'.

Offering an overview of the state of research in transitions systems, Raffe (2008) suggests that transition system research has had four significant achievements. Firstly, it has illustrated that transition systems matter. This is to suggest that country differences in the processes of transition fundamentally affect the outcomes of a particular transition system. Second, the research has broadened understanding of countries' transition patterns in comparison to each other. This has been achieved by developing effective and reliable cross-national indicators which allow for direct cross-national comparisons of transition systems. Thirdly, it has identified several important, and often shared characteristics of transition systems. Fourthly, it has assisted researchers and policy makers to attain better insight into the internal dynamic and logic of their own transition systems.

Raffe (2008) suggests that this literature has failed to produce general explanations, although it has produced general indicators such as typologies. This is linked to the existence of theoretical eclecticism or theoretical confusion, which prevents the creation of a unified and coherent theoretical means for explaining and predicting the outcomes of transition systems. Heinz (2009) seeks to fill some of the theoretical gaps by suggesting that sociological understandings of transition systems can provide a much more holistic and less parochial means of understanding the outcomes of a particular transition system. While institutions, policies and policy instruments are a part of the broader social, political and economic context of transition systems, there has been a bias toward individual agency, for example, decision-making as the key determinant of transition outcomes. Heinz (ibid) advocates a 'structuration' approach to understanding transitions systems. In this, he suggests that while economic and social forces are important structural determinants of transitions systems, aspects of individual agency, such as decision-making, biography and life planning should be understood within the context of broader social structures. Therefore, for Heinz (ibid:400):

> Transitions are embedded in opportunity structures, social networks and institutions, but take their course through individual agency of constructing meaningful connections between past experiences and future plans, a construction that is strongly influenced by present living conditions.

Taylor and Servage (2012), in their work on internship placements for young people in the health services sector in Alberta, Canada, found that in the Canadian transitions system, changes in healthcare work and the healthcare workforce and increasing competition for positions all deeply affected school-to-work transition programmes, such as the Healthcare Internship Programme. Specifically, it was expenditure cutbacks in the Canadian healthcare sector which meant that healthcare officials

sought to 'pick winners' that would give healthcare providers more 'bang for their buck', those high achieving, career-oriented and self-directed young people, over and above any other potential interns, who would make the most of their internship opportunity.

Part of the complication of this area is that there is no

> enduring, given relationship between levels of educational outcome, and, crucially, the long-term educational career paths leading to them and prospective positions in the system of social stratification, stratification by gender and ethnicity as well as by class and occupation. Consequently, it is difficult to maintain that differentiated educational paths in some way prepare pupils for given positions in the stratification system, whether in its economic or gender relations. What is significant is not so much the type of education that different groups receive, whether defined through formal content, the hidden curriculum or the social relations of education, but the relative differences between the amounts and status of education regardless of content or form (Moore 2004:101).

A frequent assumption is that different parts of the education system should function as institutional arrangements for youth transitions to the labour market. Another assumption is that an ideal labour market would be based on

> a relationship between education and the economy in which the wage nexus determined the long term supply and demand for labour, so the education system would be responsible for generating the supply of labour to an economy which generated demand for it; if this market operates like a commodity market, educational credentials must indicate the potential 'value' of individual labourers to employers. At the same time the output of the education system would mirror the divisions of labour, which would be differentiated horizontally and hierarchically in the most technically efficient and profitable ways and the subjects taught would serve the needs of the economy (Dale et al 1990:70).

What is needed is better insight into the different mechanisms at play, and different theories which attempt to explain education/labour market relationships, and test their predictive validity.

Theories and Mechanisms

Different theories about the relationship between education and the labour market tend to be premised on different putative mechanisms about why education pays off in labour markets. One such theory is human capital theory (HCT), which lies unstated and unacknowledged behind much policy discourse as well as research in this area. The key idea here is that education enhances individuals' productivity. Employers, it is assumed, are willing to pay higher wages to better educated workers because they will be more productive than uneducated workers. The mechanism at work here is the productivity-enhancing competencies that students acquire through

education (Van de Werfhorst 2011). Many researchers, such as Baker (2009:164), suggest that this is inherently tautological:

> the fact that there is an education premium in wages in the labour market is enough for the human capitalist to assume that market forces choose workers with greater productivity and hence education must be the main causal factor behind the wage gap,

while others (Livingstone 2012) suggest that its application is increasingly questionable.

An alternative view suggests that employers are uncertain about the marginal productivity of potential employees, and unable to clearly ascertain what knowledge and skills they bring, let alone how these enhance or otherwise affect productivity. What they do, therefore, is look for crude signals that differentiate applicants from *each other* (Spence 1973). Educational qualifications are used as a screening device that gives broad information about individuals relative to each other. Thurow (1976) posits a job competition model with two queues: one of vacancies for jobs, and one of applicants. The first queue is ordered by the complexity of the jobs available (contested issue). The second is ordered by the educational attainment of applicants. Selection in the labour market brings these two queues together, starting from the high paying, (believed to be) complex jobs, and highly educated applicants. Here education is a positional good; the key issue is one's position in the queue relative to others. In models like this one, in which education is used to sort individuals, education can be a sorting device for characteristics that individuals had before entering education, as well as those that they obtained in or through education. Collini (2012) argues, for example, that employers have traditionally sought arts and humanities graduates for top jobs in the UK not because they necessarily gain 'useful' skills through these courses, but because these courses have historically attracted many of the brightest students. Of course other factors can explain one's relative position in the job queue. A key one in current labour markets around the world is work experience, thus relegating young people to low positions in queues, even when they do have relatively good educational levels, and creating the perception of a 'youth' unemployment crisis, instead of just an unemployment crisis. One factor which is believed to be important to employers is an estimation of training costs, and more educated people are believed to be cheaper and easier to train. However, workers with experience are a known quantity, against a potentially risky decision.

An important distinction between the two models is that in the productive skills or human capital approach, the individual holding a job is seen as the key to the productivity of the job, whereas the positional good perspective sees productivity as primarily determined by jobs, and an individual's earnings depend on the job they acquire, and not personal characteristics (Van de Werfhorst 2011). Both approaches, though, focus on the productive characteristics of qualifications, whether indirect or direct. Other theories suggest that qualifications have nothing to do with productive capacities or the 'trainability' indicated by levels of educational achievement, but

rather, as a legitimised means for social inclusion and exclusion. Van de Werfhorst (ibid) labels this the 'social closure' perspective, because more advantaged groups close off opportunities to less advantaged groups, and educational qualifications or credentials are a key means to doing so, particularly in democracies where overt forms of nepotism and favouritism are either frowned upon or made illegal. By demanding formal qualifications for access to jobs, employers can control access to privileged positions. Brown, Lauder and Ashton (2011) provide one account of this mechanism at work in what they describe as a beauty contest between the world's top universities and top multinational companies. The latter describe themselves as in a 'war for talent' which Brown and colleagues argue is completely implausible (Brown et al 2011; Brown & Tannock 2009). Rather, the authors suggest, the 'war for talent', and its current result of recruiting exclusively from a tiny handful of universities, is a way of eliminating most potential applicants, in an era of increasingly widely available higher qualifications. Other researchers (eg, Berg 1970) who explore this perspective suggest that formal education and/or training is a kind of con.

The literature discussed above all assumes that employers are prepared to pay higher wages and give better employment prospects to people with higher rather than lower qualification levels. This, though, is increasingly not the case. In many countries education provision has become relatively more equal, but income distribution has become more and more disparate; in others rapid growth in education has not led to equivalent growth in the economy (Lauder, Brown & Tholen 2012; Livingstone & Guile 2012). Brown, Lauder and Aston (2011) point out, for example, that multi-national employers are increasingly off-shoring legal and information technology (IT) work, which has the effect that young people in developed countries who made educational investments, often at considerable personal expense, in the hope of achieving well-paying and rewarding jobs, are increasingly less likely to do so. Lauder, Brown and Tholen (2012) present what they call the Global Auction model, which they suggest has more explanatory power than human capital theory with regard to graduate employment and incomes. Brown and Tannock (2009:377) argue that this 'global war for talent' is entrenching and promoting a narrow, market-based conception of education, skill, and talent, as well as an attempt to liberalise the global movement not just of capital and commodities, but also of highly skilled labour. The casualisation of academic work in the United States demonstrates that it is relative power in labour markets, and not qualifications, skills, or knowledge, that determines how work is valued and rewarded (Newfield 2010).

Another set of issues is raised by researchers who examine how education has changed work—instead of seeing it simply as the process of producing productive workers. While strongly arguing that the relationship between schooling and work is more complicated and less 'efficient' than proponents of human capital theory would desire, Baker (2009:179) points out that we cannot see the world of work as 'mostly fixed in some preconceived "natural" fashion', but must instead understand that it 'expands and adapts given large-scale changes in the characteristics of the work force'. Education, he argues, as transformed work, reconstituting the very foundations

of society and the way work is organised, our understanding and expectations for peoples' capabilities, the nature of work, and even what is usable knowledge for economic value.

Finally, there is research which fundamentally questions the relationships between education and labour markets. Collins (1979; 2013) suggests that educational expansion is not driven by technological requirements of work, but rather by the inability of labour markets to absorb labour. He argues that rising demand for education absorbs increasingly surplus labour by keeping more people out of the labour force; he suggests that in places where the welfare state is unpopular for ideological reasons, belief in the importance of education supports a hidden welfare state.

Labour Market and Social Policy

There are many and complex reasons to explain why education does not produce skills in line with the immediate needs of labour markets. One is that labour markets or the nature of work may change at a faster pace than what educational institutions can respond to. But there is a range of factors which are completely extraneous to education. For example, Breier (2009:127) argues that there is a shortage of medical doctors in South Africa, in both the public and rural service, despite the fact that sufficient numbers of doctors are being trained, and that nowhere in the country 'do we achieve the doctors-per-population norms of even middle-income countries internationally . . . At the same time, many thousands of our doctors – estimates range from one-fifth to one-third of our medical workforce – are working abroad'. The problem here, then, is not a training problem, but a far more complex one relating to conditions of employment and lifestyle factors in South Africa compared with other countries. A different type of example is provided by Chang (2010), who points out that bright Koreans are increasingly becoming doctors, rather than engineers or scientists, despite a continued need in the labour market for the latter two professions. He suggests that a major factor could be low levels of social security, recently further lowered. Whereas medicine is seen as a secure profession in which there is considerable possibility for self-employment at high level, many companies retrench or otherwise get rid of older engineers and scientists.

In fact, the nature and structure of the labour market may be a key determinant of the structure and quality of education and training for work. Buchanan et al (2009) argue that improved pathways from education to the labour market can only be achieved by reducing the fragmentation of the workforce, as well as the fragmentation of systems of workforce development. They posit the idea of a 'skill ecosystem'. In a healthy, sustainable ecosystem, the development and deployment of labour are in balance. An ecosystem could be unhealthy if there is a pre-occupation with deploying labour, leading to work overload, and limiting the possibility for coherent skills development, or, if skills are under-utilised on the job.

Freidson (2001) theorises three main logics of the labour market, which co-exist within countries, namely: free markets, bureaucratic markets, and occupationally controlled markets. Each 'logic' has different implications both for how work is organised, how tasks are organised and divided among workers, controlled, and evaluated, as well as for the organisation of labour markets. In the first type of labour market, consumers of labour are sovereign, deciding what goods and services to demand; whose labour to employ for producing them; and what to pay for the labour. Competition between workers selling their labour and attempting to satisfy consumer demand is what shapes the labour market. By contrast, where the division of labour is controlled bureaucratically, a directing authority and support staff decide what work shall be done, and how it will be divided among jobs. This is not necessarily a feature of centrally controlled economies, but of any large workplace, and any industry or sector of the economy in which large workplaces predominate. Finally, where the division of labour is occupationally controlled, specialisations become stabilised as distinct occupations, and specialised workers obtain the exclusive right to perform the tasks connected with these occupations. Neither consumers nor managers are free to employ any willing worker, or to train workers for the purpose themselves; they must use members of the occupation who are recognised by the occupation through its own credentialing system, which determines which qualifications are required to perform particular tasks, with the backup of the state. This can be seen in the stable, identifiable specialisations organised as guilds (in the past), crafts, and professions.

Freidson (2001:65) points out that in free labour markets, 'it seems likely that for a large proportion of workers there will be no stable specialisation and little public or official recognition of their work as distinct occupations', but at the same time suggests that most economists agree that 'the conditions for a perfectly free labor market are virtually impossible to find in all but minor and marginal segments of modern economies'. Transitions between education and the labour market are likely to work best in sheltered jobs and occupations, found in both bureaucratic and occupationally controlled labour markets, although with substantial difference in how they are created and controlled. It is in these jobs and occupations where extensive education and training can and will take place. This is why labour market regulation, active labour market policies, and broader social policy are major determinants of the success of vocational education systems (Allais 2012b). Brockmann (2011), drawing on the work of Rauner (2007), suggests a distinction between vocational education and training systems which prepare for well-regulated and protected occupations, such as the German dual system, and education aimed at 'employability', as is found in countries such as the United States (US), the United Kingdom (UK), and Australia. In the former, vocational education and training is

> integrated into a comprehensive education system, and is designed to develop the ability to act autonomously and competently within an occupational field. Qualifications are obtained through the successful completion of courses developed through negotiation with the social partners, integrating theoretical knowledge and workplace learning. (Brockman 2011:120)

What is key here is not just the nature, structure, and quality of the education system, but the nature of the labour market. An occupation is a formally recognised social category, with regulative structure concerning qualifications, promotion, and range of knowledge, (theoretical and practical) required (Clarke 2011). The employment relationship is a long-term one, which makes it more likely to be founded on abilities that are multidimensional and holistic. Accordingly, vocational training aims at ensuring that students develop a high level of autonomy; an understanding of the entire work process and of the wider industry; and an integration of manual and intellectual tasks. There is a clear correspondence between the regulated occupations in the labour market, and the programmes offered through the vocational education system. The organisation and regulation of occupations reduces competition in the labour market at the level of intermediate qualifications, in the same way that in most countries, competition is reduced for professional workers.

In the second model, which is prevalent in Anglo-Saxon, liberal market countries, 'market of qualifications' enables individuals to enhance their employability through continuing vocational education or certification of sets of competencies acquired either through work experience or modularized courses' (Brockmann 2011:120–121).

In this model, individuals can compose their own qualification profiles, according to what they think will improve their position in the labour market (ibid). Vocational education is regulated through this 'market of qualifications'. The result is weak relationships between education and training and the labour market. As Rauner (2007:118) argues:

> When competence development is disconnected from occupationally organized work and the related vocational qualification processes, the relationship between vocational identity, commitment and competence development becomes loose and fragile. In which case, modularized systems of certification function as regulatory frameworks for the recognition and accumulation of skills that are largely independent from each other and *disconnected from genuine work contexts* [my emphasis].

Compounding this problem is the fragmentation of work in many liberal market economies, whereby the labour process is fragmented into discrete work processes, and employers are interested in skills for the immediate job at hand. Intellectual functions (planning, co-ordinating, evaluating, controlling) are sharply separated from execution, and training is aimed more at 'jobs' than at 'occupations'. Where the notion of occupation is used, it tends to be used in a restricted sense, as occupational standards and a series of skills, or a set of related tasks bundled together (Winch 2011).

The key point here is that different vocational education and training systems have developed in the context of a set of political, economic, and institutional arrangements. Beyond labour market regulation, other social policies, as well as the nature of the economy and the nature of production, need to be considered.

Hall and Soskice (2001), in their work on 'varieties of capitalism', distinguish between two main models of political economy in the western democracies. The first 'variety', liberal market economies, includes capitalist economies which operate more closely to the 'unfettered' free market economic model, the US, the UK, Australia and Canada. The second, 'co-ordinated market economies', include those countries in which the economy is more regulated by state intervention, whereby the state plays a formative role in developing and maintaining multiple mechanisms for institutional co-ordination, for example, Denmark, Norway and Sweden. Some of the most important institutional co-ordination occurs with a tight coupling between the financial and industrial wings of big business, collective wage determination, and strong and well-supported systems of general and vocational education, supported by the state. Iverson and Stephens (2008) argue that because co-ordinated market economies enjoy high levels of social protection, individuals are encouraged to acquire specific skills. The Scandinavian notion of 'flexicurity', for example, represents the situation whereby individuals are well protected from periods of unemployment. Because of this protection, acquiring highly specific skills makes sense as an individual choice. Individuals who are forced to take the next available job when they lose their current job are less likely to invest in acquiring very specific skill sets. Through systems such as flexicurity, which allow individuals to acquire very specific skill sets, social security is able to support a training system that enables firms to specialise in highly competitive international niche markets. Because there is a clear and attractive pathway from vocational education, workers at the lower end of the achievement distribution are incentivised to work hard in school in order to get into the best vocational schools or get the best apprenticeships. Once skills at the low end are raised, a more compressed wage structure is possible.

In liberal market economies, where there is little redistribution of wealth to public schooling and little social insurance, the middle and upper-middle classes tend to 'self-insure' by attaining high levels of *general* education, generally through private institutions such as universities. Students who expect to go to higher education have strong incentives to work hard. Vocational education is weak, so learners in the bottom third of the achievement distribution have few incentives to do well in school, and few opportunities to acquire skills. Skills at the bottom end are low, and workers end up in poorly paying jobs with little prospect for advancement.

The current explanatory power of the varieties of capitalism literature is increasingly contested, but the point here is to identify *relationships* between systems of social insurance, systems of skill formation, and spending on public education. Iverson and Stephens (2008) argue that historically, in the developed capitalist economies, social equality has fostered the development of high levels of both general and specific skills, especially at the bottom end of the skill distribution, which in turn reinforces social equality. Specific and general skills at the bottom of the distribution have also been strongly linked to employment protection and unemployment replacement rates. General skills at this level are furthermore strongly related to an active labour market policy as well as to vocational education. They suggest that

'information age literacy', including reasonably high levels of general literacy as well as information technology ability, is 'extremely strongly and negatively related to the degree of inequality' (ibid:621). This is based on an analysis of the Scandanavian countries: co-ordinated market economies which have been dominated mainly by centre-left coalitions that have supported heavy investment in public education and industry-specific and occupation-specific vocational skills. This model, they argue, has enabled both high levels of general skills and high levels of industry-specific skills. Because of the social security net and extensive spending on retraining, labour market flexibility is well supported. The combination of heavy spending on general education and well-developed vocational training creates a more compressed skill structure than in liberal market economies as not only do workers at the bottom in co-ordinated market economies have more specific skills than their counterparts in the liberal market economies, but they have better general skills too. This makes workers in the co-ordinated market economies more able to acquire more technical skills, enabling high value-added production. High levels of general education have also helped these countries cope with the rise of the service industry.

When South Africa is juxtaposed with the literature described above, it becomes easier to understand the weakness of the country's education and training system, notwithstanding factors internal to this system, some of which are discussed below. Factors such as: inequality; fragmented work and a casualised labour market; a historic and current built-in dependence on cheap labour as well as on the exploitation of primary resources; and a bias towards importing technology solutions, all work against the possibility of good vocational education. Further, they are unfavourable to the development of skills in the general population. There is a strong and vocal lobby to increase job insecurity, particularly for the youth, despite the fact that the South African economy is characterised by extremely high unemployment and extreme job insecurity for many workers. All these factors are diametrically opposed to the factors described in the literature above, which have, in some developed countries, led to high levels of both general and vocational education, with considerable economic and social benefits. Allais (2012b) argues that it is precisely because of the liberal labour market conditions which prevail that the South African education policy has followed the model of liberal market economies, favouring the 'market of qualifications', and attempting to regulate a market-based approach to education and training through a qualifications framework and quality assurance system. However, this approach makes it *less* likely that people will attain *either* general *or* specific skills and knowledge: it is almost impossible to build 'successful' vocational education in a context of extreme job insecurity and casualisation.

In liberal market economies, as well as economies dominated by informal markets, one of the major initiatives to improve the alignment between education systems and labour markets is qualifications frameworks. This was first systematically attempted in the UK in the 1980s, with the National Vocational Qualifications (Young 2009b). These qualifications were supposed to specify the expectations and requirements of employers, in terms of expected work performance, expressed as learning outcomes,

and they relied on assessment in the workplace (Stewart & Sambrook 1995:98). This explains why this type of policy is described as 'market' or 'industry-led', in this initial incarnation and in the various imitations of it throughout the world, despite its weak linkages with labour markets. This model of educational reform has, until recently, been confined to the English-speaking world, mainly the UK, Australia, and New Zealand, and developing countries influenced by these countries. The starting point has been liberal market economies with weak labour market regulation. This has meant that this type of system has been generally focused on employers' short-term labour market needs. King (2009), for example, points out that in India, while there is a policy emphasis on 'demand-driven training', 'the present system is already very demand driven, but driven by a massive demand for using cheap, unskilled labour, and training on the job'. This, ironically, is one reason why this model often leads to a lack of labour market currency for many occupational qualifications (Clarke & Westerhuis 2011). The English model has been replicated in many countries around the world, and has particularly been part of what McGrath (2010) calls a 'toolkit' of reforms of technical and vocational education and training systems in developing countries, which generally have largely or predominantly informal labour markets.

However, as shown by Friedson, it is specialised occupations, clearly defined and protected occupational roles, which *enable* training. The outcomes-based qualifications framework or competency-based training model assumes that employer-specified competencies, or descriptions of work, can lead to substantial and quality training in a much freer labour market. This, though, may be a logical contradiction; as Standing (2011) points out, it does not make sense to invest in an occupational skill if individuals will have no control over how they can use and develop it in a highly casualised labour market. Brockmann, Clarke and Winch (2011) show clearly that economic context can constrain pathways. They show that subcontracting and outsourcing are a serious problem for work-based learning and the acquisition of qualifications, and also point out that:

> countries with co-ordinated market economies, characterized by high levels of social partner involvement in VET, have been able to reform their VET systems in line with new economic challenges and as a strategy for innovation. By contrast, initial VET in liberal market economies has been marginalized and increased emphasis placed on general and higher education, albeit often of a vocational nature (ibid:6).

Further, the initial model of a qualifications framework in the UK, and most subsequent models, has had a strong emphasis on separate 'units of competence' (ie, unit standards in South Africa). This has led to a fragmenting of training for work. Winch (2011) argues that in the UK in the 1980s, one factor behind this emphasis was a desire to legitimate constantly shifting, job-type specifications, by making them easier to accredit. In South Africa in the 1990s, an argument in favour of such an approach was that it would benefit disadvantaged people by making it easier for them to acquire official statements of competence bit by bit; empirical evidence,

however, has not born this out (Allais 2007). The fragmentation of training which tends to flow from the 'units of competence' approach is aggravated by the idea that qualifications should be self-contained, without reference to particular learning programmes or curricula. In order to provide sufficient clarity to the range of possible users, the narrowly conceived outcomes/competencies tend to become very over specified (Allais 2007; Allais 2010; Wolf 1995). The process of designing the learning outcomes or competencies also tends to lead to the emergence of new terminology or jargon, understood only by those who have been involved in developing the outcomes – which then contradicts the aim of increased transparency and improved supply of information in labour markets and putative education markets.

It should also be pointed out that many countries which have attempted to marketise their vocational education systems as a way of ensuring 'demand' for educational programmes, have found that this type of intervention can become centralised and top-heavy. The regulatory state is not a small state (Allais 2012a; Allais 2012b; Keep 2005; Keep 2007). Allais (2012a) argues that the qualification and quality assurance model which was developed through the National Qualifications Framework (NQF) has contributed to the weakness of education aimed at the workplace, instead of improving relationships between education and the labour market. It has led, particularly in the weaker sectors of the education system (vocational education, adult education, skills training and workplace-based training) to cumbersome qualifications which are difficult to use, with narrow but lengthy and over-specified qualification documentation. This has made the work of government institutions as well as providers difficult, and ironically, has made it harder for providers to be responsive to employers' needs. Most of the formal education systems (such as universities) ignored this qualification model, other than cosmetically rewriting their qualifications into outcomes-based formats. However, providers needing accreditation through the SETAs have in many instances been compelled to use the new outcomes-based qualifications developed through the NQF. This could be a major contributing factor to the inability of the education and training system to produce according to the needs of the labour market; in other words, what is required is not just a focus on mechanisms to increase the 'fit' between the two systems, or to 'facilitate transitions', but a focus on strengthening the capacity of the education system in its own right.

While some of the problems with the SETAs have been accepted by policy makers, it is not yet clear how the system will be changed (Allais 2013). The NQF and its surrounding quality assurance systems has been changed, and there are signs that there may be further changes (DHET 2012). What is also required, though, is a better understanding of how to build and support educational institutions, as well as strengthen curricula and teacher capacity; all areas which have been seriously neglected in South Africa. As McGrath and Akoojee (2009) argue, governments can do more to support both public and private provision.

Ironically, one of the major rationales behind qualifications frameworks was a critique of credentialism, and an over-reliance on qualifications as the major proxy

for capability in the workplace. A major claim is that qualifications based on learning outcomes or competencies offer better, clearer and more precise information to employers about the abilities, and thus potential productivity, of potential applicants. Improving the information available to different parties in the labour market is believed to be a significant factor in improving the functioning of this market. Leaving aside the question of whether insufficient information is the main or even significant problem with the functioning of labour markets, the point here is that at the same time as failing to provide better information in labour markets, the new qualifications frameworks may have entrenched the emphasis on qualifications as a central labour market signal. This may be aggravated by the desire, through recognition of prior learning, to issue credentials for every possible skill that a learner may have.

Conclusion: Research Priorities

The arguments above question both the notion that it is individuals' lack of skills that is a primary determinant of their unemployment, and that resolving a 'mismatch' between education and work will solve this problem. On the contrary, it is the structure of the labour market as well as broader social policy that determine the quality of vocational and professional education. Improving the economy is key to improving education and training, but what should the possibilities and priorities for educational research in this broad and complex area be?

It is not sufficient to take an individualist perspective, such as the choices young people make in what type of education and training they access. Neither is it sufficient to make use of a cursory socioeconomic analysis to understand the structural context in which transitions play out without explicitly linking education and training to broader social factors. While institutional and policy perspectives in transition research are important, given the problems cited with education and training at all levels in South Africa, a broad socioeconomic analysis of the state of the South African economy, the state, and, importantly, the labour market itself should take the lead in designing research moving forward. Clearly, better theoretical understandings are required of relationships between education systems and economies, and more specifically, the different mechanisms which are at work in the South African labour market. It is also necessary to better understand the need for qualified people in South Africa and the ability of the country's education system to meet the needs; the need for more and better institutions and learning programmes; and the current barriers which prevent people from accessing education and the labour market. Underpinning all of this is the need for better ways of conceptualising vocational, occupational, and professional curricula, and strengthening educational institutions, to make it more likely that they will support the long-term needs of society and the economy.

Far better insight is needed into how different qualifications are produced, understood, and valued, and how they correspond with different occupational divisions of labour. Vocational programmes have often been developed by people

who have no concept of the economy and without an analysis of existing vocational education and what its problems have been. The reasons why vocational education does not work in many countries are complex, and need further investigation. We suggest three starting points to understand this problem. The first is that jobs for young people simply do not exist. The second is that vocational education has been developed independently from professional education, despite the fact that it is almost always the case that professionals have an interest in the knowledge and skills of people who work for them. Outcomes-based education (OBE), the NQF, and competency-based education and training (CBET) are all examples of reforms that have aggravated this problem, instead of contributing to solving it. This leaves vocational education trapped in the old divided model split between craft/artisan preparation on the one hand, and 'liberal professions' on the other, with management professions coming up on the 'outside'. The third is that we are increasingly in a 'VET' without vocations' world – the emerging job market is the hour glass picture, with increasing employment for both highly skilled, intellectual work, and unskilled work which requires little training, but less for the middle levels of skills. This picture is complex, though, as it intersects with conceptions of work.

Brockman, Clarke and Winch (2011) provide some useful ideas about how such research could be conducted. They selected a few key occupations and professions, and conducted a detailed and comparative analysis of the structuring of the labour market, the labour process, and the education and qualifications system, in four countries. A detailed analysis of these three significant components in a few selected occupations in South Africa would add enormously to our understanding of education/labour market pathways. This research should seek to understand how occupations have changed, are changing, and are likely to change in the future, at different levels of the labour market, and what the implication for knowledge and skills is.

Other areas which need to be better understood with regard to labour markets and employers include the mechanisms at work when employment decisions are made in different industries; the role of employers as providers of learning; the structure of employers' demand for skills, their recruitment and selection practices and the incentives this creates; and the impact of labour market regulation on patterns of post-compulsory participation in vocational education and training.

When economic or labour market problems are re-described as educational problems, with the accompanying expectation that education systems should solve them, the economic problems will not be solved, and education systems are likely to be reformed for the worse. An interesting recent example of this is the emergence of the notion of 'career management skills' as a new type of skill that schools, it is argued, should cultivate in learners, to enable them to cope in changing labour markets (Sultana 2012). This is likely to lead to a curriculum driven by genericism, and trendy ideas about generic, transferable skills. As Young (2009a) points out, despite emphasis on knowledge in policy documents, discussion about knowledge economies or knowledge societies, and curriculum reform, 'knowledge' is often used rhetorically, or as an empty category, with little thought going into what knowledge

should be contained in the curriculum, and, in many countries (as evidenced in South Africa through OBE), attempts to avoid specifying knowledge in the curriculum. Serious thought and research into the nature of the curriculum, both in terms of education which is aimed at preparing people for work, and more general education, is crucial, in order to understand what the possibilities are for pathways between education and the labour market, and what the inherent limitations and difficulties are, and what may be lost in an overemphasis on short-term preparation for work.

References

Allais, S., 2007, 'The rise and fall of the NQF: A critical analysis of the South African National Qualifications Framework', doctoral thesis, University of the Witwatersrand, Johannesburg.

Allais, S., 2010, Outcomes-based education: Understanding what went wrong', in Y. Shalem & S. Pendlebury (eds.), *Retrieving teaching: Critical issues in curriculum, pedagogy and learning*, Juta, Cape Town.

Allais, S., 2012a, 'Why solving on-going problems with the NQF matters', in H. Perold, N. Cloete, & J. Papier (eds.), *Shaping the future of South Africa's youth: Rethinking post-school education and skills training*, pp. 9–28, African Minds, Cape Town.

Allais, S., 2012b, 'Will skills save us? Rethinking the relationships between vocational education, skills development policies, and social policy in South Africa', *International Journal for Educational Development*, 32(5), 632–642.

Allais, S., 2013, 'Understanding the persistence of low skills in South Africa', in J. Daniels, P. Naidoo, D. Pillay & R. Southall (eds.), *New South African Review 3*, Wits University Press, Johannesburg.

Austen, S. & Macphail, F., 2010, *Post-school education and labour force participation in Canada and Australia*, National Centre for Vocational Education Research (NCVER), Adelaide.

Baker, D.P., 2009, 'The educational transformation of work: Towards a new synthesis', *Journal of Education and Work*, 22(3), 163–191.

Berg, I., 1970, *Education and jobs – The great training robbery*, Praeger, New York.

Breier, M., 2009, 'Introduction', in J. Erasmus & M. Breier (eds.), *Skills shortages in South Africa. Case studies of key professions*, pp. 1–21, HSRC Press, Cape Town.

Brockmann, M., 2011, 'Higher education qualifications: Convergence and divergence in software engineering and nursing', in M. Brockmann, L. Clarke & C. Winch (eds.), *Knowledge, skills and competence in the European labour market. What's in a vocational qualification?*, pp. 120–135, Routledge, Abingdon and New York.

Brockmann, M., Clarke, L. & Winch, C. (eds.), 2011, *Knowledge, skills and competence in the European labour market. What's in a vocational qualification?*, Routledge, Abingdon and New York.

Brown, P., Lauder, H. & Ashton, D., 2011, *The global auction. The broken promises of education, jobs, and incomes*, Oxford University Press, Oxford.

Brown, P. & Tannock, S., 2009, 'Education, meritocracy and the global war for talent', *Journal of Education Policy,* 24(4), 377–392.

Buchanan, J., Yu, S., Marginson, S. & Wheelahan, L., 2009, *Education, work and economic renewal: An issues paper prepared for the Australian Education Union*, Workplace Research Centre, Sydney.

Centre for Development and Enterprise (CDE), 2007, *Paths to employment: Challenges facing young people in accessing the job market*, CDE, Johannesburg.

Chang, H. J., 2010, *23 things they don't tell you about capitalism*, Allen Lane, London.

Clarke, L., 2011, 'Trade? Job? Or occupation? The development of occupational labour markets for bricklaying and lorry driving', in M. Brockmann, L. Clarke & C. Winch, (eds.), *Knowledge, skills and competence in the European labour market. What's in a vocational qualification?*, pp. 102–119, Routledge, Abingdon and New York.

Clarke, L. & Westerhuis, A., 2011, 'Establishing equivalence through zones of mutual trust', in M. Brockmann, L. Clarke & C. Winch, (eds.), *Knowledge, skills and competence in the European labour market. What's in a vocational qualification?*, pp. 136–148, Routledge, Abingdon and New York.

Collini, S., 2012, *What are universities for?*, Penguin Books, London.

Collins, R., 1979, *The credential society*, Academic Press, New York, NY.

Collins, R., 2013, 'The end of middle-class work: No more escapes', in I. Wallerstein, R. Collins, M. Mann, G. Derluguian & C. Calhoun (eds.), *Does capitalism have a future?* Oxford University Press, New York, NY.

Cosser, M., McGrath, S., Badroodien, A. & Maja, B. (eds.), 2003, *Technical college responsiveness. Learner destinations and labour market environments in South Africa*, HSRC Press, Cape Town.

Cruz-Castro, S. & Conlon, P., 2001, *Initial training policies and transferability of skills in Britain and Spain*, working paper No. 01-01: Unidad de politicas comparadas, CSIC.

Curtis, D.D., 2008, *VET pathways taken by school-leavers*, Australian Council for Educational Research, Melbourne.

Department of Higher Education and Training (DHET), 2012, *Green Paper for Post-school Education and Training*, DHET, Pretoria.

Dumbrell, T., 2003, *Pathways to apprenticeships*, Australian National Training Authority, Brisbane.

Figgis, J., 2001, *What convinces enterprises to value training and learning, and what does not?*, Australian Council for Educational Research, Melbourne.

Freidson, E., 2001, *Professionalism, the third logic*, Polity Press, Oxford.

Gewer, A., 2010, *Choices and chances: FET colleges and the transition from school to work*, Report commissioned by the HRD Support Unit through funding from the Employment Promotion Programme at the UCT's Development Policy Research Unit, National Business Initiative, Johannesburg.

Hall, P.A. & Soskice, D. (eds.), 2001, *Varieties of capitalism: The institutional foundations of comparative advantage*, Oxford University Press, Oxford.

Harris, R., Rainey, L. & Sumner, R., 2006, *Crazy paving or stepping stones? Learning pathways within and between vocational education and training and higher education No. 1722,* National Centre for Vocational Education Research (NCVER), Adelaide.

Heinz, W., 2009, 'Structure and agency in transition research', *Journal of Education and Work*, 22(5), 391–404.

Howieson, C., Croxford, L. & Howat, N., 2008, *Meeting the needs for longitudinal data on youth transitions in Scotland – An options appraisal*, Scottish Government Social Research, Edinburgh.

Iannelli, C. & Raffe, D., 2007, 'Vocational upper-secondary education and the transition from school', *European Sociological Review*, 23(1), 49–63.

Iverson, T. & Stephens, J.D., 2008, 'Partisan politics, the welfare state, and three worlds of human capital formation', *Comparative Political Studies*, 45(4/5), 600–637.

Keep, E., 2005, 'Reflections on the curious absence of employers, labour market incentives and labour market regulation in English 14–19 policy: First signs of a change in direction?', *Journal of Education Policy*, 20(5), 533–553.

Keep, E., 2007, 'The multiple paradoxes of state power in the English education and training system', in L. Clarke & C. Winch (eds.), *Vocational education: International approaches, developments and systems*, pp. 161–175, Routledge, Oxford.

King, K., 2009, 'Education, skills, sustainability and growth: Complex relations', *International Journal for Educational Development*, 29, 175–181.

Lauder, H., Brown, P. & Tholen, G., 2012, 'The global auction model, skill bias theory and graduate incomes. Reflections on methodology', in H. Lauder, M. Young, H. Daniels, M. Balarin, & J. Lowe (eds.), *Educating for the knowledge economy? Critical perspectives*, pp. 43–65, Routledge, Abingdon and New York.

Livingstone, D.W., 2012, 'Debunking the "knowledge economy". The limits of Human Capital Theory', in D.W. Livingstone & D. Guile (eds.), *The knowledge economy and lifelong learning. A critical reader*, pp. 85–116, Sense, Rotterdam.

Livingstone, D.W. & Guile, D., 2012, *The knowledge economy and lifelong learning. A critical reader*, Sense, Rotterdam.

Marais, H., 2011, *South Africa pushed to the limit. The political economy of change*, University of Cape Town Press, Cape Town.

Marks, G.N., 2006, *The transition to full-time work of young people who do not go to university*, Australian Council for Educational Research, Melbourne.

McGrath, S., 2010, 'Beyond aid effectiveness: The development of the South African further and training college sector, 1994–2009', *International Journal for Educational Development*, 30, 525–534.

McGrath, S. & Akoojee, S., 2009, 'Vocational education and training for sustainability in South Africa: The role of public and private provision', *International Journal for Educational Development*, 29, 149–156.

McMillan, J., Rothman, S. & Wernert, N., 2005, *Non-apprenticeship VET courses: Participation, persistence and subsequent pathways*, Longitudinal Surveys of Australian Youth Research Report 47, Australian Council for Educational Research, Melbourne.

Mohamed, S., 2010, 'The state of the South African economy', in *New South African Review 1*, pp. 39–64, Wits University Press, Johannesburg.

Moore, R., 2004, *Education and society: issues and explorations in the sociology of education*, Polity, Cambridge.

Newfield, C., 2010, 'The structure and silence of the cognitariat', *Edu-factory Web Journal*, 10–26.

Raffe, D., 2003, 'Pathways linking education and work: A review of concepts, research, and policy debates', *Journal of Youth Studies*, 6(1), 3–19.

Raffe, D., 2008, 'The concept of transition system', *Journal of Education and Work*, 21(4), 277–296.

Raffe, D., 2011, Cross-national differences in education-work transitions', in *The Oxford Handbook of Lifelong Learning*, Oxford University Press, New York.

Rauner, F., 2007, 'Vocational education and training – A European perspective', in A. Brown, S. Kirpal & F. Rauner (eds.), *Identities at work*, pp. 115–144, Springer, Dordrecht.

Russell, H. & O'Connell, P.J., 2001, 'Getting a job in Europe: The transition from unemployment to work among young people in nine European countries', *Work, Employment and Society*, 15(1), 1–24.

Sheppard, C. & Cloete, N., 2009, *Scoping the need for post-school education. Responding to the educational needs of post-school youth*, Centre for Higher Education Transformation (CHET), Cape Town.

Spence, M., 1973, 'Job market signaling', *Quarterly Journal of Economics*, 87, 355–374.

Standing, G., 2011, *The precariat. The new dangerous class*, Bloomsbury, New York.

Stewart, J. & Sambrook, S., 1995, 'The role of functional analysis in National Vocational Qualifications: A critical appraisal', *Journal of Education and Work*, 8(2), 93–106.

Sultana, R.G., 2012, 'Learning career management skills in Europe: A critical review', *Journal of Education and Work*, 25(2), 225–248.

Sweet, R., 2001, Career information, guidance and counselling services: policy perspectives. *Australian Journal of Career Development*, 10(2), 11–14.

Taylor, A. & Servage, L., 2012, Perpetuating Education – Jobs Mismatch in a High School Internship Programme: an Ecological Model. *Journal of Education and Work*, 25(2), 163–183.

Thurow, L., 1976, *Generating inequality*, Basic Books, New York.

Van de Werfhorst, H.G., 2011, 'Skills, positional good or social closure? The role of education across structural-institutional labour market settings', *Journal of Education and Work*, 24(5), 521–548.

Winch, C., 2011, 'Skill – A concept manufactured in England?', in M. Brockmann, L. Clarke, & C. Winch (eds.), *Knowledge, skills and competence in the European labour market. What's in a vocational qualification?*, pp. 85–101, Routledge, Abingdon and New York.

Wolf, A., 1995, *Competence-based assessment*, Open University Press, Buckingham.

Young, M., 2009a, 'Education, globalisation, and the "voice of knowledge"', *Journal of Education and Work*, 22(3), 193–204.

Young, M., 2009b, 'NVQs in the UK: Their origins and legacy', in S. Allais, D. Raffe, R. Strathdee, M. Young & L. Wheelahan (eds.), *Learning from the early starters*, Vol. Employment Sector Working Paper no. 45, pp. 5–29, ILO, Geneva.

7

DEBATING THE NEXUS

of Education, Skills and Technology in the Age of Lean Production: A Case Study of the ArcelorMittal Vanderbijlpark Plant

Mondli Hlatshwayo

Introduction

Faced with global competition, the Iron and Steel Corporation of South Africa (ISCOR),[1] previously a parastatal specifically set up to produce steel for the South African economy under apartheid, employed a strategy of lean production from the late 1980s. The strategy involved technological changes, work reorganisation and privatisation. In 2006, ISCOR came under the ownership of the global steel transnational ArcelorMittal International.

Lean production has the following elements:

- making optimal use of inputs such as raw materials, labour and technology;
- using technology in order to improve the quality of products and reduce waste in the production process;
- producing products based on customer orders and specifications;
- making changes in plant layout to ensure efficient use of space;
- minimising stock-piling of raw materials and products in the plant;
- using computer technology as a tool for managing customer orders, raw materials, labour and the entire production process;
- minimising the defects in products to improve the quality of the products (Barchiesi 1997; Mashilo 2010; Womack et al 1990).

According to Shah and Ward (2007:800):

> The main objective of lean production is to eliminate waste by reducing or minimizing variability related to supply, processing time, and demand. Reducing variability related to only one source at a time helps a firm in eliminating only some of the waste from the system; not all waste can be addressed unless firms can attend to each type of variability concomitantly.

Overbeek (2003) locates lean production and technological changes in production within the economic and ideological agenda of capital and neoliberal globalisation, and argues that these strategies undermine the interests of workers and the poor. He argues:

> The technological revolution of recent decades has made 'jobless growth' the norm rather than the exception. The paper characterises globalisation as a phase of intensified commodification in the global economy, which manifests itself in the globalisation of labour markets (Overbeek 2003: i).

Lean production at ArcelorMittal's Vanderbijlpark plant had negative consequences for the workers. The lean production strategy led to a drastic reduction of the workforce and changes in the nature of the work and skills in the company. This chapter shows that even skilled workers were retrenched as part of the aim of lean production through technological change. The motivation behind these retrenchments was not just lack of skills and low levels of formal education of workers in the plant. Rather, the objective was lean production and its pursuit through technological changes and work reorganisation which generally favoured a highly mechanised workplace with a smaller workforce.

It is also argued that technological changes led to a dual process of massive 'deskilling' of the workforce in general and 'skilling' of a small layer of technicians involved in work process planning at the plant. While trade unions raised concerns and demands during the implementation of lean production, they were generally unable to offer meaningful protection to their membership. Consistent with the plant's strategies, its training and skills development strategy was narrowly focused on developing the plant's internal capacity to achieve these ends. Training and skills development programmes, which were implemented after massive retrenchments in the 1990s, used the 'political' strategy of incorporating some previously excluded black employees (and black women in particular) through specific forms of training to ensure that the company addressed its own immediate skills challenges arising from its ageing workforce and out of consideration for the long-term sustainability of the company's operations.

The first section of this chapter provides the background and clarifies the methodological approach used. The second section examines how the plant and the company became fully integrated into global steel markets and the strategies it employed to achieve the aim of lean production. These strategies included: higher capital expenditure towards the employment of new technologies; specific employment practices which changed the nature of the workforce; and, most importantly, the dramatic decline in employment levels at the plant. This section also deals with the

responses by trade unions to technological change. Thereafter, the chapter focuses on the company's approach to training and the processes it employed to facilitate the process of technological change.

Background and Focus of the Chapter

Important contributions have been made in the South African industrial sociological literature on workplace changes and trade union responses during the apartheid era. Sitas (1983), Maree (1984) and Webster (1985) write about workers' and trade unions' responses to the labour process and technological changes when technological changes and computer technologies were not as pronounced as they are today in the steel industry.

Labour studies in post-apartheid South Africa have examined the impact of lean production on work, workers and trade unions, and this has helped to deepen people's understanding of the changing nature of work and the role of trade unions in a globally integrated South African economy (Buhlungu 2010; Forrest 2011; Jarvis et al 1999; Maree & Godfrey 2005; Mashilo 2010; Masondo 2005; Masondo 2010; Webster et al 2008). These writings commonly discuss the implications of work reorganisation – plant layout, training, technological changes and labour flexibility – in general, but they do not specifically examine the impact of technological changes on skills and training and the responses of trade unions to these changes in a highly mechanised plant.

In these studies, labour relations, workplace changes and trade unions' responses to work reorganisation, low wages and poor working conditions were the units of analysis, whereas this chapter will focus in part on trade union responses to technological changes as the unit of analysis.

The study examined technological changes and their impact on work, skills and training in a steel plant that is highly mechanised and computerised. With regard to training, Leger (1992) and Phakathi (2005) investigated training and the significance of tacit skills in a context of high-risk work in the mining industry during apartheid and post-apartheid, respectively. Unlike the mining industry which is less mechanised, there is little room for the use of tacit skills in the highly automated steel plant. In this regard, the study examined deskilling, which minimises workers' self-initiative in the production process, based largely on the general appropriation of skills by computer technology and machines.

Methodologically, this chapter is based on research conducted over a period of ten years between 2002 and 2012 including workers' responses to changes in the labour process that took place from 1965 to 2012. A total of 142 in-depth interviews were conducted and the research focused on trade unions, namely the National Union of Metalworkers of South Africa (NUMSA) – a predominantly black trade union – and Solidarity – a predominantly white union. Only two representatives of the company and one official of the Metal, Engineering Industries Bargaining Council

(MEIBC) were interviewed. The bulk of the interviewees were union members, shop stewards, union officials and retrenched workers.

The researcher undertook factory visits in 2003 and 2010, and this enabled him to gain a deeper sense of the production process, technological developments and the positioning of workers in the labour process at the plant. Furthermore, archival sources of the two unions and the company were also part of the data gathered (Hlatshwayo 2003; 2010).

Aronson (1994:1) describes thematic analysis of data – a method adopted by this research – and argued that data from interviews and archives are collected, processed and analysed to facilitate the emergence of 'patterns of experiences' which can then be 'listed' as themes. The adoption of a thematic approach enabled patterns to emerge, and themes such as 'lean production' and its associated technological changes provided the narrative for the research report.

Technological Changes and the Restructuring of the Plant – From Apartheid to Global Integration

The history of the ArcelorMittal Vanderbijlpark plant[1] dates back to 1928 when Iscor was established as a state steel company (Morris & Kaplan 1976). The first steel was produced at Iscor Vanderbijlpark on the night of 21 November 1943. After existing as a parastatal for 46 years, Iscor was listed on the Johannesburg Stock Exchange (JSE) in line with the state's programme of deregulation and privatisation on 8 November 1989 (Swanepoel 1996).

The steel plant is situated in the town of Vanderbijlpark in Gauteng, about 70 kilometres from the city of Johannesburg, and covers an area of approximately 0.8 square kilometres. It is the largest inland steel mill in sub-Saharan Africa (ArcelorMittal SA 2008), and employs about 4 500 people.

The plant and its global integration and consolidation

The integration of ISCOR and the plant into the global steel market started in 1989 when the company was privatised. At that time, the impact of world steel prices, strong demand for steel nationally and internationally, and the weak South African currency made exports more lucrative. During that period, there was also a strong philosophy in favour of privatisation, as part of the strategy of economic liberalisation and the need to create a 'lean' state, namely a state that does not play a productive role in the economy (Xaba 2003). Privatisation of steel firms was not just a South African phenomenon but a global trend. As part of the global integration of steel firms, the rest of the African continent and the world were also privatising steel firms (Kazantzas 2004; Mohammed 2008).

As a response to competitive global conditions after its privatisation, the plant employed the key strategy of lean production (Hlatshwayo 2003; Xaba 2003).

According to Henning (2011), technological changes are intrinsic to lean production and featured prominently in the argument for the merger between Lakshmi Nivas Mittal Holdings (LNM) Group, a global player in the steel market, and Iscor, in 2004. As the Competition Commission itself averred, 'By receiving new technology and skills from a global partner [LNM] it was believed that Iscor could participate more effectively in the global steel industry (Competition Tribunal 2004:2).

In 2006, the merger between Arcelor International and Mittal Steel International to create ArcelorMittal International further consolidated steel production and steel monopolies at the global level. Once again, in this merger, technology featured as a competitive driving force. In 2006, ArcelorMittal South Africa (2006:20) argued as follows:

> Our partnership with ArcelorMittal [International] will provide us with access to leading-edge research and development as well as the latest technologies, which will support our global competitiveness. It will also assist us to provide the South African market with the latest in steel product technology.

Capital expenditure increases to facilitate lean production

Figure 1 shows a general increase in capital expenses by Iscor. Capital expenses include purchasing technology; building sections of the company's plants and maintaining the machines as part of increased global integration; and improving productivity through technological expansion from the late 1980s.

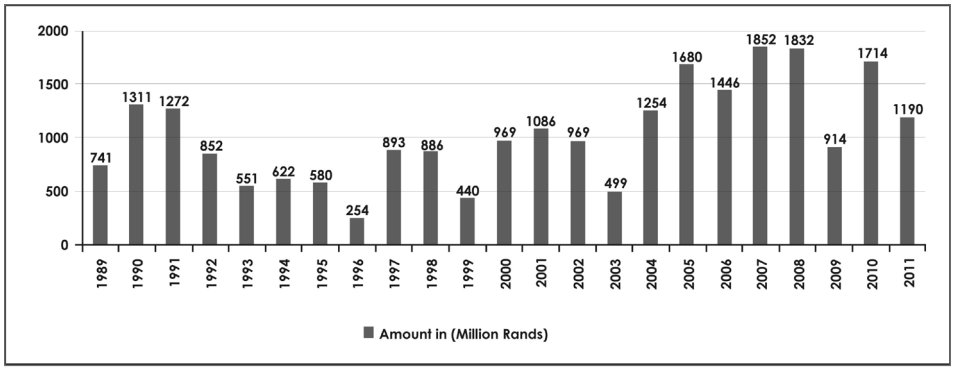


FIGURE 1: Capital expenses from 1989 to 2011

From Figure 1 it can be seen that the entry of the LNM Group in 2004 and the subsequent takeover of the company by Arcelor Mittal International in 2006, saw an increase in capital expenditure from the mid-2000s to the year 2011. This is consistent with the argument advanced during the take-over of Iscor in 2004, that it would lead to further exposure to new technologies and innovation. Capital expenses from 1989 to 2006 show close to a 150% change. Technological changes and work

reorganisation had far-reaching implications on the composition of the workforce and consequently on the educational criteria used for employment.

A drastic reduction of the workforce

Consistent with a strategy which sought to introduce new technology and reduce the number of workers, Figure 2 shows declining employment levels at the whole company since 1988. In 1988, there were 58 100 workers and this number was reduced to 9 886 workers by 2011. This means that about 50 000 Iscor workers have lost their jobs since 1988.

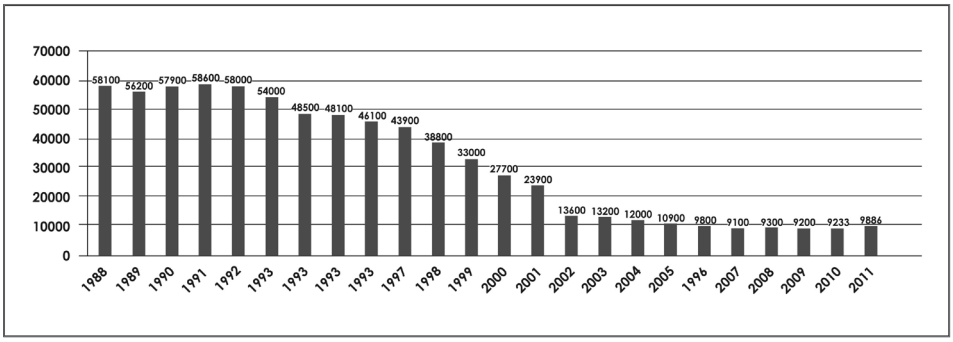


FIGURE 2: Job losses between 1988 and 2011

There is a negative relationship between employment and increased use of new technology as shown by the declining levels of employment at this plant which must be attributed to the strategy of lean production through the use of machines and computers. Technology was used to displace workers and especially workers who had less formal education.

A drastically reduced worker force becomes more productive

The 'lean production' strategy had a decisive effect on profit levels. Figure 3 shows a relationship between the numbers of workers employed relative to the levels of revenue achieved over the period 1989 to 2011.

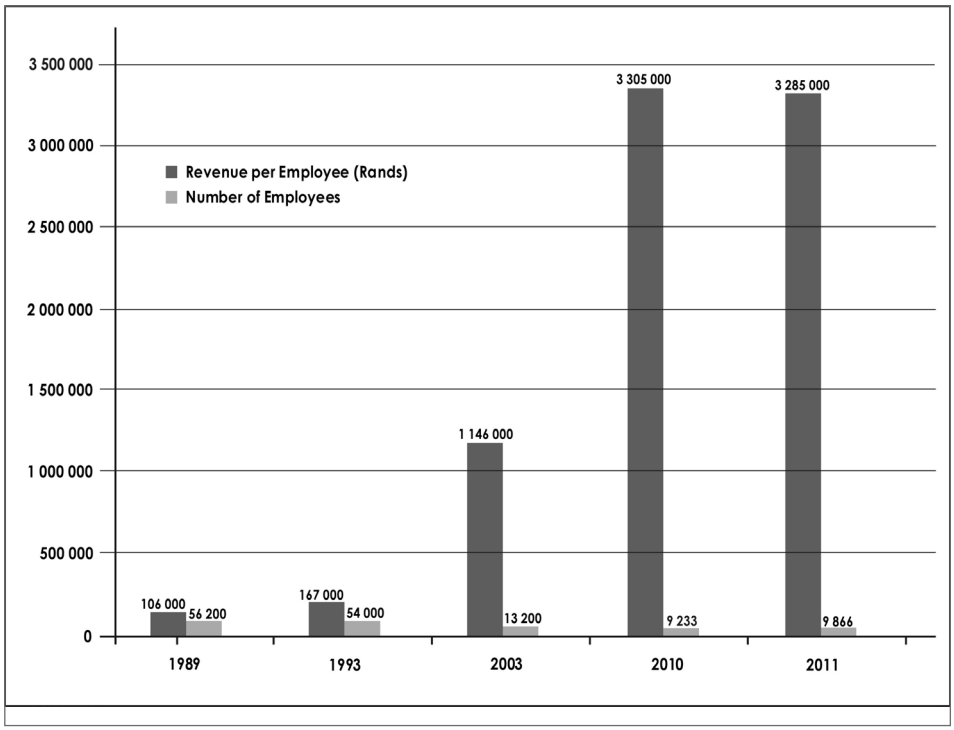


FIGURE 3: Revenue per employee since 1989

Figure 3 indicates that in 1989, when 56 800 workers were employed, the revenue per employee was R106 000. In 2011, there were 9 866 employees and the revenue per employee was R3.285 million. The increase of revenue per employee between 1989 and 2011 was R3.179 million. The revenue per employee increased 30 times since 1989. On the other hand, the period from 1989 to 2011 saw a decrease of employees by close to 50 000 workers. Therefore, following the unbundling of mining and steel activities of the company in 2002, technological and work reorganisation led to a drastically reduced number of workers who, moreover, were considerably more productive.

Formal education as a criterion for exclusion

Lean production and technological changes led to the development of criteria for excluding many workers by management and it entailed a level of formal education being used as a tool for this purpose. This had less to do with workers' skills and 'trainability'. In fact, those workers who remained at the plant spoke about how new machines and computers did what is regarded as 'appropriating diagnostic and cognitive skills from workers in the production process'. In other words, certain functions which were previously conducted by workers manually, such as

the measurement of the level of steel in a casting container, were later carried out by computers and machines (Motsoari 2010, interview). Workers who remained at the plant after the retrenchments found that their skills were usurped by the new technology.

Most migrant workers and generally older workers who had less formal education were retrenched because the company felt that they could not keep up with the pace of technological changes. The company needed workers who, ostensibly, would 'quickly' learn how to use the new technology and be able to adapt to multi-tasking. Yet, as it will be argued later in the chapter, migrant workers who had the ability to learn to use new technology were excluded and retrenched (Hlatshwayo 2003).

Blue collar workers who had less formal education and were also migrants were generally no longer needed at the Iscor Vanderbijlpark and High Veld Steel plants. In the plants, workers who had higher formal education tended to be employed as operators of new production technology (Hlatshwayo 2003; Von Holdt 2003).

Webster (1985) has shown how white South African steel workers and their trade unions contested the meaning of skill in contesting mechanisation in the 1970s and 1980s. Many black workers were employed in metal industries as machine operators and did the bulk of productive work. In the process, white workers became supervisors of black semi-skilled workers and argued that their work was highly skilled and they had to be paid higher wages in relation to their black counterparts. The definition of skill had a very strong racial dimension under apartheid (Webster 1985).

Webster (in Forrest 2005:87) also showed that black migrant workers were 'uneducated' yet it was possible to train them in new technologies. In the late 1970s, Webster (ibid) conducted a survey among black workers and concluded: 'it was more educated workers who joined the unions in the early days, but it certainly points to the possibility that many migrant workers were highly trainable in new technology and new ways of working'. Even in post-apartheid South Africa, the meaning of skill remains contested, 'Clearly understandings of skill have never been monolithic in South Africa. Workers, for instance, have inevitably had different views of their own skills and how to use them than employers' (McGrath 2004:19).

In fact, some testimonies of workers who were retrenched at the plant in the 1990s and early 2000s are consistent with Webster's findings on education and skills. For example, Ernest Jikintetho Sigaqana who was born in 1942 in Libode in the former Transkei, left school in Standard 4 (Grade 6) and joined the plant in 1979 where he worked as a general worker in the central department of the plant. He became a clerk at the plant in 1980. In the early 1990s, he became an operator of the forklift at the blast furnace section of the plant. As part of the restructuring process, he left the plant on 7 August 2001. Sigaqana was not only a skilled worker who possessed strong cognitive and analytical abilities at the plant but also had command of 'diplomacy from below'. Diplomacy is often associated with the elite in state apparatuses being able to skilfully negotiate settlements. However, in this case it is argued that workers are also skilled as negotiators. Sigaqana wrote a letter to former President Mandela

asking him to intervene in the money dispute with the firm. He received a response from the Nelson Mandela Foundation in 2002.[2]

It would have been possible to train workers like Sigaqana in the use of new technology because they were skilled workers who had conceptual and execution capabilities, but the company chose to develop criteria to support its strategy of exclusion and retrenchments. On that basis older workers who had less formal education became victims of the retrenchments because they were seen as 'deadwood' that had to be disposed of by the company. In fact, many workers were retrenched before the retirement age of 65 because of the company's strategy (Loebell 2005). In effect and consistent with Dore's (1976:5) notion of 'education inflation', the educational qualification requirements for jobs were inflated and matriculation, for example, became a basic requirement. Put differently, formal education levels became a criterion for excluding workers and that had less to do with the skill requirements for performing a job.

Arguing about this very issue, that is, of the level of formal education being used as a criterion for excluding workers, Baatjes (2008:94) says that:

> I can, therefore, only conclude that despite the 'trainability' argument . . ., the reason behind the raising of the education level is because there are simply not enough jobs to go around, and raising education levels is one way of screening people, and keeping certain people out.

Changing composition of Iscor's workforce: Colour and skills

As argued above, in the 1990s, ISCOR pursued its objectives through workforce reduction and a new education regime. Added to this was the strategy of 'deracialisation'. Management of the plant outlined its restructuring goal as follows: 'We regard labour as a fixed cost and need only a portion of it as variable. *We want a small permanent workforce* [my emphasis]' (Robertson & Viljoen in Rosenthal 2000a:4). The company and the plant used retrenchments and other forms of work reorganisation to largely move from a company dominated by so-called 'unskilled, semi-skilled and skilled' workers to one that has a preponderance of 'semi-skilled and skilled' workers. However in addition, Iscor also pursued a 'deracialisation' process in the 1990s, and rationalised 'racially' based departments which were streamlined into 'non-racial' departments.

Due to the fact that Iscor was an apartheid state corporation and had to provide employment for whites, it employed an exceptionally high proportion of white workers. In 1996, the overwhelming majority of management positions at the Iscor Vanderbijlpark plant were occupied by whites. Nearly 90% of 'skilled' jobs were held by white workers while 'unskilled' work was done almost exclusively by black workers at the plant (Rosenthal 2000b:4).

In the mid-1990s, the company was planning to outsource unskilled work such as cleaning, peak load work and maintenance. Rosenthal (ibid:2) states:

> Permanent workers are becoming multi-skilled, thus a core-periphery divide is forming with a core of skilled and multi-skilled workers being permanently employed and unskilled workers being subcontracted and used periodically'.

Unskilled workers who had 'lower' levels of formal education were not the only category of workers affected by workforce reduction. White workers in administration, human resource and hostel administrations and lower management were also affected. Black migrant workers were 'policed' by a large layer of white hostel managers in their residences and foremen at the workplace. There was also a need to rationalise and bring together various departments that were 'racially' divided because the 'new South Africa' was also about 'deracialisiation'. The human resources and training department also shrunk because migrant workers who were managed by these departments had been retrenched (Hlatshwayo 2003).

To meet the needs of the ostensible democratisation process of the 1990s, the company 'deracialised' and employed some blacks in skilled and management positions. Some NUMSA shop stewards benefited as individuals in this process, regarded by Buhlungo and Tshoaedi (2012:13) as 'upward social mobility'. These shop stewards became human resource managers and health and safety officers at the plant. This, as expected, weakened the union as some of its skilled shop stewards, who had trained for many years, joined the ranks of management. Alex Mashilo (2011, interview), a collective bargaining co-ordinator at the union's head office, stated that: 'The shop stewards at ArcelorMittal have received health and safety training from NUMSA. The unfortunate part is that these shop stewards have been recruited as managers in the plant'.

Table 1 on occupation and colour shows how the strategy based on lean production using technological changes and work reorganisation has transformed Iscor fundamentally. Out of 9 233 employees, there are only 353 'unskilled' workers. This means that 93% of the workforce is either skilled or semi-skilled (ArcelorMittal 2010; Rosenthal 2000b). The company has achieved its goal of reducing the number of unskilled workers and having a small permanent workforce. Critically, the company also relied on outsourced workers who were employed by labour brokers. In 2010, outsourced workers comprised about 40% of the workforce at the Vanderbijlpark plant (Johnston 2010).

TABLE 1: Occupation, colour and skill in 2010 (ArcelorMittal SA 2010:58)

	Female				Male				
Occupational level	**Black**	**Coloured**	**Indian**	**White**	**Black**	**Coloured**	**Indian**	**White**	**Total**
Top Management	1				1		2	6	10
Senior Management	10	1		7	13	1	4	106	142
Professionally qualified specialists and mid-management	39	8	15	133	120	26	48	515	904
Skilled technical academically qualified workers, junior management, supervisors, foreman and superintendents	137	42	9	291	1 774	211	228	2 613	5 305
Semi-skilled and discretionary decision-making	53	20	4	107	1 920	92	46	277	2 519
Unskilled and defined decision-making	7				341			5	353
Grand Total	247	71	28	538	4 169	330	328	3 522	9 233

There are no comparative figures from the period during apartheid, but the literature on the company indicates that Iscor's board of directors, top management, lower level management, and skilled positions were occupied by white men[3] (Clark 1994; Hlatshwayo 2003; Rosenthal 2000a). Table 1 shows that although there have been some demographic changes with black men and women occupying senior and top management positions, 106 white males (60%) continued to occupy senior management positions as of 2010. Table 1, in sum, shows that the company has been radically transformed from a company of 'mass production' (which involves employing larger layers of workers and produces products without customer specification) to a highly mechanised 'lean' company that has fewer workers who are employed on a permanent basis, with a majority of workers being regarded as semi-skilled and skilled. Unlike during the apartheid period, blacks and women have some representation in skilled and management positions of the company and this was

facilitated by affirmative action; however, in 2010, men still dominated specialist and technical positions. For example, out of 904 'professionally qualified specialists and mid-management' positions, there were only 62 'non-white' women.

Upward social mobility, affirmative action and trade unions

Reflecting on the issue of affirmative action, NUMSA (2011:1) contended:

> Numsa also believes in meaningful affirmative action. It does not want ex-Numsa shop stewards promoted to human resources positions and then they become tokens because they are given no power to transform the workplace. Numsa wants affirmative action for all workers. Training will skill workers and automatically move them into more skilled positions with higher pay.

NUMSA (ibid) regarded training and skills development as a way to ensure that black workers and blacks in general could occupy higher positions and earn more income. It has been argued that these policies have had limited impact since although the policies attempted to address the demographic imbalances of apartheid, they have benefited few blacks and have not addressed fundamental economic imbalances (Vally 2007).

Moreover, this process has also had contradictory effects suggesting a duality of 'mobility' which involves upward and downward social mobility. Sitas (2004) and Masondo (2012) discuss this notion of 'upward and downward social mobility' which entails some black workers and blacks moving up the social ladder, and many working class people moving down the social and economic ladder, as a result of work reorganisation and retrenchments. In addition, many union leaders at local levels as well as older workers have also moved down the ladder and remain isolated as a result of economic restructuring (Buhlungu & Tshoaedi 2012).

Table 1 shows that NUMSA and government interventions have ensured that there is black and women representation in some top positions of the company but, as argued previously (Hlatshwayo 2003), there has simultaneously been a massive downward social mobility for many workers as a result of plant restructuring. In the process the union has also lost some of its skilled shop stewards to management as a result of affirmative action (Mashilo 2011, interview).

Affirmative action has been cited as one of the reasons for the 'downward social mobility' of some whites (Visser 2006). Solidarity and Afriforum, an organisation formed by Solidarity to defend the interest of Afrikaners in South Africa, have tended to focus on the effects of affirmative action on white South Africans (Diamond 2010). Writing about the impact of social changes since the dawn of democracy on white workers who were employed by Iscor, Peens (2012) argues that these white workers see this as a loss of their 'whiteness' as some of them live in neighbourhoods where blacks also live. They also see affirmative action as the source of their problems as some black workers move up in the social ladder.

This 'white' discourse on affirmative action does not acknowledge the fact that whites and white workers in this case benefited immensely from cheap black labour. It is shown elsewhere that during apartheid, black workers employed by Iscor lived in poor conditions and had to work for low wages compared to their white counterparts. At the same time, the migrant labour system confined families of black workers to the undeveloped Bantustans (Hlatshwayo 2003).

Trade union responses to new technology, privatisation and lean production

How did trade unions respond to technological changes and lean production? NUMSA's members at the Vanderbijlpark plant were generally 'unskilled' and 'semi-skilled' with a sprinkling of 'skilled' workers. On the other hand, Solidarity's members tended to be in skilled positions such as artisans, production workers and production planners (Solidarity 2010). Union density at ArcelorMittal SA (2011a:59) was 85% and it employed 9 886 employees in 2011. NUMSA and Solidarity are the unions that are recognised at ArcelorMittal SA and their membership numbers were more or less equal (ArcelorMittal SA 2011a:ii).

Both Solidarity and NUMSA were caught off guard by technological changes at the Vanderbijlpark plant. Du Plooy (2010, interview), who was a Solidarity organiser at the time of restructuring reflected, 'But you would also understand that at that stage we were not clued up on what is to be consulted about. We did not have an understanding of new technology, workplace restructuring and globalisation'. Bobby Marie (2011, interview), who was part of a team which initiated trade union organising at Iscor reflected on how the union in its infancy at the plant was compelled to deal with basic issues of organising, 'We never got time to look at it [technology]. We were trying to establish a union. We were very reactive'.

Both NUMSA and Solidarity were unable to respond proactively to technological changes and lean production. The emphasis of the unions' strategy was largely based on reacting to lean production and this took the form of using collective agreements. These agreements had clauses which were meant to facilitate consultation and negotiations around retrenchments during the process of restructuring. However, the collective agreements were structured in a manner which enabled management to have a final say in the restructuring. In other words, the unions were to be informed about management's plans and the unions would raise procedural issues which had no impact on the final outcomes of the process of restructuring (Hlatshwayo 2013).

While it is accepted that the national and global environment was unfavourable to trade unions and workers since the 1980s, the strategies employed by the trade unions were also limited and did not help in minimising the negative effects of lean production on workers (ibid). Both unions emphasised wage campaigns, and as a result strategies for engaging lean production and new technology were not developed. As part of the African National Congress (ANC)-led alliance and the

Congress of South African Trade Unions (COSATU), NUMSA was also caught up in 'palace politics' or politics which facilitated career opportunities for some in the union leadership and this had no relationship with lean production and technological changes (COSATU 2012).

The results of all these changes were that workers were retrenched in large numbers and the numerical strength of the unions in the plant was weakened. While Solidarity had skilled workers involved in the production process, the union was unable to tap into members' understanding of production to develop alternative forms of production in order to minimise the negative effects of retrenchments. The structures, research and education departments of the two trade unions were not geared towards responding to lean production and technological changes. For example, the unions did not have specialists and trained personnel with an understanding of developments in new technologies (Hlatshwayo 2013).

Besides being unable to respond to technological changes in a manner that would protect the workers' interests, NUMSA did not manage to win the struggle against privatisation in the late 1980s. During the campaign against the privatisation of Iscor, NUMSA put itself in a contradictory position. The union argued that it opposed privatisation. However, NUMSA accepted shares offered by management with the view that the money from the shares could be used to build a strike fund. Forrest (2005:494) said:

> In 1990 the state sold Iscor to a private concern and a restructuring process began. The new ownership appeared more enlightened. It immediately offered workers 200 free shares in the company and a first option and 20 per cent discount on further Iscor shares in an attempt to increase workers' interest and stake in the company. After the devastating retrenchments, the union and shop stewards were suspicious of new schemes.

In addition, NUMSA and Solidarity were unable to respond proactively to lean production programmes of the plant, such as 'Omega' and the 'reengineering-work reorganisation programmes which sought to reduce the number of workers, introduce new technology and increase the intensity of work. Management managed to achieve its lean production objectives. The unions participated in the plant and company forums where lean production programmes were discussed, but decisions on changes had already been taken by management. NUMSA and Solidarity's responses to lean production tended to be defined by reacting to management strategies. They did not have a proactive strategy seeking to defend workers' jobs and redefine the company's role so that it could play a developmental role in the community in the area and South Africa in general (Hlatshwayo 2013).

Evidence from the unions in Sweden and Germany shows that skilled workers and workers in general who were members of trade unions were able to use collective bargaining structures to save some jobs. It is known that the struggles of workers in these countries after the Second World War led to the establishment of social democratic governments which represented the historic compromises between labour

and capital and paved the way for a stronger workers' voice in collective bargaining and technological changes in those countries (Rogers & Streeck 1994).

The Implications Of Technological Changes On Skills And Training

Having shown how technology impacted on workers, skills and trade unions, I will now examine the implications of technological changes on skills and training.

Training during the early phases of lean production

Lean production and technological changes also accompanied further training of the workforce, and this was aimed at ensuring that workers understood the philosophy of lean production and the new technology so that they could co-operate in implementing new production methods. Writing about the introduction of new technology and new training programmes on lean production in the metal industries in the 1980s, Forrest (2005:85) asserts that: 'Some companies introduced training programmes to prepare employees for the new technology and this provided the additional opportunity to discard unproductive, unsuitable workers. It was workers with skills that were spared the axe'.

Donovan (2013:1) reflects on lean production and training:

> lean training for direct labor employees is designed to remove the mystery and apprehension regarding this new technology. The emphasis is that lean production results in a more effective business that is better able to compete in the world-wide markets.

Consistent with the arguments made by Forrest (2005) and Donovan (2013), the plant was also involved in training its workforce on lean production and the use of new technology. Technological advancement, according to Iscor, had to be accompanied by a management system which ensured cost-saving, productivity and improved quality of products. The company noted that *Omega*, a lean production-based training programme, sought to ensure the effective and efficient use of technology in the production process. The company also spoke about an increase in workers who were taking part in *Omega*'s quality circles, since 1983. In 1989, there were 500 groups of quality circles that took part in the programme. This number increased to 2 246 in 1989 (Iscor 1989:20).

This programme was also about technological innovations in the production process. The *Omega* manual mentioned that machinery and materials were critical to improving productivity. *Omega* was also used for identifying problems in the process of mechanisation and devising strategies for tackling them. *Omega* also emphasised productivity and the need to ensure that the plant became globally competitive (Iscor Vanderbijlpark 1983).

Inevitably the *Omega* programme caused divisions within the union because some members of NUMSA, who were largely migrants and had less formal education, recognised the threat to their job security. In addition, they saw shop stewards who participated in the *Omega* workshops as collaborators who sided with management. This conflict led to the killing of eight NUMSA members and shop stewards in the Vaal region because of intra-union conflict between those shop stewards who were seen to be participating in *Omega* and those members who resided at the KwaMasiza hostel (Forrest 2005).

The case of Phembeshiya Didekile exemplifies this. He was a worker from Tsolo in the Eastern Cape who commenced working at the plant in 1970. He was regarded as a 'spare', which meant that he performed odd jobs and had no special designation. He then worked at the steel-making furnace as a 'tool boy' as well as at the water treatment section of the plant. When asked about the impact of the *Omega* training programme on workers, he stated:

> NUMSA did not help us. *Omega* was the problem. . . . That caused a lot of fights. A lot of machines were introduced. We used to use our hands in our work operations. All that work was taken over by machines and computers. A lot of us were retrenched. They never consulted us when they introduced these technological changes' (Didekile 2010, interview).

Other restructuring programmes which followed *Omega* included the 'reengineering' programme and the 'OPEX' challenge. All these programmes were aimed at ensuring that workers' training in the plant led to production processes and products that gave the plant a competitive edge in the global steel market. Technological changes were therefore central to these restructuring programmes at the plant (Xaba 2003).

Training after massive retrenchments

After massive retrenchments in the late 1990s and early 2000s, ArcelorMittal SA's training and skills development strategy was largely concerned with making sure it continued to produce for a global steel market. Training, as expected, was no longer mass based training as was the case during apartheid because the plant no longer needed a big workforce. In addition, training was narrowly associated with the ability to use new technology and adjustment to principles of lean production.

Hands-on training that was provided by the company was instrumental in the sense that it was largely about training workers on the specific usage of machinery. The type of training did not even begin to educate workers about the design process of a machine, its strengths and weaknesses, the reasons for choosing a specific machine and other related technical questions. According to Mandla Haluhalu (2010, interview), a secretary of the NUMSA shop steward committee at the plant, 'Workers are just trained on how to operate new machines'.

As part of conducting its workforce training to ensure that the workforce was up to speed with on-going technological developments and production schedules,

the company reported in 2011 that: 'During the year, our training department was highly active and conducted nearly 159 000 training interventions – meaning that, on average, every employee interacted with the (training) department on more than 17 occasions during the year' (ArcelorMittal SA 2011b:1).

ArcelorMittal SA had a training programme which facilitated the training of young students who joined the company from South African universities and further education and training (FET) colleges. By including black students from these institutions in its training programme, the company sought to address the 'racialised' nature of skill in the company. The company also wanted to ensure that it did not have a shortage of trained workers at any given point in time:

> Besides the significant numbers of learners at our Science Centres, at any given time the company will have about 943 apprentices in training, as well as approximately 33 technicians at universities of technology and over 50 students studying engineering at university. We pay all their tuition and essential living costs (ArcelorMittal 2011b:37).

With regard to the ageing workforce, the company further observed:

> The ageing issue lies primarily with the company's production staff, of which 13% is due to retire. We have about 1 200 well-trained production learners in the pipeline to staff the remainder of the four team shift system and which also makes provision for the ageing workforce, as well as transferring on-the-job experience and skills (ibid).

ArcelorMittal SA, NUMSA and Solidarity are also part of the Manufacturing, Engineering and Related Services Sector Education and Training Authority (MerSETA) which is one of the 23 Sector Education and Training Authorities (SETAs) established through the Skills Development Act (No. 96 of 1998). According to MerSETA (2011), its role is to facilitate skills development in manufacturing and engineering sectors of the South African economy.

About 1 500 learners were part of the company's training programme for high school leavers. As part of its collaborations with MerSETA, 'the company has invested in learner programmes, in response to the need to invest in a new generation of production personnel. Students enrol on a metal production national learnership' (ArcelorMittal SA 2012:1). These programmes are meant to run up to a year or one and a half years (MerSETA 2011). In other words, there is no guarantee that a learner will be employed by the plant or a company once the learnership is completed.

Besides the limited time for training of workers at the plant – a concern raised by Van Staden (2009) – the stated numbers of trainees who are in various of the company's training programmes are insignificant. For example, training 1 200 production workers and 100 engineers made a negligible difference given the massive structural unemployment in the community of Vanderbijpark (Berkowitz 2013:1).

Training, skills and the alleged employment nexus

Government and many educationists argue that in order for people to be employed, they need to acquire a formal education and skills in information technology, 'hard' sciences and engineering. The assumption is that there are 'many' jobs but the problem is that there is a shortage of skills. Put differently, the 'demand' for jobs is high but the 'supply' is low. According to this view, one of the roles of education is to balance the supply and demand so that there can be an equilibrium in the labour market (Becker 1993; Kraak 2004:119).

Both trade unions seem to have accepted the dominant skills discourse without any questioning or interrogation. Put simply, this dominant discourse suggests that education and training will contribute to solving the problems of employment and economic growth. In the late 1980s and early 1990s, NUMSA was central to the skills discourse in the labour movement. The union embraced the idea of a 'skills revolution' and the 'high road' to skills acquisition. Accordingly, workers had to use training as a tool for career advancement. The phrase 'from a sweeper to an engineer' was coined and became part of the union's skills discourse (NUMSA 2012:263).

NUMSA (2006:1) also affirmed the view that South Africa had a general skills shortage. The union argued that the 'skills crisis [is] gripping the country [South Africa]'. Calldo (2008:1) of Solidarity also supported this view, 'A number of studies have confirmed that the skills shortage is a real problem in South Africa, and a constraint to economic growth'. Both unions therefore espoused the view that South Africa faced a general skills shortage and the assumption that training of workers would resolve the unemployment crisis. Driven by a belief in the skills shortage discourse, Solidarity (2011) made a direct intervention in the realm of skills and training by establishing Solidarity Technical College (Sol-Tech) in 2006 with campuses in Johannesburg and Pretoria. According to Visser (2006), 'Sol-Tech was the union's [Solidarity] answer to the rising skills shortage in South Africa. In this way the MWU [Mineworkers' Union] became the only trade union in South Africa which was also registered as a training institution'. As an attempt at contributing to combating the 'skill shortage', NUMSA (2009:1) also proposed the 'establishment of a Union technical training college; the revival of regional accreditation centres; reinstatement of a 1:4, artisan: apprentice, ratio and improved incentives for employers to train workers'.

This debate about skills is dealt with in greater detail elsewhere in this volume, so will not be dealt with here. But there is some reflection on what the case study of the Vanderbijlpark plant reveals about the skills issue. The skills shortage thesis espoused by NUMSA and Solidarity does not seem to help in explaining the skills issues at the plant. Firstly, plant management had the power to define the nature and forms of skills to the exclusion of workers and their representatives. While management regarded many jobs as skilled jobs, the evidence shows that new technology appropriated skills and work which were subsumed under the power of machines and computers. Many workers who had acquired skills over the years as

machine operators, clerks and fork lifters were retrenched. As the careers section of the ArcelorMittal SA website showed on 10 May 2013, the only job advertised on the website was that of a general worker for the Vanderbijlpark plant (ArcelorMittal SA 2013). This implied that there were no jobs at the company waiting to be filled by workers as is generally implied by those arguing that the problem largely lies in a skills shortage.

Using a limited definition of unemployment, the Gauteng province where the plant is located, had an unemployment rate of 25% in 2012 (Ziyane 2012). In addition, the relevant Emfuleni Local Municipality (ELM 2007:17), in its Integrated Development Planning for 2007 to 2012, noted the impact of the decline in metal industry employment, 'The metals and metal products industry has undergone major restructuring in the past few years, resulting in job shedding'. The municipality had no illusions about job creation prospects at the plant. It realistically argued that, 'It does not seem that despite this financial success [of the plant], more permanent jobs will be created, instead it could lead to shedding of jobs' (ibid:18). The reality is that the plant has restructured itself into a 'lean' plant that has fewer workers and as a result it is unable to absorb many graduates from its immediate neighbouring university of technology, namely, the Vaal University of Technology (VUT). In 2008, VUT conducted research on graduate employment based on a representative sample of 1 117 graduates and reported that 35%, 26%, 73% and 65% of those who graduated in Applied and Computer Science, Engineering Sciences, Management Sciences and Humanities, respectively, were unemployed. Graduate unemployment in the area is a phenomenon affecting even Engineering, and Computer and Management Sciences graduates (VUT 2008).

The number of jobs at the plant was finite. The plant even struggled to absorb graduates from the neighbouring VUT (2008) despite the fact that there were other universities and FET colleges in the region.

The plant was central in the creation of the town of Vanderbijlpark and the surrounding areas and was a source of livelihood for many in the community. The impact of technological change and work restructuring has drastically reduced its value and social and economic contribution to the community of the Vanderbijlpark area and its major contribution to the surrounding communities is pollution (Cock 2006).

Debating 'deskilling' in the context of the plant

Sears (2003:70–71) argues that lean production and technological changes have not only led to a reduction in jobs, but these changes have increasingly also led to a disappearance of 'good jobs' and the intensification of work. In my research some of the workers spoke about the increased pace of work and pressures to increase productivity. For example, William Dikotsi, a former chairperson of NUMSA's shop steward committee at the plant, argued that the reduction of the workforce tends to

compel the remaining workers to work harder because the machines, computers and the production schedules tend to speed up the pace of work. He complained:

> I am now a senior operator. I work at the oxygen arc furnace with oxygen. I do the analysis of the hot metal. I check the manganese content and temperature of the metal. If it [steel] is prepared well, we then send it forward. I do this using a computer but before the computer they used to write down all the details. The machine that was used involved manual work. In my team or section we were three and now we are two because of these changes. We now have to work harder (Dikotsi 2010, interview).

Dikotsi also mentioned how manual work, such as measuring the quality and temperature of molten steel, has been appropriated by computers, thus leading to the reduction of the number of workers. It has also led to deskilling by eliminating the need for skilled labour through the introduction of high technology and the consequent downgrading of labour from a higher to a lower level.

Writing before the introduction of computer technology, Marx (1990) speaks about how machines tend to increase the pace of work and the subsumption of work through its appropriation by machinery resulting in the loss of skills acquired through experience. Similarly, Marxist theorists such as Braverman (1974) argue that skills built into new technology mean that workers no longer have to exercise those skills they had acquired before the introduction of new technology. The level of skill required for the use of the new technology tends to be lower and this results in the 'deskilling' of a worker.

Penn (1990) has suggested, using an empirical and sociological approach which compares and contrasts workers in the United Kingdom (UK) and the United States (US), that there is no evidence to suggest that there has been a numerical decline of skilled workers as a result of the introduction of new technologies. For example, he states that skilled craft workers rose from 11.1% in 1940 to 13% in 1980. Skills required in many microelectronics technologies are sensory and intellectual, such as monitoring, data entry, system status analysis and decision making. The development of software, operating systems, international banking systems, library cataloguing systems, databases, and so on require a high level of skill and sophistication.

However, in the case of ArcelorMittal the evidence shows that lean production and technological changes led to a dual and a contradictory process of massive 'deskilling' with a limited 'skilling' of technicians who occupy top occupations at the plant. For example, before the introduction of computers in the production process, fitter and turners had more power to control the labour process and the speed of work. The introduction of computer technology has taken over the machine diagnosis aspect of the job. Henry Adams (2010, interview), a Solidarity shop steward who was a fitter and turner at the plant, commented as follows:

> When I came here everything was about handwork. In 1998 there were new computers. I deal with maintenance [of machines]. I have seen a lot of new machines. It makes work to be simpler. The PLC [Programmable Logic Controller]

> or the computer gives you an error code. Yes, it also led to retrenchments. It does affect us. They must look after people who have lost jobs.

This testimony demonstrates that computer technology appropriated diagnostic skills from workers. This deskilling and reconfiguration of skills meant that workers such as fitter and turners were no longer responsible for diagnosing faults in machines as this had been taken over by computer technology, consistent with Braverman's (1974) thesis on 'deskilling'. In this case, there is what Braverman (ibid) called a separation of 'conception' from 'execution'. While machine operators and fitter and turners have post-matriculation qualifications and are regarded by the plant management as skilled workers, in fact, machines and computers have appropriated some cognitive elements of their work. The fact that these workers have post-school qualifications makes management regard them as skilled workers. Management conflates the actual skills with qualification. The contradiction is that the occupations have been reconfigured by the new technology in a form of deskilling.

On the other side of the 'skills' coin, there is a tiny minority of workers who are involved in production planning and scheduling and who seem to have some control of the labour process, and these workers can be regarded as skilled workers. These workers are aware of their power in the labour process because they are involved in production planning for various sections of the plant. For example, D du Preez (interview, 2011) who is a member of Solidarity started working at Iscor SA in 1978 and now occupies a position of mechanical electrical planner and is involved in production planning.

In addition, workers doing computer programming located outside of the company in computer companies like Siemens are also highly skilled as they are heavily involved in conceptual work. For example, highly skilled workers working as computer programmers are able to use their production process plans to ensure that there is efficient production and articulation between machines, computers and workers. The computers designed by these workers can also measure the pace of work and productivity (Association for Iron & Steel Technology 2006:1). The implication of this is that workplace re-organisation to achieve the objectives of lean production is often contradictory and results in both deskilling and the development of new skills. But this happens in the context of the introduction of new technologies which invariably results in reductions in the workforce and increases in productivity and profit levels.

Conclusion

The global integration of the plant and the company, lean production methods and the technological changes that took place at the ArcelorMittal Vanderbijlpark plant had far reaching implications on the size and type of the workforce and their skill levels and requirements. The plant was transformed from a state enterprise employing workers who were largely 'unskilled' and 'semi-skilled' to a privatised global plant employing

a smaller 'deracialised' permanent workforce employing largely 'semiskilled' and 'skilled' workers. Moreover, such a reduced permanent workforce is surrounded by a precarious and outsourced workforce.

While the company and the plant argue that the workers who were retrenched were unskilled and 'uneducated', the evidence gathered from the research suggests that the retrenched workers were trainable. The skills development strategy of the company and the plant were narrowly defined by the company's need to survive in global competition. While the plant is located within a community that has a high unemployment rate and graduate unemployment, it is largely driven by the global imperatives of its owners based principally on the aim of increasing profitability. Invariably, the plant was unable to respond to the immediate local economic development needs of the community of Vanderbijlpark or society more generally. Thus, contrary to the dominant narrative and popular conceptions about the role of investment, ArcelorMittal SA has in fact contributed to unemployment. The plant has also made another significant contribution in the form of greenhouse gases and environmental pollution.

Notes

1. Iscor South Africa became ArcelorMittal South Africa in 2006. ArcelorMittal South Africa has operations in Vanderbijlpark, Newcastle, Pretoria and Saldahna.
2. Sigaqana, who was a NUMSA member, showed me an original letter which he had received from the Nelson Mandela Foundation. After being retrenched by the company he had asked the former State President of South Africa, Nelson Mandela, to intervene in his case of retrenchment (Samuels, J. Letter to Mr Sigaqana, 22 November 2002).
3. Like Xaba (2003), I could not obtain a 'racial' breakdown of workers who were retrenched, took early retirement or retired.

Interviews

Adams, Henry, 2010, Interview with the author on 15 November 2010, Vanderbijlpark. [Digital recording in possession of author.]

Didekile, Phembeshiya, 2010, Interview with the author on 7 August 2010, Sebokeng. [Digital recording in possession of author.]

Dikotsi, William, 2010, Interview with the author on 28 November 2010, Sebokeng. [Digital recording in possession of author.]

Du Plooy, Piet, 2010, Interview with the author on 1 August 2010, Pretoria. [Digital recording in possession of author.]

Du Preez, D., 2011, Interview with the author on 25 January 2011. [Digital recording in possession of author.]

Haluhalu, Mandla, 2010, Interview with the author on 2 April 2010, Sebokeng. [Digital recording in possession of author.]

Marie, Bobby, 2011, Interview with the author on 17 June 2011, Johannesburg. [Digital recording in possession of author.]

Mashilo, Alex, 2011, Interview with the author on 3 June 2011, Johannesburg. [Digital recording in possession of author.]

Motsoari, Lebohang, 2010, Interview with the author on 28 November 2010, Vanderbijlpark. [Digital recording in possession of the author.]

References

ArcelorMittal SA, 2006, *Annual report: 2006*, ArcelorMittal, Johannesburg.

ArcelorMittal SA, 2007, *Annual report: 2007*, ArcelorMittal, Johannesburg.

ArcelorMittal SA, 2008, *ArcelorMittal South Africa, overview*, retrieved 1 August 2012, from http://www.arcelormittalsa.com/Portals/0/AMSA-at-a-glance.pdf.

ArcelorMittal SA, 2010, *Annual report: 2010*, retrieved 19 January 2012, from http://www.arcelormittalsa.com/ Portals/0/ArcelorMittal_full_Lo-res2.pdf.

ArcelorMittal SA, 2011a, *Annual report: 2011*, ArcelorMittal SA, Johannesburg.

ArcelorMittal SA, 2011b, *Forging ahead: Sustainability report 2011*, retrieved 18 February 2013, from http://www.arcelormittal.com/corp/~/media/Files/A/ArcelorMittal/corporate-responsibility/publications-and-reports/archive/regi-corp-resp-reports/ArcelorMittal-SouthAfrica-SustainabilityReport-2011.pdf.

ArcelorMittal SA, 2012, *Transformation tomorrow: Filling the skills gap*, retrieved17 January 2013, from http://www.arcelormittalsa.com/thinksteel/index.php/stakeholders/filling-the-skills-gap/.

ArcelorMittal SA, 2013, *Careers: General worker, Vanderbijlpark Warehouse*, retrieved 6 February 2013, from https://www.jonti2.co.za/?p=view_vacancies&cat=459,0.

Aronson, J., 1994, 'A pragmatic view of thematic analysis by the *Qualitative Report*, 2(1), Spring', retrieved 7 April 2013, from http://www.nova.edu/ssss/QR/BackIssues/QR2-1/aronson.html)http://www.nova.edu/ssss/QR/BackIssues/QR2-1/aronson.html.

Association for Iron & Steel Technology, 2006, 'Mittal steel honours Siemens VAI for Vanderbijlpark project, Warrendale', *Steel News*, retrieved 2 August 2012, from http://steelnews.com/Mitall/tabid/36/Cat/177/Doc/620/Default.aspx.

Baatjes, B., 2008, 'An investigation of knowledge and skill requirements for employment as a machine operator: A case study of a large textile company', MEd thesis, University of KwaZulu-Natal, Pietermaritzburg.

Barchiesi, F., 1997, Flexibility and changes in forms of workplace subjectivity: A case study of the South African automobile assembly industry, Master's thesis, University of the Witwatersrand, Johannesburg.

Becker, G.S., 1993, *Human capital: A theoretical and empirical analysis, with special reference to education*, University of Chicago Press, Chicago, IL.

Berkowitz, P., 2012, 'The meaning of numbers: Labour Force Survey', *Daily Maverick*, 7 February, retrieved 18 February 2013, from http://www.dailymaverick.co.za/article/2013-02-06-the-meaning-of-numbers-labour-force-survey-q4/.

Braverman, H., 1974, 'Labor and monopoly capital: The degradation of work in the twentieth century', *Monthly Review Press*, New York, NY.

Buhlungu, S., 2010, *A paradox of victory: COSATU and the democratic transformation in South Africa*, University of KwaZulu-Natal Press, Scottsville.

Buhlungu, S. & Tshoaedi, M., 2012, 'A contested legacy: Organisational and political challenges facing South Africa', in S. Buhlungu & M. Tshoaedi (eds.), *COSATU's contested legacy: South African trade unions in the second decade of democracy*, pp. 1–31, HSRC Press, Pretoria.

Calldo, F., 2008, 'Skills shortage in South Africa: Summary of facts per sector regarding this issue', Solidarity Research Department, 25 January, retrieved 27 March 2013, from http://www.solidarityresearch.co.za/wp-content/uploads/2010/07/16-Skills-Shortage-in-South-Africa-Summary-facts-FJC-ET.pdf.

Clark, N., 1994, *Manufacturing apartheid: State corporations in South Africa*, Yale University Press, New Haven, CT.

Cock, J., 2006, 'Throwing stones at a giant: An account of the Steel Valley struggle against pollution from the Vanderbijlpark steel works', report for the Centre for Civil Society, University of KwaZulu-Natal, March, retrieved 20 April 2013, from http://www.swopinstitute.org.za/files/giantshort3.pdf.

Competition Tribunal, 2004, 'In the large merger between LNM Holdings NV and Iscor Ltd, Case no. 08/LM/Feb04', retrieved 8 June 2011, from http:www.saflii.org/za/cases/ZACT/2004/41.rtf.

Congress of South African Trade Unions (COSATU), 2012, *Secretariat Political Report of the 11th National Congress*, COSATU, Johannesburg.

Diamond, D., 2010, 'Solidarity, South Africa's majority white union adapts to the post-apartheid world', Institute for Research on Labor and Employment's Strategic Decision-Making in Labor and Social Movement Organizations Conference, retrieved 3 May 2012, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1980341.

Donovan, R., 2013, 'Lean manufacturing training', retrieved 15 February 2013, from http://www.rmdonovan.com/Lean_Training_and_Education/.

Dore, R., 1976, *The diploma disease: Education, qualification and development*, University of California Press, Berkeley, CA.

Emfuleni Local Municipality (ELM), 2007, *Integrated Development Plan (IDP) for 2007/2012*, retrieved 27 March 2013, from http://led.co.za/sites/led.co.za/files/cabinet/orgname-raw/document/2012/emfuleni_lm_idp_2007-2012.pdf10.

Forrest, K.A., 2005, 'Power, independence and worker democracy in the development of the National Union of Metalworkers (NUMSA) and its predecessors 1980–1995', PhD dissertation, University of the Witwatersrand, Johannesburg.

Forrest, K.A., 2011. *Metal that will not bend: National union metalworkers of South Africa 1980–1995*, Wits University Press, Johannesburg.

Henning. D., 2011, 'IG metal union and German government reaffirm their collaboration', International Committee of the Fourth International, Oak Park, retrieved 12 April 2012, from http://www.wsws.org/articles/2011/oct2011/igme-o21.shtml.

Hlatshwayo, M., 2003, 'The politics of production and forms of worker response at the Iscor Vanderbijlpark works, 1965–1973', MA research report, University of the Witwatersrand, Johannesburg.

Hlatshwayo, M., 2010, 'Notes on factory visit, date of the visits: 24 June 2010, p. 130/129', ArcelorMittal Vanderbijlpark Plant, Mondli Hlatshwayo. [Document in author's possession.]

Hlatshwayo. M., 2013, 'Trade unions, technological changes & production', *South African Labour Bulletin*, 37(1), March/April, 17–19.

Iscor South Africa, 1989, *Annual report: 1989*, Iscor, Pretoria.

Iscor South Africa, 1991, *Annual report: 1991*, Iscor, Pretoria.

Iscor South Africa, 1992, *Annual report: 1992*, Iscor, Pretoria.

Iscor South Africa, 1993, *Annual report: 1993*, Iscor, Pretoria.

Iscor South Africa, 1994, *Annual report: 1994*, Iscor, Pretoria.

Iscor South Africa, 1995, *Annual report: 1995*, Iscor, Pretoria.

Iscor South Africa, 2003, *Annual report: 2003*, Iscor, Pretoria.

Iscor Vanderbijlpark, 1983, 'Omega: Study manual', Historical Papers. NUMSA Archive AH2555, ci. 1987–1990, University of the Witwatersrand, Johannesburg.

Jarvis, D., Isaacs, S., Nicholson, J. & Phillips, G., 1999, *Making sense of workplace restructuring*, Trade Union Research Project, Durban.

Johnston, R., 2010, 'ArcelorMittal fatality rate unacceptably high: Zero fatalities remain top priority for joint global health and safety committee', retrieved 3 August 2012, from http://www.imfmetal.org/index.cfm?c=21982.

Kazantzas, F., 2004, 'Iscor Limited: The journey from parastatal to globalisation', Master of Business in the Faculty of Business Law, De Monfort University South Africa, Johannesburg.

Kraak, A., 2004, 'Training policies under late apartheid: The historical imprint of a low skills regime', in S. McGrath, A. Badroodien, A. Kraak & L. Unwin (eds.), *Shifting understandings of skills in South Africa: Overcoming the historical imprint of a low skills regime*, HSRC Press, Cape Town.

Leger, J. 1992. 'Talking rocks: An investigation of the pit sense of rock fall accidents amongst underground gold miners', PhD dissertation, University of the Witwatersrand, Johannesburg.

Loebell, I. 2005. 'Results of a survey on changes in working and living environment of a group of workers and ex-workers at Iscor, Vanderbijlpark, and at Highveld Steel and Vanadium, Witbank, compared to the conditions under apartheid', *Unia*, Zurich.

Maree, J., 1984, 'Trade unions, redundancies and new technology agreements', School of Economics, University of Cape Town, Southern Africa Labour and Development Research Unit (SALDRU).

Maree, J. & Godfrey, S., 2005, '"If you can't measure it, you can't manage it": Reorganization of work and performance at two fish processing firms', in E. Webster & K. Von Holdt (eds.), *Beyond the apartheid workplace: Studies in transition*, pp. 125–148, University of KwaZulu-Natal Press, Scottsville.

Marx, K., 1867, 1990, *Capital: A critique of political economy*, Penguin Books in association with New Left Review, London and New York.

Mashilo, A.M., 2010, 'Changes in work and production organisation in the automotive industry value chain: An evaluation of the responses by labour in South Africa', MA research report, University of the Witwatersrand, Johannesburg.

Masondo, D., 2005. 'Trade liberalisation and work restructuring in post-apartheid South Africa', in E. Webster & K. von Holdt (eds.), *Beyond the apartheid workplace: Studies in transition*, pp. 149–172, University of KwaZulu-Natal Press, Scottsville.

Masondo, T., 2010. 'Worker participation in workplace restructuring in the automotive industry: A comparative study of German and South African Volkswagen plants 1970–2009', MA research report, University of the Witwatersrand, Johannesburg.

Masondo, T., 2012, 'The sociology of upward social mobility among COSATU shop stewards', in S. Buhlungu & M. Tshoaedi (eds.), *COSATU'S contested legacy: South African trade unions in the second decade of democracy*, pp. 110–1231, HSRC Press, Pretoria.

McGrath, S. A., 2004, 'Introduction: The shifting understandings of skills in South Africa since industrialisation', in S. A. McGrath, A. Badroodien, A. Kraak & L. Unwin (eds.), *Shifting Understandings of Skills in South Africa: Overcoming the Historical Imprint of a Low Regime*, pp. 1 -19, HSRC Press, Cape Town.

McGrath, S. A., Badroodien, A., Kraak, A. & Unwin, L. (eds.) 2004, *Shifting understandings of skills in South Africa: Overcoming the historical imprint of a low skills regime*, HSRC Press, Cape Town.

Merseta, 2011, Sector Skills Plan: 2010/11–2015/16, retrieved 18 February 2013, from http:www.google.co.za/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=2&ved=0CDgQFjAB&url=http%3A%2F%2Fwww.merseta.org.za%2FLinkClick.aspx%3Ffileticket%3DelcCeXfL3xU%253D%26tabid%3D100%26mid%3D662%26forcedownload%3Dtrue&ei=ln76UMitIoS7hAexoYD4Dw&usg=AFQjCNGXkx5EMihhncWQvWcnIADoGP5iow&sig2=duKFmVMLGJWi2hn2APQjuw.

Mittal Steel South Africa, 2005, *Annual report: 2005*, retrieved 12 March 2013, from http://www.arcelormittalsa.com/InvestorRelations/2005/annual/index/index.asp.

Mohammed, A., 2008, 'Privatisation of iron and steel in Africa', paper presented at the 8th International Arab Iron and Steel Conference at Doha, Qatar, 17–19 March, retrieved 20 January 2012, from http://www.afristeel.org/PRIVATISATION%20OF%20THE%20IRON%20AND%20STEEL%20INDUSTRY%20IN%20AFRICA.pdf.

Morris, M. & Kaplan, D., 1976, 'Labour policy in a state corporation: A case study of Iron Steel Corporation (Article 2), *South African Labour Bulletin*, 2(8), 2 –21.

NUMSA, 2006, 'Soft skills training a real let down', NUMSA, 21 April, retrieved 20 January 2012, from http://numsa.org.za/article/quotsoft-skillsquot-training-a-real-let-downnumsa.

NUMSA, 2009, 'Press statement on NUMSA Mini National Congress held from 11–14 May', retrieved 18 February 2013, from http://numsa.org.za/article/press-statement-on-numsa-mini-national-congress-held-from-11--14-may-2009-june-1-2009--125-pm.

NUMSA, 2011, *NUMSA's policies and principles*, retrieved 20 January 2013, from http://numsa.org.za/page/numsas-policies-and-principles.

NUMSA, 2012, *Book 2b, Secretariat Report Organisational Matters*, retrieved 12 January 2013, from http://numsa.org.za/admin/assets/articles/attachments/00032_book_2b_secretariat_report.pdf.

Overbeek, H., 2003, 'Globalisation, neo-liberalism and the employment question', Working Papers Political Science No. 01/2003, retrieved 12 November 2013, from http://bdi.mfa.government.bg/info/Module%2009%20-%20Ikonomicheska%20diplomacia/dopalnitelna%20literatura/wpps012003.pdf.

Peens, M., 2012, 'Racial remains in a company town? Iscor houses and the appearance of race in contemporary Newcastle', *South African Review of Sociology*, 43(1), 23–40.

Penn, R., 1990, *Class, power and technology: Skilled workers in Britain and America*, Polity Press, Oxford.

Phakathi, T., 2005, 'Self-directed work teams in a post-apartheid gold mine: Perspectives from the rock face', in E. Webster & K. von Holdt (eds.), *Beyond the apartheid workplace: Studies in transition*, pp. 173–186, University of KwaZulu-Natal Press, Scottsville.

Rogers, J. & Streeck, W., 1994, 'Workplace representation overseas: The works councils story', in R.B. Freeman (ed.), *Working under different rules*, pp. 97–156, Russell Sage Foundation, New York, NY.

Rosenthal, T., 2000a, 'The steel in South Africa in the 21st century: A case study of ISCOR', pp. 1–9, Sociology of Work Unit at the University of Witwatersrand and the International Labour Organisation (ILO), Geneva.

Rosenthal, T., 2000b, 'The steel in South Africa in the 21st century: A case study of ISCOR', pp. 1–7 Sociology of Work Unit at the University of Witwatersrand and the International Labour Organisation (ILO), Geneva.

Samuels, J., 2001, 'Request for Mr Mandela to intervene, Attention Mr. Ernest Jikintetho', personal communication, 22 November 2001. [Document in author's possession.]

Sears, A., 2003, *Retooling the mind factory: Education in a lean state*, Garamond Press, Ontario.

Shah, R. & Ward, P.T., 2007, 'Defining and developing measures of lean production', *Journal of Operations Management*, 25(4), 785–805.

Sitas, A., 1983, 'African worker responses on the East Rand to changes in the metal industry', Doctoral thesis, University of the Witwatersrand, Johannesburg.

Sitas, A., 2004, 'Thirty years since the Durban strikes: Black working-class leadership and the South African transition', *Current Sociology*, 52(5), 830–849.

Solidarity, 2011, 'Notes on the field visit: Solidarity members' meeting in Vanderbijlpark, 25 January 2011', National Congress: Resolution, 15 April 2010, Solidarity, Pretoria.

Solidarity, 2011, 'About Sol-Tech', retrieved 13 June 2012, from http://www.sol-tech.co.za.

Swanepoel, J., 1996, 'Iscor News: Sixty years: A history in the making', *Iscor News*, July Edition, 1–2.

Vally, S., 2007, 'Higher education in South Africa: Market mill or public good?', *Journal for Higher Education in Africa*, 5(1), 17–28.

Van Staden, A., 2009, 'The balanced scorecard as performance measurement and personal development tool in a steel organisation', MBA thesis, North West University, Vanderbijlpark.

Visser, W.P., 2006, 'From MWU to Solidarity: A trade union reinventing itself', *South African Journal of Labour Relations*, 30(2), 19–41.

Vaal University of Technology (VUT), 2008, *Graduate survey report*, retrieved 7 February 2013, from http://www.vut.ac.za/new/images/vutstaff/2008_graduate_survey_report.pdf.

Von Holdt, K.R., 2003, *Transition from below: Forging trade unionism and workplace changes in South Africa*, University of Natal Press, Pietermaritzburg.

Von Holdt, K.R., & Webster, E., 2005, 'Work restructuring and the crisis of social reproduction: A southern perspective', in E. Webster & K. von Holdt (eds.), *Beyond the apartheid workplace: Studies in transitions*, pp. 3–40, 1st ed., University of KwaZulu-Natal Press, Scottsville.

Webster, E., 1985. *Cast in a racial mould: Labour process and trade unionism in the foundries*, Ravan Press, Johannesburg.

Webster, E., Bischoff, C., Xhafa, E., Lins, J., Deane, D., Hawkins, et al, 2008, 'Closing the representation gap in micro and small enterprises', Global Labour University, Geneva, retrieved 26 August 2008, from http://www.global-labour-university.org/fileadmin/GLU_Working_Papers/GLU_WP_No.3.pdf.

Womack, J., Jones, D. & Roos, D., 1990, *The machine that changed the world 1990*, Rawson, Brooklyn, NY.

Xaba, J., 2003, 'Employee assistance programme and retrenchment: A South African case study', MA thesis, University of Johannesburg, Johannesburg.

Ziyane, B., 2012, 'Gauteng socio-economic outlook', Consumer Goods Council South Africa **(**CGCSA**)** Conference, Johannesburg, South Africa, 11 October, retrieved 5 March 2013, from www.cgcsa2012.co.za/ClientData/10079/Uploads/speaker_presentations/cgcsa-2012_barbara-ziyane_mec-representative_keynote-address.pd

8

SKILLS, JOBS AND DECEPTION:

Examples from the South African Workplace

Britt Baatjes

Introduction

This chapter is largely based on research conducted in a textile factory for the author's master's thesis (Baatjes 2008). The research focused on a possible *link* between a particular educational level used as a 'measure' for the first stage of selecting prospective employees as machine operators, and the actual knowledge and skills used in the workplace to perform the job. The research included conducting interviews in the workplace; observing machine operators performing their jobs; and analysing various documents such as the assessment tool. The study concluded that there was incongruence between the 'requisite' knowledge and skills and the *actual* knowledge and skills needed. The language and mathematics competencies needed in order to be deemed 'competent' in the Adult Basic Education and Training (ABET) assessment are at a higher level than the language and mathematics needed 'on-the-job'. The study was not simply about language and mathematics competencies but also about the 'new workplace' that has emerged with the advent and spread of globalisation. The study looked at the appropriateness of the 'measure' used as a requirement for an interview for a job, and by so doing it explored issues of inclusion and exclusion, power relations, morality, ethics and social justice.

Besides sharing the findings of the research at the textile factory, this chapter also provides other examples of the use of assessments designed for a particular purpose, but used inappropriately for another, and draws on these examples to explore issues relating to globalisation, the new workplace, technology and the definition of 'skill'.

The Broadening Definition of 'Skill'

The dominant discourse on skill and its relationship to work is ever-present and persuasive, and many well-meaning people uncritically embrace it too. Somehow people are led to believe that the problems and crises experienced in the workplace and indeed, beyond, are largely the fault of the education system and its failure to prepare students for the workplace by teaching them these basic skills (see Brown, Green & Lauder 2000 and Olssen, Codd & O'Neill 2004).

A deeper understanding of what the 'skills', which many workers, including graduates, supposedly lack, is necessary. There is, both in South Africa and throughout the world, a new definition of skill which is 'now broader and more conceptually equivocal than it has ever been' (Payne 2000:354). The meaning of the word 'skill' has changed over the decades. In the 1950s and 1960s, there was 'a traditional view of skill' (Keep & Mayhew 1999 in Payne 2000:354) which held that there was a strong division between academic and 'hard' technical skills. This definition has gone through numerous changes over the decades, and

> has expanded almost exponentially to include a veritable galaxy of 'soft', 'generic', 'transferable', 'social' and 'interactional' skills, frequently indistinguishable from personal characteristics, behaviours and attitudes, which in the past would rarely have been conceived of as skills (Keep & Mayhew 1999 in Payne 2000:354). If the notion of skill has always perhaps been 'essentially indefinable' (Ainley 1993:4 in Payne 2000:354), it is now both broader and more conceptually equivocal than it has ever been (Payne 2000:354).

In the South African context, the terms 'scarce' and 'critical' skills were coined with accompanying lists of such – lists which change as the scarce and critical skills change. The definition in the *National Skills Authority – Briefing Paper* is that

> a 'scarce skill' refers to the inability to find suitably qualified and experienced people to fill occupational vacancies either at an absolute level of scarcity (no suitable people available) or at a relative level of scarcity (no suitable equity candidates available); while a 'critical skil' refers to the inability of people to perform to the level of occupational competence required due to gaps in their skills profiles (DoL & GTZ 2007:10).

The world over, skills such as reading with understanding, writing, and speaking; thinking skills like problem-solving, learning how to learn, thinking of new ideas, setting goals, and choosing best alternatives; and also personal qualities (Secretary's Commission on Achieving Necessary Skills [SCANS] US Department of Labor 1991) are now the new skills and are used as prerequisites for employment. According to Hull (1997:17), these 'skills' are 'sometimes determined by experts on blue-ribbon panels' (such as SCANS) and 'sometimes based on opinion surveys of employers and round table discussions of business executives and educational experts (such as, Carnevale et al 1988)'. Hull goes on to say that 'startlingly, such judgments are almost never informed by observations of work, particularly observations which incorporate

the understandings of workers. Instead, skills are listed as abstract competencies and represented as context-free and universal' (ibid). Skills which are presented as some sort of 'constant, quantifiable traits and abilities that reside inside a person' (Hull 1997:191) seem to fall into two categories – either one has them or not. Acquiring them on the job (as one 'sits by Nelly'), which may not take a substantial amount of time at all, is not taken into account at all. One is required to enter the workplace and do the job with the so-called necessary skills in place already.

Gamble (2003:18) quotes Wolf (2002:37) who discusses 'employer demand' and claims that:

> the evidence on skills suggests that employers in the brave new 'knowledge economy' are after just those traditional academic skills that schools have always tried to promote. The ability to read and comprehend, write fluently and correctly, and do mathematics appears more important than ever.

Hard skills are very often linked to other skills such as those mentioned by Wolf above. In research conducted in the Mining and Minerals Sector in 2002, the following was noted: 'The only qualification at NQF level 1 that workers can access is the Blasting Certificate for which they require ABET level 3 English and numeracy' (Baatjes, Aitchison & John 2002:45). In effect, this means that if a mineworker wanted to do a blasting certificate (blasting being a hard skill), he/she would have to have the necessary English language and numeracy skills at ABET level 3. The link between a hard skill (blasting, in this case) and language and mathematics skills is evident here, and is regulatory in this case. The reason for the link is given as an operational imperative.

Throughout the world, inadequate skills, including lack of literacy skills, have been cited as the reason why companies and even economies perform poorly (Moser 1999 in Castleton 2002:559). Companies increasingly require that employees have certain levels of education in order to access jobs. Many 'traditional' workers (Hammer 1996 in Castleton 2002:559) – 'those deemed to be least skilled' (Castleton 2002:559) are at the greatest risk of either losing their jobs through retrenchment or never being able to find employment. In South Africa, adults and workers without ten years of schooling face the greatest barrier to finding employment in the formal labour market (Baatjes 2004). Baatjes (2008) showed that less than 7% of workers in formal employment have less than ten years of schooling.

This blaming of victims for problems and crises they encounter is widespread. The root cause of the crises and problems – a system which gives rise to structural unemployment – is blamed far less and, often, not at all. Gowen (1994:125, in Breier & Sait 1996:66), writes of the United States (US) experience:

> this discourse . . . leads to 'a casting of blame of the ultimate flaws in Taylorism and industrialisation and the nation's resultant inability to compete in a more competitive and sophisticated global economy directly on American workers and the schools that have educated them'. Yet, American businesses are in trouble for a wide variety of reasons that have nothing to do with worker illiteracy.

Then there are those who go slightly further and question the changing nature of work itself and whether such changes will indeed result in jobs 'which require different, additional, or more complex skills' (Bailey 1990; Barton & Kirsch 1990 in Hull 1997:20; Levin & Rumberger 1983).

Hull (1997:4) argues that 'many current characterizations of literacy, literacy at work, and workers as illiterate – as deficient – are inaccurate, incomplete, and misleading'. She also argues that not enough attention is being paid to measuring reading rates, compiling lists of essential skills based on actual observations of workers and with workers, and to how people actually do their work.

Two South African examples are provided which reinforce Hull's point about the so-called new skills which are usually put together 'by experts on blue-ribbon panels' and may, in fact, have little to do with 'how people actually do their work' – research conducted in a textile factory and the Food and Allied Workers Union versus South African Breweries case. The former is based on detailed research as part of a dissertation and the latter is taken from arguments made and accepted in a labour case.

Research on the Factory Floor

This section relates to the implications of the research conducted in a textile factory and focuses on whether there was a relationship between employment criteria and language and mathematics skills that machine operators actually use to do their jobs 'competently'. The employment criteria included a matric pass (Grade 12) and, thereafter, the successful completion of an ABET level 4 English and mathematics placement assessment (ABET level 4 is equivalent to Grade 9 or NQF level 1). This is the first hurdle which faces potential employees since no one is considered for an interview without meeting these two criteria first. The hard skills associated with machine operating are not assessed, neither is experience considered.

During the course of the research, no evidence suggested that the kinds of knowledge, skills and competencies associated with matric or ABET level 4 English and mathematics had anything to do with whether (or not) a person could do his/her job as a machine operator. With reference to English and mathematics, the job of operating a machine competently requires basic reading, writing, numeracy and visual literacy skills. By 'basic' the following is meant: operators transfer information from one document to another, and count, add and subtract. Visually, they need to know such things as 'on' (green); 'off' (red) buttons and signs such as 'earplugs' and 'emergency'. Verbal communication on the factory floor was in isiZulu. Translation from English into isiZulu was used in all meetings. Although English was the 'official' workplace language, it was seldom used. After studying the ABET standards, the researcher found the knowledge and skills that were being utilised by the workers to be at much lower levels, namely, ABET level 1 numeracy and ABET level 2 English.

Very basic literacy and numeracy skills are indeed required, but these skills are at a much lower level than those prescribed by the company as an employment imperative.

Besides these basic English and numeracy skills, it was clear that a 'workplace literacy' related to the particular context is needed and this workers learn 'on-the-job' because it is organisation-specific. 'Experience' was cited as important by many of those interviewed, but in reality, a retrenched clothing or textile machine operator without a matric would *not* be considered for employment. He/she would not even be allowed to sit for the ABET assessment – this in a context of thousands of retrenched clothing and textile workers.

The researcher was told by the Human Resource and Training Managers that a higher level of education is required for prospective employees because the company likes to employ people who are 'trainable' and that the requirement is also for 'career-pathing'. In light of this, the researcher asked for evidence – wanting to see how many of the 'suitable' candidates/employees had indeed progressed through the company, but no evidence was provided. Therefore, the only conclusion is that there is incongruence between the company's 'required' employment criteria and the *actual* language and numeracy used 'on-the-job'.

Prior to entering the factory floor, the researcher had thought it unfair that academic skills were a pre-requisite to 'qualify' for an interview in order to perform a hard skill. The dominant discourse, strongly influenced by human capital theory, suggests, *inter alia*, that in the 'new' workplace, 'new skills' are needed, such as problem-solving, teamwork and a good attitude, and that these new skills require higher levels of education. The researcher observed a few factory workers without the 'requisite' skills (they had been working there prior to the introduction of the new employment criteria) and all of them performed their jobs well (see Baatjes 2008). The researcher explored why language and mathematics requirements are higher than what is really needed on the factory floor and also questioned why the 'requirement' is deemed necessary in the company, and in many companies in South Africa and throughout the world.

The following is derived from a labour dispute and the resulting court case. The issues are similar to the ones discussed above.

A Case In Point – FAWU Versus SAB

In 2004, the Food and Allied Workers Union (FAWU) and others brought a case against South African Breweries (SAB) to contest the retrenchment of certain employees because they were deemed not to have the necessary knowledge nor skills to be part of a new operating practice known as BOP II (best operating practice), a practice which supposedly leads to world class products (Labour Court 2004:1099, 1102). The measure for finding out whether employees would cope within the new workplace environment was determined by assessing their literacy and numeracy levels (using ABET assessments).

The union questioned whether it had been fair for SAB to set an entry level specification for existing employees. The union argued that these new standards had resulted in 'the retrenchment of those employees with the lowest educational levels' (ibid:1095). Many of the retrenched employees had been the longest serving employees at the company, and had also been discriminated against during the apartheid years.

The SAB had in its restructuring process linked particular ABET levels with positions, for example, 'Packaging attendant: ABET level 2 literacy, ABET level 2 numeracy, mechanical aptitude, one-year experience in a packaging environment' (ibid:1120). The union's argument included the question: 'Was the use of ABET reasonable in the prevailing circumstances?' (ibid:1121).

The union's expert, Daryl McLean described the assessment as 'flawed in virtually every respect'. He said that ABET unit standards were not a valid assessment of workplace competency or trainability (ibid:1127). He also asked whether this assessment actually measured what it was supposed to measure. If it did not, then the test was 'invalid' and had 'no predictive validity' (ibid:1128). McLean also stated that ABET unit standards are 'generic in nature' and that: 'They are intended to apply to a wide cross-section of situations and, accordingly, have been formulated at a general level. They do not necessarily accurately reflect workplace-specific language, literacy and numeracy requirements' (ibid:1129).

McLean further stated that a written assessment of school literacy and numeracy is not an appropriate measure of a person's 'ability to read and interpret workplace instruction forms or do the calculations that are required in the workplace' (ibid). He also stated that it was possible that an employee in a brewery may know the English vocabulary used in work instruction forms, and that he/she may be able to fill in work instruction forms, yet that same person may fail a generic literacy placement assessment. This was because people in a workplace who fill in work instruction forms on a daily basis know the purpose thereof, recognise the text type, visual cues and interpret the meaning thereof in that context (ibid). He made the same argument for numeracy. He emphasised the importance of workplace experience and in the judgment, it was stated that: 'personnel without certification at these levels may have developed competency in such positions' (ibid1131).

No evidence was given in the court case by SAB to do with the appropriateness of choosing ABET as the instrument of measurement (ibid:1127). The judge ruled that the retrenched employees were to be reinstated as the 'measure' used was neither appropriate nor fair.

The key argument of this chapter concerns the unjust exclusion of workers from employment opportunities as a result of unfair screening procedures. The latter procedures often claim to assess knowledge and skills that are 'deemed necessary' for the job when in reality the assessed knowledge and skills are not imperative for the prospective job. This argument should *not* be misconstrued as not recognising the importance of acquiring literacy and numeracy skills nor further training and skills development.

It is also acknowledged that certain skills and knowledge can and are used across contexts. The issue this chapter highlights though is that it is unfair to use a particular kind of knowledge/skill (such as academic literacy) as a measure for another kind of knowledge/skill (such as operating a machine) and to exclude people on the basis of this unfair practice.

Screening and Credentialism

Screening can be unfair for a number of reasons including that workers may not necessarily need the so-called skills being assessed, particularly if the actual job requirements are not studied in-depth; workers may be able to acquire the skills on the job (even fairly rapidly) as learning is a social activity; workers' own knowledge and skills are not acknowledged in this process and; academic requirements are not the same as workplace ones and therefore the 'measure' is inappropriate.

Human Resource practitioners and others usually argue that the issue is to do with the imperative of particular skills and people's lack thereof, but the real issue is to do with the capitalist system (now a neoliberal one) within which this plays out. In a capitalist system, which focuses largely on profits for those in positions of power, not everybody can be employed and therefore, by capitalism's very nature, some have to be excluded from employment. Establishing strategies and techniques to exclude some people is part of this bigger picture. Of course, screening and assessment is not necessarily a bad thing in itself as long as it is fair and appropriate. Unfair screening, such as the screening/assessment discussed in this chapter, is of great significance as it is really an issue of ethics, morality and justice. The Constitution (RSA 1996) states under 'Social and economic rights' that everyone has the right to 'freedom of occupation – the right to work and to choose your work' (Chapter 2: The Bill of Rights 1996). It cannot be acceptable to exclude and marginalise thousands of people, many of whom have years of experience (the same people who were discriminated against during the apartheid years) from accessing jobs.

What is unclear is that the same people who were previously deemed to be competent to perform certain jobs, are now labelled 'not competent' (such as in the SAB case). The researcher supports the argument which suggests that 'spiral(ling) qualifications' (Dore 1976:24) are being used as a way of screening people in order to either 'throw them out' or keep them from getting in because there are simply not enough jobs available. The argument given by proponents of human capital theory (HCT) and its link to education/training and productivity, is that screening and credentialism are used to select the 'right' candidates for the job/s. The issue of 'trainability' is also argued here (ie, people with higher levels of education are more 'trainable'). It could be argued that screening and credentialism are two of the mechanisms adopted by supporters of HCT to decide who is 'in' and who is 'out' in a particular context. There are many examples where large numbers of candidates apply for a limited number of jobs, such as the traffic officer trainee posts example in

Pietermaritzburg, KwaZulu-Natal, where 150 000 applicants applied for 90 positions. Almost 35 000 shortlisted applicants had to undergo a fitness test and tragically seven died in the trying (Radebe 2012).

In the following explanation of 'screening', the dominant discourse is challenged by Killeen, Turton, Diamond, Dosnon and Wach (1999:101):

> 'Screening' refers to the use employers make of educational attainment as a means of narrowing down the field of applicants. This may imply that attainment is a proxy for 'trainability', or it may mean simply that employers use attainment as a cheap (and apparently rational) means of excluding a certain category or categories of applicants.

'Credentialism' has long been written about and remains relevant. Berg (1971) wrote about it as did Dore (1976). 'Credentialism' is 'subject to a variety of interpretations'. For the purposes of the research conducted in the textile factory, it means 'increasing rates of "over-education", in the sense that skills and knowledge are developed in excess of demand' (Killeen et al 1999:101). The so-called 'required' level or qualification to do a particular job has steadily increased over the years; for example, in South Africa more and more companies will only employ matriculants (no one with less than a Grade 12) to do low-skilled jobs, such as packing. The argument is that the employee will, with a higher level of education, do the job better or more 'competently', and is more 'trainable for career-pathing'. This argument, however pervasive, is contested. In the current study, the researcher looked at whether the 'developed skills and knowledge' are actually making a difference or whether they are simply being asked for, but not being utilised. She argued the latter and, therefore, raised the question: Why then are these 'skills' presented as a necessity for employment? (For further reading on over-qualifications see Livingstone 2002.)

Employability Skills – Are There Really Such Things?

Today career education is all about generic employability skills and, therefore, it could be argued that skills, such as critical thinking, problem-solving and having a positive attitude, are important in order to cut horizontally across all industries and vertically across all job levels (Buck & Barrick 1987 in Hyslop-Margison 2005:68–69). Of course, in a labour market where workers lack job security, the idea of skill transfer understandably attracts widespread support. However, the actual transferability of capacities, such as critical thinking and problem-solving, remains questionable: 'Effective problem-solving and critical thinking inevitably require precise knowledge about procedures, processes and consequences specific to the situation in question. The employability skills discourse adopted by career education programs disregards this basic epistemological requirement' (Hyslop-Margison 2005:68–69).

In a workplace one learns how to do his/her tasks and duties as he/she works – 'learning' happens in a real situation and the learning process cannot be separated from

the situation in which the learning is presented (Merriam & Caffarella 1999:241). This is *situated cognition*. The knowledge, skills, values and attitudes (which may include critical thinking and problem-solving) that one learns within an organisation are specific to the organisation, and can only be learnt once one has started working for the organisation (and not prior to employment – of course other 'learnings' and experiences that one comes with are important too and could be transferred to the new workplace if required). When a person becomes part of something, such as a group or a team, he/she learns how things 'work' within that group or team (eg, the kind of language used on a factory floor). As one participates, so one learns how things are done in that *particular* context. This is true even if one has been working for many years for an/other organisation/s. *Communities of practice* are self-organised, selected groups of people who share a common sense of purpose and a desire to learn and know what the other knows (Wenger 1998 in Hansman 2001:48). Those who designed and developed the tests for screening to do with employment in the two examples cited in this chapter – the textile factory research and the FAWU versus SAB case – did not take into account situated cognition or communities of practice, which are two very important parts of learning in a workplace.

Of course a person needs to enter a job with appropriate knowledge and skills but there are certain things that he/she can only learn 'on-the-job' – learning is a social activity and time must be given for some learning to happen, such as observation/learning from co-workers, *after* a person has been employed.

New Literacy Studies and the Current Argument

Part of the New Literacy Studies (NLS) definition of 'literacies' – that there are different literacies associated with different contexts/areas of life, as applied to the *teaching* of literacy – is limiting, as one could focus on teaching in a narrow way rather than more broadly and holistically. Literacy should be more than a mere 'usefulness' within one's immediate context. While I challenge the extreme 'context-specificness' when it comes to what is taught and learnt as part of 'literacy', the NLS definition of literacies nonetheless has merit in the following three ways:

Firstly, who controls and decides what 'literacy' is, and the issue of power relations behind this, are highlighted by NLS scholars. In the current study the researcher looked at issues of power and who decides who is included and who is excluded and why. Secondly, NLS scholars do not accept the 'standard picture of literacy' (Winchester 1990:21) which is very technical and concerned with a particular kind of reading and writing. Thirdly, NLS scholars believe that 'literacies' are sets of practices which are socially embedded and must, therefore, be learnt within particular communities (such as a workplace/a 'community of practice').

Wink (2005:47), a scholar of critical pedagogy, defines a number of 'literacies', and explains academic literacy as 'languages of schools and universities' and workplace literacy as 'languages of our jobs'. The current study looked at what kinds

of 'literacy' and 'numeracy' are measured, and for what purpose/s. In the company at which the research was conducted a particular type of literacy (ie, school-based) is measured, and this school-based literacy is used as a measure for another type of literacy (ie, workplace-based). While the researcher used the argument that there are many 'literacies', the 'prevalent discourses' as these examples below show, see people as either 'literate', or 'illiterate' and by implication inferior and lacking in something.

The following examples highlight how people who are labelled 'illiterate' are perceived as not 'full, complete or participating' members of society:

> Illiteracy is one of the biggest handicaps these people have. Teaching them literacy will make them full members of the community. There is so much they do not know (Mrs A, wife of a farmer).

> The lack of access to basic education, including literacy and numeracy, has consigned millions of our people to silence and marginalisation from effective and meaningful participation in social and economic development. This had a particular impact on women, who comprise a large proportion of the illiterate (ANC 1994:87 in Gibson 1996:49).

People who are either already in the 'new' workplace or wanting to become part of it are also being similarly divided.

Through such discourses the 'illiterate' are portrayed as marginalised and in 'deficit' (Hull in Gibson 1996:49). It is assumed that this deficiency impacts on their work performance and that the acquisition of literacy skills will both empower and 'develop' them (O'Connor in Gibson 1996:49). There would appear to be some sort of 'known' standard or measure 'out there' of what it means to be 'literate', and if someone does not meet this, then he/she is deemed 'illiterate' and incompetent. The advocates of NLS contest this notion and the researcher argued along similar lines in her study. In the autonomous model (Street in Gibson 1996:51) literacy is constructed as a universal, neutral, technical skill (ibid) and the 'working knowledge' acquired by workers (Hull in Gibson 1996:51) is negated. Ignorance and lack of literacy are often presented as synonymous (Gibson 1996:51).

The researcher further argues that 'literacy' is neither 'universal', 'neutral', nor 'technical', and that if people are judged based on a particular set of literacy skills, other skills and knowledge could be negated, for example tacit knowledge and the knowledge a person acquires simply because he/she is an adult and has years of experience. Wink (2005:49) describes a mariachi guitar player in the following way: 'He carried the entire history of the Mexican revolution in his head, and he could sing and play it. After taking lessons from him, I learnt the difference between orate and literate communities'.

Similarly, Gibson (1996:55) illustrates the notion of 'illiteracy/literacy' discussed above by quoting a so-called 'illiterate' farm worker, Freek Jakobs, who says of himself:

> I cannot really read or write, but I am actually like a person who can read and write. I know my work. I think something and when I have thought it I will not forget it again. I keep it in my head, everything I know, I, how do you say, I file it. Yes, I file it in my head and then I read it again.

Jakobs may not have the so-called 'necessary' skills to enable him to successfully complete a Communications/Language placement assessment, but from his account, it would seem that he is able to do his job competently (he states quite confidently that he 'know(s) his work').

Gibson (1996:55) writes of another so-called 'illiterate' and 'innumerate' farm worker, Migiel Hendriks, who although he 'may not be able to read or write,' nevertheless uses numeracy skills very effectively to make wagons. Migiel Hendriks stated that he was able to make wagons by measuring and calculating 'how much (he) would need to make (them). After making one wagon, he adapted the measurements to make more: 'By the second wagon I almost always ordered the correct amount of material' (ibid). The idea that so-called illiterate and innumerate workers can do literate and numerate things is described by O'Connor (1994:270 in Gibson 1996:55) in the statement: 'workers often acquire specialised "work knowledge" through enculturation in the workplace. Like Hendriks, many of the "illiterate" farm workers stressed that they had learnt their skills from other workers through collective experience or apprenticeship in the workplace' (Luttrell 1989 in Gibson 1996:63). I used the argument, so aptly put forward by Gibson (1996:63) in her concluding remarks about farm workers, in which she states that 'conventional literacy discourses' contribute to the 'disempowerment' of workers who are actually skilled in the work they do. But these workers are often judged by 'school' literacy and labelled negatively because they do not have it.

This argument that there is a difference between conventional literacy and other literacies is highlighted in Breier and Sait (1996:83) when they state that if what management really wants is to improve communication at the factory, then it should turn its attention to 'understand(ing) and pay(ing) attention to workers' communicative practices and interests and stop insisting that communication take place on its terms alone'. Employees should not have to acquire the so-called 'necessary skills to participate'.

To sum up, the researcher adopted a definition of 'literacy' which acknowledges that there are many 'literacies', that 'literacy' is context-specific, and a particular 'literacy' (eg, academic) may not necessarily be the best measure for another kind of 'literacy' (eg, workplace) particularly when it comes to 'requirements' for jobs.

Testing

In the study, the researcher argued that the reason behind the raising of education levels is that there are simply not enough jobs to go around, and raising education

levels is one way of screening people and keeping certain people out. As mentioned earlier, as early as the 1970s, Dore (1976:24) wrote about 'spiral(ling) qualifications' being used as a way of screening people. Also at that time there were critiques of the view that there is a direct link between literacy and productivity. Sticht (1978) found that a low reading level did not appear to be detrimental to the job performance of many poor readers. In 1980, Diehl and Mikulecky undertook a workplace literacy study and found that the kind of reading that took place on the job was more often than not a ready opportunity to use print, rather than the need to do so. Rifkin (2000) found that many jobs were being deskilled and concurred with Zuboff (1988 in Hull 1997:21) that the actual literacy requirements of many jobs were quite modest. It could be argued that the nature of work and the skills to perform the necessary tasks have changed since these studies were undertaken. However, Hull (2000) (writing in the US) and Castleton (2002) (writing in Australia) have continued to argue against the accepted view of mainly government and business that there is a direct link between low skilled employees and poor performance of companies and the economy.

In the Griggs versus Duke Power Company Supreme Court ruling (1971), the court ruled that literacy cannot legally be used as a screening device unless the literacy skills required on the test reflect actual job demands (Hull 1997:23). Griggs was a class action brought by 13 'black' employees at Duke Power Company's Dan River Steam Station in North Carolina, US. The applicants sought to challenge Duke Power's discriminatory practice of requiring a high school diploma or scores equal to those of the average high school graduate on standardised IQ tests, in order to secure promotion and consequently an increase in pay. The testing and diploma criteria disqualified African-Americans at a much higher rate than 'whites'. Duke Power never established that the criteria successfully measured ability to do the jobs in question. The 'white' employees hired prior to the requirements being introduced were able to do their jobs satisfactorily. The fact that Duke Power never established that the jobs in question were successfully measured by the criteria and the fact that the 'white' employees who were employed before the requirements could do their jobs, begs the question: Why introduce the testing/diploma criteria? In this case, there were concerns about racism.

The broadening definition of 'skill' that has almost blindly been accepted by many organisations and people reinforces certain things over others – Ainley (1994 in Payne 2000:363) says that 'personal' and 'transferable' skills are actually 'social and generic competencies'. He questions whether these 'skills' or 'competencies' can be 'acquired' equally by all as he states:

> To present attitudes and habits detached from their cultural context as technical abilities that can be acquired piecemeal in performance not only divorces them from the cultural context that gave them their original meaning but represents them as equally accessible to all students whatever their class, cultural background, gender or race.

Shaughnessy (1977 in Hull 1997:15) and others argue that people can acquire whatever literacies they need, given the right circumstances. In Heath's (1986 in Hull 1997:15) words:

> all normal individuals can learn to read and write, provided they have a setting or context in which there is a need to be literate, they are exposed to literacy, and they get some help from those who are already literate (p. 23).

This makes sense in the 'sit by Nelly' scenario.

Displacement By Technology

The 'new' workplace is characterised by more technology and new and better machines and these have, in many instances, replaced (and displaced) people in the workplace. This replacement of people by machines is one of the issues raised by Rifkin (2000:88):

> Today, the concerns over automation are being heard once again. This time, however, the field upon which the battle over technology is being fought has grown dramatically to encompass the whole United States economy and much of the global marketplace. Issues surrounding technological unemployment, which a generation ago touched primarily the manufacturing sector of the economy, affecting poor black workers and blue collar labourers, are now being raised in every sector of the economy, and by virtually every group and class of workers.

An interesting finding in the current research was that all machine operators who were interviewed stated that the newer machines (such as in the more automated departments) are actually easier to operate, even though they require operators with 'higher level' language and mathematics skills. It is argued that the more automated machines actually de-skill workers as they now simply need to press buttons. The older, less automated machines required more skill, such as knowing the amount of tension needed as a bobbin runs through a machine.

Shaiken (1984) and others argue that the automation of machines has been a deliberate de-skilling effort by management in order to rely less on workers' knowledge and thereby get rid of workers' control. This is part of the history of conflicting interests between workers and management (Hull 1997:22–23). A worker aptly captures his sense of displacement in the following manner:

> With computerization I am further away from my job than I have ever been before. I used to listen to the sounds the boiler makes and know just how it was running. I could look at the fire in the furnace and tell by its color how it was burning. I knew what kinds of adjustments were needed by the shades of color I saw. A lot of the men also said that there were smells that told you different things about how it was running. I feel uncomfortable being away from these

> sights and smells. Now I only have numbers to go by. I am scared of that boiler, and I feel that I should be closer to it in order to control it (ibid:21).

Global Crisis Of Capitalism

In South Africa, there is much said about skills and the shortage thereof, and far less about the fact that there is a shortage of jobs throughout the world, including a severe shortage in South Africa. Almost 40% of employers claim a lack of skills is the main reason for entry-level vacancies (Mourshed, Farrell & Barton 2012). South Africans have become accustomed to hearing that people are unskilled, lack the 'necessary' skills, need to be up-skilled, or re-skilled. The emphasis is put on a skills deficit, while the real issue is somewhat different – the real issue being that worldwide, young people are three times more likely than their parents to be out of work. In Greece, Spain and South Africa, more than half of young people are unemployed, and jobless levels of 25% or more are common in Europe, the Middle East, and Northern Africa (Mourshed, Farrell & Barton 2012). An estimated 700 000 young people in Japan known as *hikikomori* have withdrawn from society and rarely leave home. There exists an 'ant-tribe' – the 2 million newly graduated Chinese who, every year, cannot find work. Increasing joblessness is, of course, not really about the skills issue but rather one of the symptoms of the real issue – the crisis of capitalism.

As Graff (1986:82) concludes in his historical look at the relationship between literacy and economic and social progress, 'Literacy is neither the major problem, nor is it the main solution'; and in the words of Greene (1989, in Hull 1997:13), 'The world is not crying out for more literate people to take on jobs, but for job opportunities for the literate and unlettered alike'.

New Workplace, New Skills

In this globalised world which has given rise to the 'new workplace', potential employees are frequently told that they do not have the necessary knowledge and skills to perform the so-called 'new' jobs. For a number of years there have been countless studies, reports and articles highlighting this, including many in South Africa. They largely form part of the dominant discourse, strongly influenced by human capital theory. An example is the article 'Young, jobless and desperate – degrees with no guarantees' (*City Press* 16 June 2012) which focuses on young South Africans who have degrees and no jobs. In the article, Adcorp's Sharp says: 'most graduates in search of jobs either lack work experience, practical "on-the-job knowledge", and the supervisory skills they need – or their degrees are irrelevant to the job market' (ibid). His advice for graduates is to 'choose the right subjects, get the highest grades possible, specialise in sought-after honours programmes such as economics, finance, statistics, accounting, law, mathematics and quantitative methods, and do lots of holiday work on a voluntary basis' (ibid).

The article also refers to a 2009 study by the South African Qualifications Authority and Higher Education South Africa which found that there was a huge gap between what employers expected and what they got from graduates who came straight from higher education studies. According to the study, employers were mostly concerned about competence in English, information and communication technologies (ICT) skills and an understanding of the world of work: 'In most countries an adequate foundation for these competencies will have been laid in the schooling system before students enter into higher education' (ibid).

Interestingly and ironically (considering the statement above about 'an adequate foundation having been laid in most countries'), another article published in a British newspaper, Levy (2013) states that British graduates *also* lack basic skills. Half of the 127 companies surveyed said that university leavers struggle with basic English and nearly two-fifths claimed that they cannot do simple mathematics: 'Businesses tell us they lack confidence in our education system's ability to deliver basic literacy and numeracy skills'. Yet, the research added that 91% of firms were happy with applicants' IT skills. 'But employers want to see young people with a strong work ethic, and "softer" skills like timekeeping, and communication, which are fundamental in the work environment' (ibid).

Conclusion

As long as the discourse around the issue of skills remains mired in the dominant view related to the deficiencies of individuals alone, the *real* causes of unemployment and realistic, sustainable solutions will continue to be elusive. 'Measures' to address unemployment – many unfair and even immoral – will continue to exclude those who are actually 'competent'. Besides the estimated 600 000 South African unemployed graduates, there are many artisans who are excellent plumbers, bricklayers and painters who cannot find employment. These join the growing number of desperate job seekers armed with paint brushes and spirit levels who line the streets. They, like the graduates, most certainly have the requisite knowledge and skills. What they require is dignified and socially useful work.

While this is what is urgently required, company owners continue to 'downsize' and 'anorexic workplaces' are 'justified by global competition' (Marshall in Walters 1997:59). South African workplaces are being transformed into 'lean and mean' organisations – owners retrench; outsource; employ casuals (sometimes 'permanent casuals'); expect workers to hyper-task; and 'do more for less'. They seek out cheap labour even if it is across the ocean; and prefer using technology rather than employing humans – and it is not just that a machine cuts neater and straighter, but also, and very importantly for the 'captains of industry', a machine does not need benefits, it never gets sick nor does it answer back.

What really matters to business people is their 'bottom line' – and like all 'good' business people, they will use whatever it takes to keep their profits up, even if it means using educational levels and qualifications to exclude.

References

Baatjes, B., 2008, **'**An investigation of knowledge and skill requirements for employment as a machine operator. A case study of a large textile company', Master's thesis, University of KwaZulu-Natal, Pietermaritzburg.

Baatjes, I., 2004, 'Norms and standards for funding public adult learning centres', *Quarterly Review of Education and Training in South Africa*, 10(6), 15–27.

Baatjes, I., 2008, *Review of ABET in South Africa (1995–2003)*, HSRC Press, Cape Town.

Baatjes, I., Aitchison, J. & John, V., 2002, 'A baseline study of ABET in the Mining and Minerals Sector: Improving provision and delivery', Mining Qualifications Authority and German Technical Department (GTZ), Johannesburg.

Bailey, T., 1990, *Changes in the nature and structure of work: Implications for skill requirements and skills formation*, National Center for Research in Vocational Education, University of California at Berkeley, CA.

Barton, P.E. & Kirsch, I.S., 1990, *Workplace competencies: The need to improve literacy and employment readiness*, Office of Educational Research and Improvement, Washington, DC.

Berg, I., 1971, *Education and jobs: The great training robbery*, Beacon Press, Boston, MA.

Breier, M. & Sait, L., 1996, Literacy and communication in a Cape factory', in M. Prinsloo & M. Breier (eds.), *The social uses of literacy: Theory and practice in contemporary South Africa*. John Benjamins, Philadelphia, PA.

Brown, P., Green, A. & Lauder, H., 2000, *High skills: Globalization, competitiveness and skill formation*, Oxford University Press, New York, NY.

Carnevale, A.P., Gainer, L.J. & Meltzer, A.S., 1988, *Workplace basics: The skills employers want*, US Department of Labor and the American Society for Training and Development, Washington, DC.

Castellano, M., 1997, '"It's not your skills, it's the test": Gatekeepers for women in the skilled trades', in G. Hull (ed.), *Changing work, changing workers. Critical perspectives on language, literacy, and skills*, State University of New York Press, Albany, NY.

Castleton, G., 2002, 'Workplace literacy as a contested site of educational activity', *Journal of Adolescent and Adult Literacy*, 45(7), 556–566.

City Press, 2012, 'Young, jobless and desperate – degrees with no guarantees', retrieved 5 March 2013, from http://www.citypress.co.za/news/young-jobless-and-desperate-degrees-with-no-guarantees-20120616/.

Department of Labour (DoL) and German Technical Department (GTZ), 2007, 'National Skills Authority', briefing paper, DoL and GTZ.

Department of Labour (DoL), 2007, *Scarce and critical skills*, retrieved 6 May 2013, from https://www.labour.gov.za/downloads/documents/useful-documents/skills-development-act/3-Scarce%20and%20Critical%20Skill%20(2).pdf.

Diehl, W.A. & Mikulecky, L., 1980, 'The nature of reading at work', *Journal of Reading*, 24(3), 221–227.

Dore, R., 1976, *The diploma disease*, George Allen and Unwin, London.

Gamble, J., 2003, *Curriculum responsiveness in FET colleges*, HSRC Press, Cape Town.

Gibson, D., 1996, 'Literacy, knowledge, gender and power in the workplace on 3 farms in the Western Cape', in M. Prinsloo & M. Breier (eds.), *The social uses of literacy: Theory and practice in contemporary South Africa*, John Benjamins, Philadelphia, PA.

Graff, H.J., 1986, 'The legacies of literacy: Continuities and contradictions in western society and culture', in S. de Castell, A. Luke & K. Egan (eds.), *Literacy, society, and schooling: A reader*, Cambridge University Press, Cambridge, UK.

Greene, M., 1989, 'The literacy debate and the public school: Going beyond the functional', talk given at the Annual Meeting of the American Educational Research Association, San Francisco, CA.

Hammer, M., 1996, *Beyond reengineering: How the process-centred organisation is changing our work and our lives*, HarperCollins, New York, NY.

Hansman, C., 2001, 'Context-based adult learning', *New Directions for Adult and Continuing Education*, 89, 43–51.

Hull, G., 1997, 'Hearing other voices: A critical assessment of popular views on literacy and work', in G. Hull (ed.), *Changing work, changing workers. Critical perspectives on language, literacy, and skills*, State University of New York Press, Albany, NY.

Hull, G., 2000, 'Critical literacy at work', *Journal of Adolescent and Adult Literacy*, 43(7), 648–652.

Hyslop-Margison, E.J., 2005, *Liberalizing vocational study. Democratic approaches to career education*, University Press of America, Lanham, MD.

International Labour Research and Information Group (ILRIG), 1998, 'An alternative view of globalisation', ILRIG Globalisation Series, No 1, ILRIG, Cape Town.

Killeen, J., Turton, R., Diamond, W., Dosnon, O. & Wach, M., 1999, 'Education and the labour market: Subjective aspects of human capital investment', *Journal of Educational Policy*, 14(2), 99–116.

Labour Court, 2004, Food and Allied Workers Union and others v. South African Breweries Ltd (C1008/2001), Labour Court, Cape Town.

Levin, H. & Rumberger, R., 1983, 'The low-skill future of high-tech', *Technology Review*, 86(6), 18–21.

Levy, A., 2013, 'Graduates lack basic skills and are more interested in "what a job can do for them, not what they have to offer an employer"', retrieved 8 April 2013, from http://www.dailymail.co.uk/news/article-2294249/Graduates-lack-basic-skills-interested-job-offer-employer.html?ITO=1490&ns_mchannel=rss&ns_campaign=1490.

Livingstone, D.W., 2002, 'The changing nature of work and lifelong learning in the new economy: National and case study perspectives', WALL Working Paper No. 1, retrieved 11 November 2013, from http://www.wallnetwork.ca/resources/workingpapers.htm.

Marshall, J.,1997, 'Globalization from below: the trade union connections', in S. Walters (ed), Globalization, adult education and training. Impacts and issues, Zed Books, London and New York.

Merriam, S.B. & Cafferella, R.S., 1999, *Learning in adulthood: A comprehensive guide*, 2nd ed., Jossey-Bass, San Francisco, CA.

Mourshed, M., Farrell, D. & Barton, D., 2012, 'Education to employment: Designing a system that works', retrieved 1 March 2013 from http://mckinseyonsociety.com/education-to-employment/report/.

Olssen, M., Codd, J. & O'Neill, A., 2004, *Education policy: Globalization, citizenship and democracy*, Sage, London.

Payne, J., 2000, 'The unbearable lightness of skill: The changing meaning of skill in UK policy discourses and some implications for education and training', *Journal of Educational Policy*, 15(3), 353–369.

Radebe, M., 2012, 'Heat fells job seekers', retrieved 30 April 2013, from http://www.witness.co.za/index.php?showcontent&global%5B_id%5D=93325.

Republic of South Africa (RSA), 1996, *Bill of Rights, Constitution of the Republic of South Africa*, Government Printer, Pretoria.

Rifkin, J., 2000, *The end of work*, Penguin Books, London.

Sticht, T.G., 1978, 'Literacy and vocational competence', Occasional Paper No. 39, Ohio State University, National Center for Research in Vocational Education, Columbus, OH.

The Equal Rights Trust. ERT case summary: Griggs v. Duke Power Co., 401 U.S. 424 (1971), retrieved 11 March 2013, from http://www.equalrightstrust.org/ertdocumentbank/Microsoft%20Word%20-%20Griggs%20v%20Duke%20Power.pdf.

United States Department of Labor, 1991, *What work requires of school: A SCANS report for America 2000,* US Department of Labor, Washington, DC.

Walters, S. (ed.), 1997, *Globalization, adult education and training. Impacts and issues*, Zed Books, London and New York.

Winchester, I., 1990, 'The standard picture of literacy and its critics', *Comparative Education Review*, 34(1), 21–40.

Wink, J., 2005, *Critical pedagogy. Notes from the real world*, Pearson, Boston, MA.

9

ON THE USE AND ABUSE OF EDUCATION:

Reflections on Unemployment, the 'Skills Gap' and 'Zombie Economics'[1]

John Treat

We need a better-educated citizenry, but the cure for increasing inequality lies elsewhere

— Lawrence Mishel

Introduction

Much of the space of public policy discourse in South Africa is currently occupied by anxious discussions of the so-called 'triple crisis' of 'poverty, inequality and unemployment'. Almost invariably, such discussions tend also to invoke an additional, adjunct 'crisis in education'. Most often, these are linked by an assumption that the crisis in education must be addressed in such a way that it *simultaneously* addresses the triple-crisis of 'poverty, inequality and unemployment'. In other words, policy makers must devise some way of putting the education system to good use in resolving the country's challenges of poverty, inequality and unemployment, and must do so as a matter of urgency.

The anxiety expressed in these discussions is hardly surprising when one considers the country's pervasive, entrenched and profoundly racialised social and economic inequality, as well as the widespread and growing social unrest that flows from it (Municipal IQ 2012). This anxiety seems likely to be further heightened by the increasing disaffection both at home and abroad with the capitalist system itself, and is never more palpable than when the spectre of 'youth unemployment' is raised explicitly.

There definitely is reason to be concerned. Officially, South Africa's unemployment rate is estimated at roughly 25% (Statistics SA 2013), down slightly from the immediately preceding period but still significantly above post-transition lows (Arora & Ricci 2005). Unofficially, it is recognised to be closer to 50% (SAPA 2012a), with estimates of unemployment among young people ranging as high as 74% (IOL Business Report 2010). There is also cause for worry over the effectiveness of South Africa's educational system which, despite local improvements and many inspiring individual stories, continues to produce results widely regarded as unacceptable, and occasionally characterised as a threat to the country's imperfect but hard-won democratic dispensation itself (SAPA 2012b).

Superficially, the dominant representation of how these troubling and stubborn social phenomena are linked is almost too familiar. Enduring high levels of unemployment are attributed to the combination of a 'shortage of skills' and the supposed 'high costs of labour', which together prevent – or at least discourage – businesses from hiring people. On this account, the government is characteristically urged – sometimes even urges itself – to take steps to address the 'skills gap' through a combination of: introducing productivity-orientated curriculum changes; providing support to skills training programmes; providing hiring incentives to private businesses; loosening labour legislation; and implementing other 'business-friendly' interventions, aimed variously – at least ostensibly – at 'up skilling'; 'incentivising job creation'; 'easing the burden of hiring'; or accomplishing similar feats of policy construction and service delivery.

Regarding the challenge of 'youth unemployment' in particular, two kinds of interventions are typically invoked with special enthusiasm, namely, introducing educational interventions such as outcomes-based education (OBE) or similar changes to school curricula on the one hand, and incentive schemes like the youth wage subsidy (YWS), on the other. (See Chapter 10 by Reddy in this volume for a discussion of the youth wage subsidy.)

In this chapter, I will interrogate the underlying logic at play in this dominant narrative, and examine the reasons why such an account could continue to be seen as persuasive, despite an overwhelming body of evidence against it. With these insights as background, I will consider more generally the way in which the concept of 'unemployment' is deployed to frame the underlying phenomena of material vulnerability, attempting also to situate these phenomena in their proper historical context. The more clearly this underlying logic is grasped, the more evident it becomes that the sorts of interventions that are frequently proposed are badly misconceived: at best, they are wasteful of precious public resources and, at worst, corrosive of deeper possibilities for humane and socially cohesive development. Seeing these dangers more clearly opens the space for a consideration of alternatives – alternatives less likely to exacerbate existing social inequalities, and that may simultaneously contribute toward avoiding our growing global ecological crises. Achieving greater clarity in these matters may also help people to avoid expecting things from an educational system that it cannot provide, and that it should not be

expected to provide. This clarity may thus help them also to avoid undermining the valuable social function that an educational system *can* serve – and that perhaps *only it* can serve.

'Skills Gap' or 'Evidence Gap'?

Although its rise to rhetorical dominance in South Africa may be a fairly recent development, the idea that a 'skills gap' can meaningfully account for entrenched unemployment has a lengthy and sordid history. Levine (2013:10) of the University of Wisconsin-Milwaukee's Center for Economic Development recounts Krugman's (2010:35) description of how, in the United States (US),

> even during the Great Depression [of the 1930s], when aggregate demand and the country's job creation machinery had collapsed, some observers predicted that unemployment would remain high because 'this present labor supply of ours is peculiarly unadaptable and untrained. It cannot respond to the opportunities which industry may offer'. Yet somehow, as Krugman points out, when the massive defense buildup just a few years later for World War II provided a quintessentially Keynesian fiscal stimulus sufficient to boost aggregate demand, the 'skills gap' vanished and 'industry was eager to employ those 'unadaptable and untrained' workers.

Despite this compelling historical evidence to the contrary, Levine recounts how the notion of a 'skills mismatch' became the dominant explanation of unemployment in the US beginning in the early 1980s, effectively displacing a more intuitively plausible explanation based on job scarcity (hardly a startling possibility to account for unemployment). Citing Lafer (2002:20–21), Levine (2013:10) notes that Ronald Reagan's administration 'turned away from the public employment and government "pump priming" policies that had been a key element of federal jobs strategies since the New Deal', insisting instead:

> If some people experienced long-term unemployment, it was not because jobs were unavailable, but because they lacked the skills or motivation to make themselves employable. Even during the recession of 1981–82, when national unemployment rates reached their highest level since the Great Depression, administration officials insisted jobs were available for those with the talent and tenacity to work their way up.

This reliance upon a supposed 'skills gap' to explain unemployment has persisted in subsequent decades, despite the boom of the Bill Clinton years which should have been recognised as its conclusive repudiation. Under Clinton:

> National employment increased by almost 23 million . . .; incomes grew across all categories; and unemployment in 2000 fell to a 30-year low of 3.8%. As for the skills gap stifling productivity and innovation, workplace productivity took off after 1995, registering annual growth rates over the next 15 years more

> than double the annual growth rate between 1973 and 1995. This increase, as Lawrence Mishel has sardonically noted, 'must have been a surprise' to the skills gap Cassandras, as it was accomplished with 'the supposedly unqualified lower-skilled workforce . . . that allegedly put our nation in [economic] danger' (Levine 2013:11).

Turning to the statistical evidence, Levine reviews the relevant data in five areas, namely: wage levels, hours worked, occupational projections, under-employment coupled with workforce over-qualification, and rising overall levels of human capital. In every area, there simply is none of the evidence that basic economic theory would predict in the face of a 'skills gap' that could account for un- or under-employment:

- **Wages:** No evidence of rising wages, as would be expected due to market competition for those skills in short supply.
- **Hours:** No evidence that existing workforce hours have increased to compensate for the alleged skills shortage.
- **Occupational projections:** 70% of projected job openings through 2020 will require a high school diploma (matric equivalent) or less, countering the suggestion that satisfaction of hiring requirements would be due to an absence of skills.
- **Under-employment and workforce over-qualification:** Data shows a workforce characterised by under-employment and over-qualification of skilled and educated workers, rather than the converse.
- **Rising human capital:** Educational attainment has increased in recent decades, not decreased.

Summarising the relevance of these observations – and the consensus regarding their more general applicability – Levine (2013:4) writes:

> The consensus among top economists [in the face of the evidence] is that the skills gap is a myth. High unemployment is mainly the result of a deficiency in aggregate demand and slow economic growth, not because workers lack the right education or skills. The skills of the labor force did not suddenly erode between 2007 and 2009, when the unemployment rate more than doubled, so it makes no sense to claim that high unemployment in 2009 and through today has been caused by a soaring number of 'unqualified' workers. As Stanford University economist Edward Lazear put it: 'The structure of a modern economy does not change that quickly'.
>
> This conclusion, rejecting the skills gap/structural unemployment theory, has been confirmed in numerous recent studies, from: a) university economists at Stanford, the University of California-Berkeley, Duke, MIT, and the University of Pennsylvania; and, b) researchers at the Brookings institution, the Economic Policy Institute, the Center for Economic and Policy Research, the Federal Reserve Banks of Atlanta, Boston, and Chicago, and the Boston Consulting

> Group. Two recent Nobel Laureates in economics and two former heads of the President's Council of Economic Advisers thoroughly reject the skills gap as an explanation for persistently high joblessness.

In the words of Kiviat (2012 in Levine 2013:15): 'When firms post job openings at a certain wage and no one comes forward, we call this a skills mismatch. In a different universe, we might call it a pay mismatch'.

Nevertheless, Levine (2013:12) notes, the 'skills gap' explanation uncannily persists – an example of what Quiggin (2010:5) has called 'zombie economics': 'beliefs about economic policy that have been "killed" by evidence and analysis, but somehow, like "zombie ideas," keep coming back'. Levine argues that this persistence is due to a range of mutually reinforcing factors. Citing Mishel (2011) again, Levine (2013:49) notes that the 'skills gap' narrative is 'very comfortable reasoning for the very comfortable class', blaming, as it does 'failing schools' and 'dumb workers' for 'the economic calamity actually caused by a deregulated financial sector following a massive redistribution of income and wealth':

> Put another way, there's a strong ideological component behind the skills gap trope: it diverts attention (and policies) from the deep inequalities and market fundamentalism that created the unemployment crisis, and focuses on a fake skills gap that had nothing to do with the surge in joblessness since 2007.

According to Levine (ibid:50), a second factor bolstering the persistence of the 'skills gap' explanation is that, with repetition, 'a "herd mentality" and "ideational contagion" among policymakers seems to have emerged':

> The endless repetition of skills mismatch stories over the past decade… has created a policy environment in which all decision-makers treat the supposed existence of a skills gap as if it were an uncontested fact, regardless of statistical evidence and a vast body of research to the contrary.

Finally, Levine (ibid) notes that the media have

> played a critical role in fuelling this herd mentality and widespread acceptance of the skills gap meme . . . For the media, as Barbara Kiviat notes, 'the skills gap story is an easy one tell, much easier than explaining macroeconomic factors or the intricacies of international trade or exchange rates'.

Summarising the deeply misguided situation to which these mutually reinforcing errors and elisions have led, Levine (ibid) writes:

> Thus, an unfortunate brew of corporate self-interest and ideology, a herd mentality in public discourse, and a credulous media has resulted in nearly universal belief . . . that the state [of Wisconsin] suffers from what the data show to be a 'fake' skills gap. The policy implications are enormous.

As Krugman (2010 in Levine 2013:50) puts it: 'We aren't suffering from a shortage of needed skills; we're suffering for a lack of policy resolve . . . structural unemployment isn't a real problem, it's an excuse [not to pursue] government action on a sufficient scale to jump-start the economy'.

Understanding 'The Problem of Unemployment'

It seems clear, then, that the supposed 'skills gap' does not account for 'the problem of unemployment' as this is normally understood. For this reason, attempting to fill the former alleged 'skills gap' in order to solve the latter 'problem of unemployment' cannot succeed. Given the evident implausibility of the dominant framing of the problem of unemployment – indeed, its misleading nature – scholars may feel compelled to ask whether their grasp of the underlying phenomenon itself is sufficient. They may easily tend to think they understand perfectly well what is meant by a phrase like 'the problem of unemployment', but it is hardly obvious that their judgement here is above suspicion. Are they at all sure that they are trying to solve the right problem? What exactly is 'the problem of unemployment'? Whose problem is it? How did this problem arise? Do unemployed people have 'a problem of unemployment', or is theirs a different problem – perhaps a problem of livelihoods? Are there artificial or unnecessary constraints on the livelihood options available to people? If so, how did those constraints arise?

Such a series of questions already points in a particular direction – a familiar and easily recognised direction, even if one that tends not to figure prominently in policy discussions regarding education and employment. Before addressing the history, it is worth noting a point that is often simply ignored in these debates, namely, that unemployment is a structural feature of capitalism: its presence is not a sign of capitalism's failure, but a necessity to its proper functioning in service of capital accumulation. Under capitalism, that is, some level of unemployment is guaranteed, since the pool of the unemployed – what Marx famously called the 'reserve army of labour' – plays a crucial role in maintaining downward pressure on wage demands through either implicit or explicit threats of dismissal and replacement.[2]

The paradigmatic examples of the origins of this 'reserve army' – conventionally cited as pivotal in the shift from feudal to capitalist modes of production – notoriously involved forced removals and dispossession, especially through the 'enclosures of the commons' in the United Kingdom (UK). For ruling elites, such a process of forced dislocation can serve two complementary purposes. Firstly, it secures monopoly control of productive resources (ie, land; property). Secondly, it creates or supplements the pool of potential wage labourers necessary for capitalist commodity production: people made desperate through dispossession of the means through which they had previously secured their livelihoods. This enforced vulnerability creates the conditions under which surplus value – created through the deployment of vulnerable labour in productive engagement with the newly monopolised means of production –

can be appropriated by the new 'owners'. Colonial expansion in the pursuit of profits, catalysed by racist constructions of foreign subjects, essentially replicated this basic model of complementary resource- and labour-exploitation further from 'home'.

While the intervening history is extraordinarily complex, this fledgling process of 'economic globalisation' has simultaneously accelerated and become more sophisticated over time. Its current, 'neoliberal' phase – generally recognised to have begun in the 1970s – has involved the removal of many restrictions on trade and financial transactions, slackening of regulations, and co-ordinated crackdowns on organised labour. With economic globalisation, states have become more beholden to market forces, and political pressure on national governments has been increased to ensure acceptance of this policy paradigm. Despite the dominant rhetoric of inevitability – perhaps captured most succinctly in Margaret Thatcher's infamous insistence that 'there is no alternative' – the onset of this latest phase was neither natural nor inevitable. On the contrary, it was planned and designed on the basis of recommendations from certain mainstream economists, and implemented knowingly by governments on behalf of capital interests, under pressure from international organisations such as the International Monetary Fund (IMF), the World Bank and the World Trade Organisation (WTO).

The consequences of this form of economic globalisation on working and poor people globally have been profound. Firstly, it has intensified and spread the pressures of competition, forcing companies to look ever more desperately for ways to cut production costs, including by lowering wages. Secondly, it has encouraged financial speculation as an alternative approach to profit-making and capital accumulation, with the result that capital created by workers in the real economy – in factories, in mines, on farms, etc. – is not reinvested in production, or used to increase wages or provide training to workers, but placed in financial markets in hopes of gaining profit without the problems associated with production. Thirdly, the increased 'casualisation' of work in the name of 'labour flexibility' – made easier by technological innovation – has further weakened the position of workers by making them more easily replaceable. In South Africa, the brutalising and destabilising consequences of such measures have predictably manifested themselves along trajectories largely defined by the country's history of deeply racialised disenfranchisement, oppression and exploitation.

Reflecting on the outcomes of this latest phase of capitalism, Gorz (1999) offers a provocative perspective on their meaning and the opportunities they present. After tracing the history of the rise to dominance of transnational corporations and the financial markets they simultaneously rely upon and cultivate, Gorz (ibid:16) offers that, despite this history:

> States are not without the requisite levers for changing the direction and nature of globalization. But they do not possess them individually. They will not have them so long as they lack the common political will to win back through common action what can now only be a pooled sovereignty. The irresistible power of global capital is due above all to the inclination of states to compete

> against each other to attract capital by granting it favours, rather than to stand together and refuse to be played off against each other.

Elaborating on the way in which capital interests exploit such inter-state competition as ideological cover for the further extraction of profits, Gorz notes that even in times when virtually any social services are denounced as unaffordable, chief executive officers' (CEO) salaries and shareholder dividends have continued to balloon. Summarising, Gorz (ibid:22) writes:

> The 'irresistible power of the markets' exists only as a result of governments' willing submission to the power of finance – which they then use as an alibi to carry forward on their own account the war capitalism has declared first on the working class and, thereafter, on society as a whole.

Concomitant with this call for inter-state co-operation in resisting the dominance of global capital and financial markets, Gorz (ibid) calls on people to 'leave wage-based society behind'. On his reading, capitalism has effectively abolished 'work' as this has traditionally been understood, through a combination of productivity gains and the mobilisation and 'virtualisation' of capital. That is, capitalism in its neoliberal phase has effectively transcended traditional (and especially 'Fordist') models of productivity that could be counted upon to require significant quantities of labour. One result is that enormous numbers of people now stand no realistic chance of securing their material livelihoods through wage-based labour. But since the idea of wage labour remains predominant in people's thinking, the inherited idea of 'work' in the social imagination – as 'the deployment of institutionally certified skills according to approved procedure' – must be overcome. As Gorz (ibid:1) writes, 'We must dare to prepare ourselves for the Exodus from "work-based society": it no longer exists and will not return'.

Although the pressures on governments to follow the neoliberal line are very real, this does not mean individual states are simply 'at the mercy' of forces over which they have no control. National policy changes to facilitate globalisation are carried out by national governments, and although global market forces do constrain the range of choices available as state policy, national governments have no obligation to adopt policies that further promote neoliberal approaches to economic development, which have had consistently and predictably devastating consequences for poor and working people (Vally & Spreen 2006). This is not to minimise the power of international organisations, foreign governments, transnational corporations and financial institutions to penalise, punish or weaken countries that pursue an alternative course; this can even take the form of military aggression. To suggest, however, that South Africa has no choice but to accept such policy prescriptions is simply false (ibid).

The Meaning of Being Unemployed

It is commonplace to observe that only a subset of people not making a productive contribution to the formal economy is counted among the unemployed. Most familiarly, 'discouraged job seekers' are generally not counted among the formally unemployed. Less familiarly, there is another category of people altogether, who also make no productive contribution to the formal economy, but who are never really considered among those who 'don't even count as unemployed': those who live off hoarded wealth (rents, income on investments). Such persons are also not part of the productive workforce in any meaningful sense, but are not normally considered to be 'unemployed'. The slightly unsettling nature of the example itself should perhaps make us suspicious that we have internalised a framing of these debates that occludes in advance some of its salient features.

Even within modern economies, there are people who pursue livelihoods in ways that are not simply through typical 'employment'. For example, there are many people who work 'independently', usually selling services to various 'customers'. Of course, such people still 'work for others' in the sense that they must sell their products or services to someone who will purchase them. Their customers may or may not be part of the 'formal economy'. In some cases, people will provide services in exchange for other goods or services, instead of taking payment in cash. Another small portion of the population works together in groups as co-operatives, where everyone contributes their own efforts and participates in the decisions of the group. As with independent contractors, co-operatives must generally sell what they produce to others, but again this may or may not be part of the formal economy, and may or may not always require payment in cash.

Another way in which people may secure a livelihood is through certain kinds of government support programmes, such as a 'basic income grant', where people are guaranteed a certain amount of income each month that will allow them to meet their basic needs. This may be justified on the basis of people being unable to find employment for a certain time, or on the basis that they are studying, or training for a new position, or simply on the basis that the government believes that everyone should have a guaranteed basic income in order to survive. Despite the fact that persons receiving such assistance may pursue socially valuable activities within their families and communities that would otherwise go unremunerated – such as childcare, food production, community improvements, etc. – these are not typically recognised as 'work' under capitalism. Predictably, such schemes are typically opposed by business interests, who complain that such people are 'a drain on the economy', or that providing support will 'encourage dependency'. Of course, such schemes also mean that fewer people will be prepared to accept employment from businesses working for low wages under poor conditions.

Those who live off income from investments presumably do not lament the leisure their situation affords them. For the unemployed person, the real problem is not a matter of *employment* but of *livelihood*. What is at stake here is the perennial

conflation of the needs of people for a means of living – a livelihood – with the 'needs' of businesses to make a profit. The point here is not necessarily, or not merely, to advance a particular development model, but to highlight the ways in which hegemony functions at the level of ideas – the ways in which the dominant framing of public policy debates shapes people's view of what is possible, even before any questions arise over the specific content of a given set of policy proposals.

This distinction is typically blurred at the level of rhetoric under capitalism, and capital benefits from this obscurity. Capital requires that people depend upon employment within capitalist enterprises in order to obtain their livelihoods – at least to the extent that they cannot be replaced by advances in technology. The resulting confusion serves a useful rhetorical function in maintaining hegemony within the space of public discourse: It supports the suggestion that efforts to address unemployment should generally take the form of government setting its policies and deploying its resources to encourage businesses to hire more people. As has been mentioned above, current policies expose domestic labour markets to powerful exogenous forces that all but render such interventions futile in advance. Under these conditions, such government interventions constitute the expenditure of public resources to assist the private sector in further entrenching its political dominance over the public sphere.

It takes little imagination to recognise that once scholars abandon an uncritical attachment to the paradigm of formal employment, the less likely they are to assume – without justification – that interventions aimed at removing material vulnerability and reversing social disadvantage must take the form of public assistance to employers in the formal economy. Similarly, it implies no rejection of formal employment as such to insist on recognition that for a society such as South Africa, the likelihood that the formal sector can address the level of insecurity that millions of South Africans experience is infinitesimally small.

The more scholars recognise and appreciate the distinction between employment, on the one hand, and livelihoods on the other, the more likely it is that they will be able to recognise and seriously consider a wider range of policy options and budget priorities. Most importantly, these should include those that build upon people's existing skills and experience, but that are otherwise often occluded. These insights free scholars to consider more seriously the possibility of promoting approaches to securing livelihoods that build on community-level projects already underway. It also frees them to consider approaches to education that aim to nurture human beings with skills and values that empower them not merely to compete with one another for scarce formal employment, but to participate more confidently in the lives of their families, communities and society. They should be able to do this as active citizens capable of critical engagement in the collective project of democratising the world; celebrating their own culture and those of others; and expanding the range of positive experiences available to humanity as a whole.

On the Supposed 'Skills Shortage' in South Africa

Often discussions of skills and employment focus only on a very narrow range of skills, namely, those that will encourage someone to hire jobseekers. In South Africa, as in many other countries, there is an added emphasis on formal qualifications and formally recognised skills. In some cases there is a good reason for this: for example, if you choose to go to a doctor or a dentist, you may wish to be sure that this person has the formal training they claim to have. However, in many cases, formal qualifications may have little to do with people's skills, or their abilities to perform effectively in a particular role.[3]

Taken together, this emphasis on *formally recognised skills for employability* is almost certain to lead to the conclusion that there is a 'shortage of skills' – because what counts as 'skills' has been defined in an extremely narrow sense, and entirely around the requirements of businesses for profitability. By defining skills in this narrow way, business is able to put even more pressure on working people to meet the specific 'requirements' of business in order even to be considered for employment.

If only in order to highlight the inadequacy of the conceptualisation of skills that occupies the heart of this dominant framing, I will reflect momentarily on the range of skills that people need in order to live full lives. A very partial list might include the following:

- skills to secure a livelihood, if they are able to do so, whether through self-employment, co-operative work with others, formal employment in an enterprise (with the character of the employment determined profoundly by the ownership and management relations in play), or through knowing how to access social services during times when they are unable to work productively themselves
- skills to find the information needed to make important decisions about their education, about their careers, about their future, and about their participation in broader civic processes;
- skills to protect and improve their health and well-being, and to obtain the support they need from others – including from the government – that can help them protect and improve their health and well-being;
- skills to resolve disagreements with members of their family, with their peers and neighbours, or with colleagues;
- skills to participate meaningfully in civic and political processes in schools, communities, workplaces, and in society more generally – including the skills to understand and critique dominant ideologies and systems of social relations that leave them, and many others, disenfranchised, marginalised, and subject to exploitation by foreign and domestic capital interests;
- skills to exercise agency in defending national sovereignty in ways that are conducive toward eventual international integration that is historically informed, meaningfully inclusive, resolutely just, and fully emancipatory.

Whatever else it does, such a list should bring into sharp relief how profoundly the 'debate' about education and skills has been limited by a focus on the 'needs' of businesses to make a profit. This highlights the fact that decisions regarding which skills to promote are inherently *political* decisions, in addition to whatever *economic* consequences they may have. For this reason, it is essential to ask who benefits most from the different choices that are proposed about which skills to develop and promote. There is no reason to suppose that the promotion and advancement of technical skills requires that these be framed by profit-seeking competition. The problem is simply that the kinds of skills that are most often spoken about as 'necessary' and 'scarce' are those most likely to meet the requirements for businesses to make a profit, with no regard for the larger social consequences of the particular ways in which those businesses make their profit. Such skills are simply not the same as those skills people need in order to meet their own requirements for living, or to make a useful and satisfying contribution to their communities and their societies.

It seems almost too obvious to state – except that it is constantly left out of consideration – that businesses benefit from a larger pool of skilled workers, especially if those highly skilled workers must also compete for jobs that remain scarce due to exogenous factors. Such a situation is essentially ideal from the employer's perspective, since it affords access to highly valuable (ie, profitable) skills, while their relative surplus in the market ensures continuing downward pressure on wages for the lucky few who are hired. To externalise the costs of expanding that pool of skilled labour onto the public budget, in the name of 'tackling the problem of unemployment', is an added bonus.

In light of these considerations, we might be tempted to ask whether all of the talk about a 'mismatch' between 'people's skills' and 'the requirements of business' is just a way of keeping attention away from asking more basic questions about the structure of the economy, about the kind of society we are trying to create, about who benefits most under the current arrangements, and about the priorities that are implied in the common ways of approaching these questions. While it is obvious that a greater 'pool' of more highly skilled workers whose training has been paid for by government would benefit private businesses, it simply doesn't follow that those businesses' demands for profitability should receive priority consideration in determining government policy on education and skills development. This is especially important to remember when the prospects for addressing a widespread need for livelihoods through the formal economy are so bleak.

Of course, few would dispute that knowledge and skills are important. The challenge is that there is no 'neutral' position from which we can determine which kinds of knowledge and skills are most important. Choosing between different kinds of skills to cultivate involves choosing between different *values* – different visions of the world we want. If we accept that a leading priority should be to train people to become productive, servile employees of radically non-democratic, hierarchical private companies within a tremendously wasteful, competitive economy, then we have already eliminated a whole range of questions. It is far from obvious that the

majority of people are advised to accept that a chaotic world of competing economic units, engaged in all manner of evasion and corruption in order to gain advantage over one another for access to limited resources, is the only one possible, or even the best among options. Best for whom? In other words, these are not simply '*technical*' decisions about how best to improve the situation of young people, but *political* questions about what kind of society, and what kind of world, we are trying to build.

As Harvey (2011)[4] has observed, capitalists perennially strive to externalise two major cost components of the production processes they rely upon for profits: those associated with the ecological impacts of such processes (from the often devastating acquisition of raw materials, through to disposal of waste materials and the eventual disposition of official products), and costs associated with the social reproduction of the labour force (nutrition, education, healthcare, etc.). To the extent that these two kinds of costs – both major input costs to essentially any production process – can be externalised onto the public purse (through public funding of social services) or onto future generations (through erosion of the material environment on which all life depends), profits in the near term can be increased.

Such a perspective casts the enthusiastic support of business leaders for publicly funded interventions to address the fake 'skills gap' in a different light. It also fits much better with what we understand very well about human psychology, and the potential biases, blind spots and conflicts of interest to which material incentives give rise. Indeed, the very existence of governance requirements to declare conflicts of interest is grounded in the insight that one's personal material situation affects one's judgement, no matter how objective and well-intentioned one may consider oneself to be. This is why 'contributions' from people with a direct material stake in policy outcomes should be viewed through the lens of their specific position, and why the commitment to securing profits even at public expense should make us especially wary of such contributions from representatives of private business interests.

Alternative Ways to Think about Skills

Once we begin to free ourselves from the evidently groundless spectre of a supposed 'skills gap' as an important underlying cause of joblessness, we are freed as well from the pressure to seek reforms to the educational system misguidedly intended to fill that gap. This allows us to consider a much wider range of possibilities for how to re-imagine and re-orient educational paradigms, policies, practices and institutions in service of a higher set of ideals.

As a starting point, one alternative way of thinking about skills, livelihoods and work is through the concept of 'socially useful work'. This way of thinking about the issues draws our focus back to the fact that there are many ways of making a contribution to society, and that we should not assume that contributing toward the profitability of a business is the only way, or the best way – or even necessarily a good way.[5]

Many people have skills that are very useful and that can add value to the lives of the people around them: skills in childcare, in building or repairing things, in cooking or cleaning, in making music or telling stories, and countless other things. Many people already provide these services to each other on the basis of neighbourly exchange – in other words, they help each other when something is needed, and simply maintain an 'informal' sense about who has done what for whom, and who owes someone else a return favour. These are not necessarily skills that businesses can easily profit from, so these skills are not normally recognised or taken seriously within discussions of skills, employment and livelihood.

Those who favour a capitalist approach to the economy – and to social relations more generally – often say that such people as these should see themselves as 'entrepreneurs', and should create individual businesses that allow them to participate in the 'formal' economy. It is true that for many people this is almost the only way to be able to make a living. This doesn't change the fact that there are other ways to arrange a society, and if we are serious about creating the best society for people, we should not simply accept the dominant ideas about how things should be done.

Unfortunately, there is rarely any discussion about using government resources to strengthen people's abilities to act in these ways within their own contexts. Discussions about the use of government resources are almost always focused on how to encourage employment that will contribute to the profits of private businesses.

What, Then, is the Purpose of Education?

Finally, we can return to the question of education and consider how the foregoing considerations would seem to indicate how to approach it. It should be evident by now that the dominant framing of the supposed inter-dependencies of education, skills and employment tends to invoke putative solutions that are ill-suited to address the underlying problems they ostensibly target. In its linkage to the so-called crisis of education in South Africa, this framing carries a further implication: that the essential purpose of education is to prepare those receiving it to compete for employment within a system that requires employment to be scarce. In addition, the system has been adjusted to make employment more scarce through the adoption of policies that favour *even further* the basic inequality of opportunity and access to resources that are entrenched and enforced within the existing order. That is, the dominant discourse entrenches the idea that the best 'outcomes' people can really hope for from an educational system are that it will help make young people more easily 'employable' within a system whose defining features must be accepted as natural and inevitable, despite having been designed to ensure the inescapable vulnerability of the vast majority of them.

An additional effect of this framing in the South African context is that the urgencies around education and unemployment may effectively compound one another in the public imagination, with the net result a feverish call for the government

to take 'drastic measures' to further prop up the profitability of businesses whose material origins lie in violent appropriation, and that already receive the benefits of limited liability and protection against the seizure of assets. Meanwhile, the continued invocation of 'the private sector' as a 'partner' in this process effectively unifies and anthropomorphises in thought a scattered collection in reality of warring private interests – thus creating and sustaining the illusion of a harmonious and rational 'stakeholder' in a deliberative consultation, and further occluding the reality of capitalist property relations: 'the market' as the stomping ground for a 'band of warring brothers', alternately competing for position with one another, and colluding when necessary to maintain their collective dominance over material resources and the framing of public thought and discourse.

Such a framing not only works to limit policy options in advance by attempting to insinuate a misleading causal account, but the exaggerated pressure with which it is advanced works further to encourage the neglect or dismissal of policy options that could engender more humane and socially desirable outcomes. Responsible policy makers and engaged citizens should alike resist the temptation to capitulate to such 'received wisdom' and 'common sense'. Such resistance seems particularly justified when the 'common sense' embeds assumptions from a global system that – especially in the context of an ongoing global economic slump, as the European Union teeters on the brink of dissolution, and the US wallows in the debt of bank bailouts as home repossessions multiply – can hardly be credibly advanced. As South Africa's *National Development Plan* (NPC 2011:20) itself concedes, 'Understanding and responding appropriately to complex global challenges is the first task of planning'. South Africans must collectively determine whether the continuing embrace of a neoliberal policy paradigm that has brought hardship to working and poor people around the world constitutes an 'appropriate response' to the complex global challenges the country faces.

Implicit in many of these discussions is the idea that the proper purpose of education is to prepare people to find jobs within a system of social relations that must be accepted in its basic structure and characteristics. This reflects a vision of the world that is fundamentally pessimistic, and disempowering for the vast majority of people. Discussions of the purpose of education should not be seen as mainly focused on helping people to obtain employment within a system that exploits them, but should rather reflect the entire range of human needs, abilities and capacities, and should foster hope, dignity and self-determination.

The South African government itself has recognised the importance of taking this wider view of the purpose of education. In 2011, the National Planning Commission (NPC) published the *National Development Plan: Vision for 2030*, which recognises education, training and skills as engines for development. More recently – and more importantly – the *Green Paper for Post-School Education and Training* (DHET 2012) states in its preface:

> The government of South Africa has resolved to make reducing employment its priority concern, and to ensure that every Ministry and Department takes whatever action is possible to expand job opportunities and build sustainable livelihoods, and enable all South Africans to contribute to, participate in, and benefit from, that expansion. This must include interventions to ensure redress of the injustices of the apartheid past and the progressive introduction of free education for the poor up to undergraduate level . . .
>
> It is important to emphasise that the focus on employment is not to the exclusion of all other development and transformational goals; quite the contrary – unemployment can only be reduced if the transformation agenda is taken forward with renewed vigour.

Such policy statements and positions provide potentially useful points of leverage for education activists – but that is all they provide. It is essential that people not become complacent in the face of such positions by assuming that government will simply act on them in ways that are favourable to poor and working people. Rather, it is up to people to conscientise and mobilise on the basis of the opportunity such statements provide for the enactment of progressive policy and action.

Many people who live in informal settlements, in townships, and in urban areas, already pursue alternative approaches to securing their own livelihoods, in the absence of even basic services, let alone meaningful support from government – and indeed often in the face of active interference or obstruction from public officials. Many of these initiatives take the form of co-operative ventures, despite the overwhelming dominance of a paradigm that selectively praises an individualistic, 'entrepreneurial' approach. Such people prove daily that they possess many useful skills that can be put to use in securing their own livelihoods. All of them possess important skills for living that public policy debates should not only keep in view, but should seek actively to build upon. Many of them also directly contribute toward addressing violence against women and children, food security, climate change impacts, and many other problems that far too many South Africans still face.

Conclusion

In order to discharge its obligation to improve the conditions of the poor, the government should place the poor at the centre of discussions around employment, skills and education. Learners, educators and activists have an opportunity to influence government policy on these questions, and therefore to shape the education and training sector in South Africa, and to make it responsive to the needs of adult, young and child learners. In turn this will place them at the centre of these discussions, rather than treat them as people who must wait for the government to convince private businesses to 'employ' them.

Scholars should rather undertake, in earnest, the democratising project of reimagining their task from that of understanding the relationship between education

and employment, to that of understanding the relationship between learning and useful activity. The former framing severely constrains the range of policy options considered possible or reasonable to those which are compatible with shoring up the dominance of both a specific and a general social form, each historically contingent and each a source of grave concern for the future of the planet: specifically, the limited liability corporation, and generally, private, monopoly dominance of strategic resources and assets.

Unless and until the underlying structural causes and dynamics exacerbating inequality are addressed, South Africa will remain on a developmental pathway that deepens inequality and undermines social cohesion and stability. Progressive voices should press for greater focus on the perspective that remains focused on livelihoods, decent work and socially useful labour, rather than profit-driven discussions about job creation and the needs of business. Rather than trying to find ways to justify more payouts to business, progressive voices – and all responsible citizens – should press for serious planning and engagement with the wide-ranging set of alternative, grass roots approaches that are already being pursued at community level, despite minimal or no support in most cases.

The solution to 'the problem of unemployment' will never be found in this or that piecemeal initiative, launched from within a policy regime whose main purpose is to maintain a system of social relations that *requires* unemployment in order to deliver profits to those whose power it entrenches. No combination of initiatives that leaves the underlying institutional bases of growing inequality can fully succeed in alleviating the underlying social tensions and averting the kind of eventual social rupture that so many fear, with such good reason. Solutions should be sought with all urgency, but not all urgencies are equal. Responsible policy making must recognise that urgent demands for public support to processes grounded in the accumulation of profits must be resisted.

Similarly, progressive voices should insist that the discussion of education be kept at a safe distance from the discussion around employment, and not be allowed to continue to be 'instrumentalised' in service of capital. If unemployment is not fundamentally a consequence of a 'skills gap', then attempting to address it by making changes to the education system is utterly misguided. There are certainly improvements to be made to South Africa's education system, but if the changes proposed are designed to address a problem which they cannot usefully address, scholars' efforts are doomed from the outset. Indeed, there is a danger that they will simply further entrench an approach to education that reduces learners to 'human capital', to be shaped, disciplined and deployed in service of profits.

If scholars accept the vital importance of education in preserving what democratic gains have already been made, they should be even more eager to insulate the sphere of education from demands from private interests for publicly subsidised skills training. Despite the rhetoric of 'partnership' and 'social responsibility' that characterises so much public debate on these questions, such interests are bound by fiduciary duty to pursue private profit even at public cost. Scholars should neither

pretend otherwise, nor attempt to wave away the disturbing implications of such basic structural facts for public policy decision making.

Given the overwhelming dominance of wealthy, private interests in shaping public debate to produce outcomes in their favour, perhaps the single most important function of education is to teach young people the skills necessary to interrogate the ideological underpinnings of the policy debates that will shape their futures. In the words of education theorist Berney (2008), it is necessary to 'bring education into the 21st century', that is, 'stop using education to get people to fit into society, and start using education to get them to change it'.

Notes

1. This chapter draws on material developed in the context of preparing a booklet on youth unemployment produced for the Centre for Education Rights and Transformation, entitled 'Youth unemployment: Understanding causes and finding solutions – Reflections on education, skills and livelihoods', developed with input from Mondli Hlatshwayo, Miriam Di Paolo and Salim Vally.
2. Exceptions are possible during, for example, wartime, when appeals to patriotism replace threats of dismissal in limiting wage demands.
3. In many cases, especially jobs that do not require very specialised skills, the emphasis on proof of formal qualifications seems to have more to do with making it as easy as possible for the employer to hire someone, without having to devote much time to figuring out who would actually be the best candidate for the position.
4. Video lecture; relevant remarks begin at 21:35.
5. For example, if people are working for a company that manufactures weapons, or cigarettes, or some other harmful products, there are very serious questions they may need to ask about the value of what they are doing.

References

Arora, V. & Ricci, L.A., 2005, 'Unemployment and the labor market'in M. Nowak & L.A. Ricci (eds.), *Post-apartheid South Africa: The first ten years*, International Monetary Fund, retrieved 4 April 2013, from http://www.imf.org/external/pubs/nft/2006/soafrica/eng/Pasoafr/

Berney, J., 2008, 'Bringing education into the 21st century', acceptance speech upon receipt of the Distinguished Social Sciences Alumni Award, University of California Santa Cruz Division of Social Sciences, retrieved 4 April 2013, from http://www.youtube.com/watch?v=seAwvQSDqhA.

City Press, 2010, 'OBE gets overhauled', retrieved 3 May 2013, from http://www.citypress.co.za/features/obe-gets-overhauled-20100724/.

Gorz, A., 1999, *Reclaiming work: Beyond the wage-based society*, trans. C. Turner, Polity Press, Cambridge.

Harvey, D., 2011, 'Emancipation from what and from whom?', lecture given as part of the International Conference, New Emancipatory Struggles, Zagreb, Croatia, 19 May, retrieved 30 April 2013, from http://www.youtube.com/watch?v=ZodgVvezNuw.

IOL Business Report, 2010, '74 percent of youth under 24 years are unemployed', retrieved 21 January 2013, from http://www.iol.co.za/business/business-news/74-percent-of-youth-under-24-years-are-unemployed-1.804232.

IRIN News, 2005, 'South Africa: Fallout as China sews up textile market', retrieved 29 March 2013, from http://www.irinnews.org/Report/55156/SOUTH-AFRICA-Fallout-as-China-sews-up-textile-market.

Kiviat, B., 2012, 'The big jobs myth: American workers aren't ready for American jobs', retrieved 3 May 2013, from http://www.theatlantic.com/business/archive/2012/07/the-big-jobs-myth-american-workers-arent-ready-for-american-jobs/260169/.

Krugman, P., 2010, *End this depression now!*, W.W. Norton, New York, NY.

Lafer, G., 2002, *The job training charade*, Cornell University Press, Ithaca, NY.

Levine, M., 2013, *The skills gap and unemployment in Wisconsin: Separating fact from fiction*, Center for Economic Development, University of Wisconsin, Milwaukee, retrieved 10 April 2013, from http://www4.uwm.edu/ced/publications/skillsgap_2013-2.pdf.

Mishel, L., 2011, *The overselling of education*, retrieved 3 May 2013, from http://prospect.org/article/overselling-education-0.

Municipal IQ, 2012, '2012: a record high in service delivery protests (already)', retrieved 21 January 2013, from http://www.municipaliq.co.za/publications/press/201208061008296873.docx.

Quiggin, J., 2010, *Zombie economics: How dead ideas still walk among us*, Princeton University Press, Princeton, NJ.

SAPA, 2012a, 'SA unemployment rises', retrieved 21 January 2013, from http://www.iol.co.za/business/business-news/sa-unemployment-rises-1.1415829.

SAPA, 2012b, 'Education crisis a threat to democracy – Jansen', retrieved 21 January 2013, from http://www.news24.com/SouthAfrica/Politics/Education-crisis-a-threat-to-democracy-Jansen-20121122.

Spreen, C.A. & Vally, S., 2010, 'Prospects and pitfalls: A review of post-apartheid education policy research and analysis in South Africa', *Comparative Education*, 46(4), 429–448.

Statistics South Africa, 2013, *Quarterly labour force survey: Quarter 4 (October to December)* retrieved 3 May 2013, from http://www.statssa.gov.za/publications/statsdownload.asp?PPN=P0211&SCH=5447.

Vally, S. & Spreen, C.A., 2006, 'Education rights, education policies and inequality in South Africa', *International Journal of Education Development*, 26(4), 352–362.

10

THE YOUTH WAGE SUBSIDY

In South Africa: Employment, Skills and 'Churning'

Niall Reddy

Introduction

How did a relatively small, ancillary labour market policy become the centre of an intense public contest that led to a violent confrontation between the Congress of South African Trade Unions (COSATU) and the Democratic Alliance (DA) on the streets of Johannesburg? The answer is not immediately obvious. When wage subsidies were first proposed around the transition period (admittedly with certain major variations on the contemporary iteration), it was economists on the left – Marxists and Post-Keynesians – who were their chief advocates. Wage subsidies are fairly common around the world – perhaps the majority of advanced economies have some experience with them – but it is not clear whether they have ever drawn the rancour of unions in the way they did in South Africa. In fact it is the sections of the right that bristle at the prospect of the state tinkering in markets that have been the most vocal opponents of such policies. Now it is business that champions the subsidy.

Explaining why the youth wage subsidy (YWS) became the site of such adversity will be the aim of the second half of this chapter. It is a story that offers insights into many of the most salient political and sociological developments of post-apartheid South Africa. The YWS commands a degree of public attention that is hugely disproportionate to its likely economic impact, even by the most optimistic predictions. In part this is due to its instinctive appeal in a country desperate for a cure to an entrenched unemployment crisis and to its elevation by a media dominated by business driven cures to that crisis. But perhaps more importantly its high public status is the work of an opposition party, the DA, desperate for a means of appealing

to a constituency to which it is not naturally adapted and to articulate clear differences to the economic policy of the ruling party.

The first half of this chapter will provide a socio-economic assessment of the YWS. The designers of the policy and its major supporters conceived it as an intervention into a job-deficient economy whose primary ailment is a lack of adequate skills, compounded by high rigid wages. The inadequacies and fallacies of this view are a leit-motif of this volume. The chapter critiques the economic logic of the YWS and is centrally concerned with the effect it will have on youth employment and skills. After conducting a review of existing global youth wage subsidies, I conclude that targeted wage subsidies are not a panacea to general unemployment – they are surgical interventions designed to correct for perceived 'market failures': privileging one group over another is inherent to them. Despite fleeting mentions in the public debate and policy discussion, that fact has been routinely obscured and elided. The evidence suggests that they have weak or even negative effects in developing economies.

A YWS is particularly unsuited to South African conditions. Local employers have shown a bottomless appetite for casualised and externalised labour over the last decade. Fears that the policy will be used simply to swap older for younger workers and accelerate the 'job churning' are thus well grounded. Its proponents contend that it will provide some relief to the skills crisis by dispersing job experience, but since it is likely to undergird entry-level, precarious employment, the YWS will probably make little contribution to providing the higher skill gradients putatively demanded by business. Instead it may act as one more lever in subsuming the education system to narrow market demands. If aggregate job effects are not realised, as seems likely given the sclerotic state of the global economy, the policy will function simply as a transfer to profits in the context of chronic capital strike. Perhaps of greater concern, the YWS is likely to be attended by social externalities that could deepen segmentation on the shop floor and may even act as a stalking horse for rolling back labour regulation.

Based on recent developments, COSATU's vehement opposition to the YWS may well pit it not just against the DA but also the leadership of the African National Congress (ANC). The YWS could become yet another issue that is driving the rank and file of COSATU into conflict with the ANC leadership – its political import may well exceed its likely economic effects.

The Nature Of South Africa's Unemployment Crisis

The South African economy is in a sense the progeny of the minerals-energy complex (MEC) (Fine & Rustomjee 1996). The term refers to a nexus of mega-conglomerates, rooted in mining and downstream industries, but that also covers finance and other sectors, that imparted a particular dynamic to the industrialisation path of the economy though its economic weight, linkages with other sectors and close relation

to the state. The result, as the 20th century wore on, was the concentration in capital-intensive mineral sectors supported by the heavy infrastructure of state-owned enterprises (SOEs) with poor industrial diversification. The system of migrant labour, which many have argued was the economic substratum of apartheid, reflected the specific needs of the MEC core. It intersected well with the interests of a powerful agricultural capital, which grew coextensively with the dispossession and destruction of the South African peasantry. Small-scale and subsistence agriculture could never again provide employment for any significant population.

During the 1980s, the MEC felt the pressures to globalise and financialise arising from the global tide of neoliberalism. In the former they were frustrated by the pariah status of the apartheid state. This, in part, led to a burgeoning of the domestic financial sector and an increase of speculative activities, much of it related to MEC firms that also used their control of the financial sector to spread over more distant sectors. The macro-economic policy that issued from the negotiated settlement seemed centrally geared to facilitating the new imperatives of the MEC (Ashman, Fine & Newman 2011b). Under a paroxysm of mergers, acquisitions and unbundlings, the MEC reshaped itself with new international players coming in and a host of major South African firms relisting overseas with the encouragement of the ANC government. Eager to take advantage of globalising markets and reduce exposure to the revolutionising country, capital left South Africa's shores in droves, with illegal flight averaging 12% of gross domestic product (GDP) between 2001 and 2007 (Ashman, Fine & Newman 2011a).

Liberalisation and deregulation sent shockwaves through local industry. Textiles collapsed nearly entirely and restructuring in the agro-food value chain caused the sector to shed around 600 000 jobs between 1988 and 2004 (along with 1.7 million evictions from commercial farms) (Wegerif, Russell & Grundling 2005). Proving itself worthy in the eyes of international financial capital meant drastic cuts for the South African state, including wide privatisation in the substantial SOE sector. The gold mines, having depleted their accessible reserves, also cut hundreds of thousands of workers from their payroll. The job bloodbath coincided with a massive increase in the number of entrants into the labour market, particularly women (Banerjee et al 2008).

South Africa's emaciated state was incapable of articulating and implementing the energetic industrial strategy that would have been needed to lead a diversification out of the MEC towards job absorbing sectors. Capacity was instead drained into elite formation through black economic empowerment (BEE). A paltry shift towards a 'developmental state' framework stemmed downsizing in the public sector – with state jobs accounting a massive proportion of the net creation over the late 2000s, but still far from compensating for job depletion in the private economy. Investment remained deterred by a lack of effective demand and a persistent high interest rate that still did not help to calm a fluctuating exchange rate. The only notable growth was in the finance, communications and MEC sectors – all with little to offer in the way of job creation.

Current unemployment is disproportionately spread amongst the youth. Over half of 15- to 24-year olds, nearly 1.4 million people, are unemployed (Bhorat 2011). However, whilst South Africa's unemployment rate may be amongst the highest in the world, the extent to which it is concentrated amongst the youth is relatively in line with comparable economies. Youth unemployment is a major problem globally (NT 2011:11–12).

There are a number of fairly intuitive reasons why unemployment tends to hit the youth hardest. In the first place, a much larger proportion of entrants into the job market at any given time are youths. So in times of crisis, when jobs are diminishing, young people will also be the largest group of entrants into unemployment. Youths are likely to hold jobs requiring less experience and skill, so when firms retrench, they are more likely to be the first to go. Moreover, firing young people, who on average will have spent less time with a particular firm, will often be cheaper and involve lower severance pay. Young people are also more commonly students and tend to take on part-time work, which may distort statistics (Mlatsheni & Rospabe 2002:2).

South Africa remains an economy defined by the continuing influence of the MEC (albeit one that looks very different to prior decades) to which a huge swath of the population is surplus. The 'second-economy', of informality and underemployment, is not a parallel, isolated aberration, but a direct outgrowth of the 'first' with which it interpenetrates and combines (Bond 2007).

Mainstream economics, however, has taken little notice of these and similar accounts of the particularities of South African industrialisation and the related class and state agencies that reproduce a job-deficient accumulation path. Whilst acknowledgement of the distortionary effects of the apartheid economy in laying the basis for mass unemployment is variously given, it is 'labour market rigidities' that are commonly blamed for preventing self-correcting markets from repairing the crisis. In particular, strict legislation and powerful unions are said to drive up wages and price low-skilled and new entrant workers out of the market. Moreover, another apartheid hangover, South Africa's dysfunctional education system, fails to provide the skills that are demanded by local firms in a high wage setting. Certainly, this view of unemployment is held firmly by the major proponents of the YWS (DA n.d.). The National Treasury's (NT 2011:9) discussion document contends that 'a better educated and more highly skilled workforce is the most pressing long-term priority for the economy'.

This school of thought also adds further arguments for why unemployment is disproportionately concentrated amongst youths. Being inexperienced, youths are more likely to be the least 'productive' workers but minimum wage legislation and strong unions prevent wages being adjusted to their actual productivity – leading to a wage-productivity gap primarily amongst the youth (NT 2011:10). It is correcting this distortion that is the NT's major rationale for the policy. Thus, whilst it is acknowledged not to be a cure-all, the YWS is conceived by its advocates as a policy that deals with the root causes of South Africa's unemployment crisis.

What Is The Proposed Youth Wage Subsidy?

The NT's design proposal comes from a 2011 discussion document, 'Confronting Youth Unemployment in South Africa'. The DA endorses the NT proposal but suggests a slightly different design based on the recommendations of Levinsohn (2007). For simplicity, the author will focus here on the NT proposal, which is likely to be closest to any actualised policy.

The NT proposes to disburse the subsidy for every 'new' worker, aged between 18 and 28, hired by the firm for a period of two years. Existing workers aged between 18 and 24 will be granted the subsidy for a period of one year to mitigate substitution of subsidised for unsubsidised workers (NT 2011:39). The amount of the subsidy varies depending on the wage. The NT proposes an inverted V-scale peaking at 50% of the wage for those earning R24 000 a year and tapering to zero at R60 000 (see Figure 1). Existing workers and those in the second year of subsidy receive a smaller amount. The policy will be applied through the existing Pay As You Earn (PAYE) tax infrastructure which is expected to minimise administrative costs.

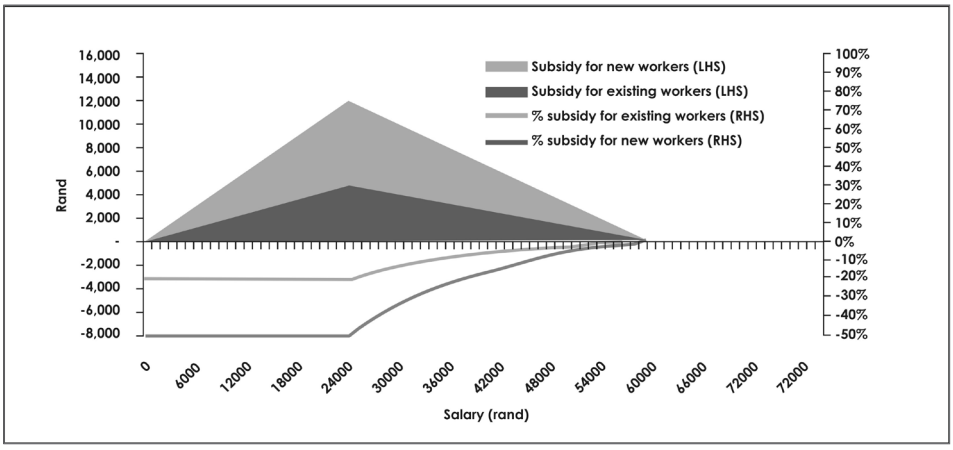


FIGURE 1: Subsidy profile – value and % – for new and existing young workers qualifying for the subsidy

The use of the term 'new worker' here is ambiguous. The NT notes that 'marginal' or 'incremental' subsidies, which only apply the subsidy to net employment increases, that is, hires above a certain level of 'ordinary employment', are more cost effective and discourage the substitution of unsubsidised workers (NT 2011:28). There are downsides to such subsidies, however, they will have a smaller incidence; potentially create fewer jobs; and be harder to administer. But it is not at all clear if this is what the NT is proposing. 'New' workers may not be 'additional' – they may simply replace existing workers without a net increase in employment. The author will attempt to deal with both possibilities in his assessment of the policy.

The economic intent behind the policy is fairly clear. Formally, at a firm level, the subsidy cheapens the cost of labour without lowering wages, thereby inducing raised employment and output. The magnitude of the change will be determined by the 'wage elasticity of labour' (the percentage change in employment given a one per cent change in wages). For simplicity, this can be thought of as decomposing into two parts: (1) factor substitution – shifting to labour from other inputs by change in production technique; and (2) scale effect – increased output due to lower production costs. Since the subsidy is targeted, 'other inputs' for which young labour may be substituted includes older (generally more skilled) labour. Neoclassical economics tends to assume perfect substitutability between factors of production, at least at a macro level, but the reality is more complicated – involving technical and physical constraints. Exact effects will therefore be hard to predict.

Under perfect competition there would necessarily be output increases as firms respond to lower costs. 'Perfect competition', however, is a quirk of orthodox economic textbooks and not a guide to reality. In actual fact, firms will base production decisions on economic expectations and calculations of market share. The aggregate effects of the YWS are thus inseparable from broader economic conditions. If there is a general expansion, then the subsidy may induce greater and more labour intensive investment outlays and thus lead to higher job creation than would otherwise have been the case. If there is either no expansion or a recession, then firms may simply increase mark-ups over labour, thus absorbing the subsidy as profit. Net employment increases would be left to factor substitution.

If it succeeds in either creating jobs or lowering costs, then the subsidy implies some range of secondary effects, although these (like other impacts) must of course be judged against the opportunity costs of implementation. A major windfall advanced by proponents of the policy is the experience and training effects dispersed to participants. The NT points to pervasive long-term exclusion to suggest that these could be substantially beneficial.

Two major 'externalities' or pitfalls pervade the literature on wage subsidies. The first is deadweight losses. This is a term from marginalist economics that refers to the 'value' foregone by impairing the allocative efficiency of the market. For the purposes of the current discussion, it may be regarded as the costs associated with the subsidy that do not achieve the desired economic outcome. In this case it refers primarily to the cost of subsidies that do not create new jobs, that is, the cost of subsidising already existing jobs and jobs that would have been created regardless of whether the YWS was implemented.

The other major concern is 'substitution effects', which occur when employers do not create new jobs but simply substitute older workers for new, young workers. A related issue is 'churning' in which workers for whom the subsidy has expired are replaced. Again, no new jobs are created and the net effect is a higher mark-up; increased turnover in the labour market; and a shift in the unemployment burden towards older workers.

COSATUs opposition to the policy is rooted in these concerns. They contend that the subsidy will not add jobs to the economy but simply compel the replacement of older workers with younger ones. This could have divisive effects; put downward pressure on wages and also undermine skills dispersal.

The Evidence For A Youth Wage Subsidy

Truth was an early casualty in the war over the YWS. Aggressive media campaigns succeeded in associating the policy with the creation of 400 000 jobs, which was repeated *ad nauseum* by journalists (see, eg, DA 2012; Marrian 2012; Rossouw 2011). That figure was taken from the NT document, and somewhat selectively as it turns out (NT 2011:41). In fact it refers to the *total* number of workers that the NT estimates will receive the subsidy over the next year. In other words, it includes all existing youth jobs and those that would have been created regardless. The number of sustainable (longer than six months) jobs likely to be created specifically due to the policy is 133 000 according to the NT. The tax credits for the rest of the 400 000 is thus deadweight loss. Still, if the numbers are correct, at R37 000 per job, the YWS would be a cost efficient means of creating employment.

However, even this less ambitious goal will be difficult to achieve. The NT study eschews the more sophisticated tools of economic modelling and selects an altogether more basic technique, which is questionable at every level. It turns on the multiplication of macro-economic wage elasticities (the percentage change in employment resulting from a one percentage change in wages) by the estimated reduction in the cost of hiring induced by the YWS. Those elasticities are derived from methodologies suitable for uncovering historical correlations but not laying bare essential parameters of an economic system. Other studies have used more advanced Computable General Equilibrium methods to forecast effects and have returned optimistic results (Burns, Edwards & Pauw 2010). But those models too rest on the ontology of neoclassical economics. If, as this author does, people doubt that the hyper-deductivism used in constructing neoclassical models is suited to generating accurate predictions of a concrete economic reality, the results are unlikely to be convincing (Fine & Milonakis 2009; Muller 2014). In the end modelling can provide a cautious heuristic but not much more. A case for the policy must draw on past experience and reasoned argument on the nature and specificities of South Africa's economy. As Marx (2005:17) finds, 'the measured net employment effects [of wage subsidies] tend to be considerably lower than what most theoretical models and simulations predict, even under relatively pessimistic assumptions'.

So what conclusions emerge from the international experience with YWSs? Almost all advanced economies have current or historical experience with some mix of active labour market policies (ALMPs), which typically include job assistance, training and vocational programmes, and employment subsidies. An overall review of the innumerable formal evaluations of these programmes, primarily focused on rich

nations, is at best ambivalent regarding their efficacy. When it comes to developing countries, as will be seen, the evidence is not promising. No major consensus as to the specific applicability, universal design features or predictable outcomes of the various policies is discernible.

A number of international economic bodies, like the World Bank, have advised tentatively, based on evidence from middle income countries, that wage subsidies can have positive impacts if they are carefully designed and administered to avoid abiding drawbacks – especially substitution effects and deadweight losses (Betcherman et al 2007; ILO 2011:76). However, the *World development report 2013: Jobs* (World Bank 2012:268) cautions that, due to related concerns, 'aggregate employment effects [of wage subsidies] are… low at best'. A severe dearth of any comprehensive studies of wage subsidies in developing nations prevents any firm conclusions regarding their general applicability. It should be noted that this is not a minor caveat – categorical differences in the nature of labour markets between developed and developing nations preclude any easy policy comparisons. In many cases, the problems that ALMPs in rich nations are designed to address simply do not exist in poorer countries, which face entirely different challenges. The delicate regulative demands, on which the success of such programmes is contingent, are less likely to be met in poorer countries (Dar & Tzannatos 1999).

A further point must be emphasised: the overwhelming majority of the specific evaluations of wage subsidies are aimed at their micro-economic, individual level effects. In particular they are interested in assessing whether participation in job programs is likely to have positive impacts on the employability of targeted groups (Card, Kluve & Weber 2009). That is, very few of these studies examine the macro level, aggregate effects of wage subsidies – such as the number of net jobs created. This fits with the predominating consensus amongst economists that these policies are not a panacea to general unemployment but are useful only as a palliative to specific labour market failures. This sits somewhat at odds with the public debate in South Africa which has so far crystallised on the number of overall jobs likely to be created by the policy. Supporters of the policy may have had a particular interest in obfuscating on this matter, given COSATU's emphasis that the net effect of the policy is likely to be the substitution of older for younger, temporary workers.

The NT (2011:30–31) for its part makes very little effort to reflect the contested, indeterminate nature of the international evidence on wage subsidies. Instead the document marshals a very selective, even tendentious sample of the literature in order to make its case. It is worth conducting a systematic review of the NT's submission in order to demonstrate the difficulty in finding a clear precedent, as is clearly their intention (Reddy & Strauss 2012).

The first thing to note is that the NT's body of evidence is overwhelmingly derived from advanced economies – seven of the 13 case studies and the only multinational review are from rich nations. A further two are middle income nations, three are 'transition' countries and only one, Colombia, would have strong similarities with South African circumstances. No attempt is made to problematise

the comparisons. Furthermore, many of the cited studies have more limited relevance for the government's proposal since they regard general subsidies or target different groups such as older workers or women.

As COSATU (2012) points out in a trenchant criticism of the NT's document, some of the studies adduced, despite misleading citations, in fact conclude firmly against the use of wage subsidies. Sweden is the notable example, especially important given the overall size of its subsidy programme, which Larsson (2003) concludes had negative net employment effects on participants due to stigma effects. Betcherman and Daysal (2009:1) appear to give very encouraging estimates of overall job increases from subsidy programmes in Turkey, in fact they conclude that, 'the evidence suggests that the dominant effect of subsidies was to increase social security registration of firms and workers rather than boosting total employment and economic activity'.

Others sources are more tentative than suggested by the NT. Katz (1996) finds very marginal employment probability gains from a targeted subsidy scheme in the US, but argues that further investigation is merited. In cases where researchers more unambiguously favour the use of subsidies, critics can legitimately claim the NT's selection of sources is partial and marred by omission. For example, O'Leary (1998), who presents optimistic results from a Polish programme, is directly contradicted by more recent research using more rigorous data (Kluve, Lehmann & Schmidt 2007). The same is the case for the German experience. The NT's source, Jaenichen and Stephan (2007), is directly contradicted by a later study, by Schünemann, Lechner and Wunsch (2011:20), which found that in Germany:

> The possibility for firms to reduce wage cost by hiring preferably the long-term unemployed does not affect their exit rates out of unemployment. Furthermore, we find no substantial improvement on employment stability for those individuals due to the subsidy programme. Our findings are in contrast to the previous empirical literature on employer-side wage subsidies (cited in COSATU 2012).

In some cases, as COSATU notes (2012:8–10), the governments of countries with putatively successful policies have subsequently come out strongly against subsidies or gradually phased them out, a fact which goes unremarked in the NT's document.

The NT's task should have been to provide an unbiased, self-critical body of evidence to stimulate debate - not to cherry pick examples to suit a preconceived agenda. At worse, the NT's research seems lazy. In its review of the Czech Republic, the document cites Leetma, Vôrk, Eamets and Kaja (2003) to the effect that subsidy programmes resulted in a 9% net increase in employment. In fact that paper, as the title makes clear, examines ALMPs in *Estonia* and even then does not venture estimates for subsidy programs given that their study included only four participants.

Conspicuously absent from the NT's discussion is any review of the broad international literature, particularly any focused on the implications for developing nations. Dar and Tzannatos (1999:ii), for example, review evaluations of ALMPs in 100 countries and find

> While it can be argued that the lessons from developed countries on the effectiveness of these programs may not be directly applicable to developing countries, it is unlikely that these programs will be more successful in developing countries given the scarcity of administrative capacity to implement these programs and the paucity of monitoring and evaluation experience to study their effectiveness.

Betcherman, Olivas & Dar (2004:42) find that:

> The clear majority of subsidy programs do not appear to have net positive impacts on the longer-term employability or earnings of participants. This is particularly the case for developing and transition countries where the limited evaluation evidence is uniformly negative'.

Smith (2006:41), who focuses on the applicability of ALMPs for South Africa, argues ultimately that

> the accumulation of available evidence is discouraging – the evaluations reviewed here suggest any of the employment effects from firm-side subsidies that do exist are small. This is not a new conclusion, as similar reviews by other researchers concluded that employer-side subsidies are cost inefficient because they subsidise hiring that would have occurred anyhow – and if the subsidy is targeted towards workers of specific characteristics, it may simply induce substitution by the employer from untargeted to targeted workers.

Thus, the balance of international experience weighs heavily against the YWS. It therefore becomes incumbent on proponents to explain what particularities of the South African labour market may provide for happier outcomes. But the NT's argumentation is lacking here too.

The NT's response to concerns over substitution and churning effects turns on the notion that it makes 'little business sense' to replace experienced workers with young inexperienced ones (NT 2011:37–38). They contend that the two-year lifespan of the subsidy provides enough time for young workers to develop the skills and experience that would protect them from churning. Moreover, hiring involves training costs which may make workforce rotation less appealing. Finally, they argue, churning may not be such a bad thing since workers will gain both skills and experience.

The NT's arguments therefore appear to assume the predominance of the 'standard employment relation' and a sort of Fordist organisation of production based on employee loyalty. They seem hopelessly out of touch with the seismic shifts in the nature of work in South Africa and globally in recent decades.

Casualised and externalised forms of employment emerged in South Africa already in the early 80s, along with a strengthening black trade union movement, but really exploded in the post-apartheid period following greater protections in the Labour Relations Amended Act (No. 127 of 1998) and more freedom for unions. Although problems of definition and measurement prevent the major household surveys from being used to gain a clear picture on the extent of these processes,

case study evidence and expert opinion suggest that they are pervasive (Hinks 2004; Theron, Godfrey & Lewis 2005; Webster et al 2008). Moreover, a number of studies have already noted a significant degree of churning present in South African labour markets (Seekings & Nattrass 2005:294; Valodia et al 2006).

Perhaps the major vehicle for South African precariousness has been the spread of Temporary Employment Services or 'labour brokers'. These are third party contractors that intermediate between employee and employer. Despite the name, labour broking is not necessarily connected to temporary or part-time work but often encompasses full-time workers and those involved in 'core functions' of the firm. A literature of case study evidence shows that the primary function of labour broking is to avoid compliance with labour law (Theron, Godfrey & Lewis 2005). This occurs primarily through confusion generated by the triangular employment relation which is used to complicate litigation against irregular dismissal. Labour broking also segments the workplace reducing the power of collective action – workers on a single shop floor may be required to bargain with a dozen separate employers.

Again, hard data on the extent of labour broking are difficult to come by. An imperfect proxy using the 'Business Not Elsewhere Classified' subsector of the industry codes in Labour Force Surveys can be used, but likely understates the extent of broking due to reliance on self-reporting by respondents. Still it shows a dramatic increase in triangular employment over the last decade, peaking at just over 815 000 jobs in 2012. The National Association of Bargaining Councils and Adcorp, a JSE listed employment firm, have given estimates in a similar range but both are likely to suffer from similar underestimation. These trends, which receive no mention by either the NT or the DA, should feature at the heart of the debate over the YWS. They suggest that South African business has an immense appetite for precarious forms of employment. Substitution effects in this context are likely to be extremely high and these concerns cannot be recused by abstract references to 'business sense'.

What of the argument that high churning is not such a bad outcome in a labour market systemic exclusion? Beneficiaries may not get secure tenure but at least the YWS will allow many unemployed people to gain a foothold into the jobs market and gain experience and skills. Those who are sympathetic with this argument tend to point to the high levels of long-term unemployment in South Africa. The NT (2011:13) claims that 2.8 out of 4.1 million unemployed people have been out of work for a year or more. Moreover, they argue that unemployed people with prior experience are more than three times as likely to find employment as those without (ibid:38). This is often adduced as further evidence for the skills-deficient nature of unemployment in SA: the far higher probabilities of employment for those with experience are taken to be an indicator of extreme employer preference for skilled workers. It is not clear that this is the case however – previous employment history may be regarded as an indicator of any number of individual characteristics or a guard against general uncertainty and do not necessarily reflect the fact that employers are hunting 'skills'.

However, the subsidy is intended to induce employment amongst layers of the unemployed for which there exists a putative 'productivity-pay gap'. It is aimed

therefore, at 'low skilled' work. The author has suggested that in large part it will apply to the vast numbers of precarious workers that South African businesses are demanding. Clearly, therefore, it is unlikely to disburse the kind of skills that would be needed to absolve a structural supply-side problem, much less contribute to the holistic social education for which this book advocates. The YWS is likely to apply only to employment associated with basic, entry-level work skills.

Given this and, *a fortiori*, the author's contention that in the final analysis, the employment crisis is not one of skill supply failure, it is not clear what the pervasiveness of long-term unemployment tells us about the likely *aggregate* effects of the YWS. That is, the subsidy could simply have the effect of lowering the number of people in *long-term* unemployment or reduce the average duration of long-term unemployment without putting more people into jobs at a given time. The corollary of course would be a reduction in the average duration of employment. This may itself be a desirable outcome. Churning disperses the benefits of participation in the labour market and mitigates long-term exclusion. It allows more people to engage in formal work even if it makes the terms of that engagement more tenuous for many others.

But is this really the type of work that should be cultivated? COSATU has raised the legitimate concern that the prospect of subsidised workers and higher churning will put downward pressure on all wages. Workers exposed to substitution may be compelled to accept lower wages in order to compete with subsidised workers. The subsidy may also incentivise further restructuring towards 'labour flexibility' in order to take advantage of subsidy windfalls from churning. Moreover, there is a significant danger that the YWS will become a vehicle for a generalised attack on labour legislation.

Amongst exponents of the mainstream understanding of unemployment in South Africa, it is the 'rigidities' imposed by overly strict legislation and powerful unions that prevent ordinary market functioning from adjusting the wage downwards to eliminate any 'productivity-pay gap'. However, there is little evidence that the current labour law dispensation has any major role to play in keeping South Africans out of work. Claims of excessive regulation are usually based solely on employer surveys, some of which have indeed shown that South African employers are more concerned about labour laws than their counterparts in other countries. But this could reflect a range of factors including untransformed business and social practices rooted in the apartheid-era labour regime. Benjamin, Bhorat and Cheadle (2010:13) find, using World Bank data, 'that in most measures of labour regulation . . . South Africa is not an extraordinarily over-regulated (or indeed under-regulated) labour market'. The Organisation for Economic Co-operation and Development's (OECD 2013) *Report* found South Africa to have the five most liberal labour regulations amongst a sample of 39 economies. Moreover, despite the ubiquitous complaints there is significant evidence that actual compliance with labour regulation is episodic (Webster et al 2008). Bhorat, Kanbur and Mayet (2011), for example, find systemic violation of minimum wage legislation. Despite this, the complicity of labour legislation in

unemployment has become an article of faith for most interlocutors in the public debate.

Most major policy documents and academic works favouring a YWS insists that it will be far more effective if accompanied by an exemption on firing regulations for subsidised workers (Burns, Edwards & Pauw 2010:19; DA n.d.; NT 2011:36). The NT policy document moots the idea of a probationary period during which new hires are not protected by various aspects of the labour law. This would be disastrous – exposing workers to multiple forms of abuse which employers have shown increasing predilection for in recent years. It would also constitute a major attack on unions. Workers who are not afforded basic protection from arbitrary dismissal are much less likely to risk joining a union. Unions would be less willing to expend capacity and resources trying to organise workers in such precarious situations. The end result would be further segmentation and pressure on wages.

As noted earlier, the NT is unclear as to whether it is advocating for an 'incremental' subsidy that applies only to net increases in employment in a firm, or whether the subsidy is available also to 'new' workers that join a firm above or below 'ordinary employment'. The former model would nominally reduce substitution costs since there would be no incentive to replace existing older workers. It would also have smaller incidence, create less jobs but would likely be more cost-effective. Remaining substitution effects would then be implicit – the favouring of younger over older new hires – but that is in any case the intended effect of the policy. The trouble, however, is that an incremental design will be incredibly difficult to implement effectively. Even if some definition of 'ordinary employment' could be found that does not arbitrarily favour firms with a particular labour structure, the administrative task of applying this definition would be costly and unlikely to succeed. It may incentivise firms to restructure their labour force to meet a favourably low definition of 'ordinary employment' and encourage the use of externalisation. In general, the possibilities for fraud with any design of the YWS, including the employment of ghost employees, are numerous.

The NT (2011:37) document makes one further point: that substitution effects are likely to be mitigated given the timing of implementation which coincides with a recovery from the crisis and an upswing on growth. What recovery? Growth in 2012 was around 2.5%, which was a poor showing for a so-called 'emerging market'. Most forecasters predict modest growth over the medium term subject to downwards revision if struggles over a living wage continue to disrupt production – at rates woefully inadequate to achieve government employment targets at current rates of capital intensity (NT 2012). This is not a local phenomenon as a global recovery has also failed to materialise (Roberts 2013). Failure to resolve Eurozone troubles or the continued slowdown in China could trigger a renewed recession. Narrow unemployment increased year on year by 0.6% at the end of 2012. This would have been far higher were it not for 74 000 jobs added in the 'Business and Financial Services' subsector, which consists largely of outsourced and labour brokered workers (StatsSA 2012).

Again, this is a major consideration. The subsidy by itself is nowhere near the magnitude required to induce an increase in output when there is stagnating demand. This means that any job creation would have to come from factor substitution – shifts to labour intensive production. Yet again there seems little prospect for this. In reality production does not conform to neoclassical models based on perfect substitution for factors of production. Choice of technique is determined by physical considerations, best practice and other concerns – not merely relative factor prices. The subsidy is unlikely to be sizeable enough to induce changes in production methods which, in any case, would tend only to be feasible over the longer term. If the economy fails to add jobs, then the YWS risks amounting solely to deadweight losses and deleterious substitution effects. It would act, in this case, as a large transfer to profits – not at all a desirable outcome in an economy characterised by on-going capital flight and a de-coupling of profits from investment since the crisis (Kamhunga 2012; OECD 2013:16).

There is little prospect for a market-led solution to the unemployment crisis. Sober growth forecasts in the context of an ailing global economy foreclose on any real hope of reaching the employment aims of the National Development Plan ([NDP], NPC 2011) within the current policy trajectory. In these circumstances, and given the major shifts towards informalisation amongst South African employers, a YWS is unlikely to have any aggregate effect on jobs. It will serve to entrench a market-based orientation to the unemployment crisis and a skills-deficiency approach. Worse still, it may function as the thin edge of the wedge for a generalised attack on labour legislation. COSATU certainly believes that the YWS will further segment the workplace and divide workers. In fact, in the eyes of its progenitors, that divisiveness may be more than merely an unintended side-effect of the policy. The next section examines the political dimensions of the fight over the YWS, beginning with some background on its foremost advocate, the DA.

A Political Biography Of The Youth Wage Subsidy

The DA is South Africa's largest opposition party, capturing 16.66% of the national vote in the 2009 elections on a liberal ticket turning on the slogan of 'Open Opportunity Society for All' – meritocracy, free markets and a hard line on corruption. Its rise has been meteoric – from just 1.7% in the 1994 elections – largely reflecting the absorption of National Party (NP) supporters and the consolidation of the minority vote. But many regard the DA to have reached a natural ceiling with that victory. Further advancement will require the DA to make inroads into the majority black population: a challenge with which it has had little luck so far, despite the recent inclusion of a slate of prominent black leaders. The DA's positioning of the YWS at the centre of its economic programme is part of a strategy to break out of its current compartmentalisation, that reflects important realities but also misconceptions of shifting class relation in post-apartheid South Africa, which will be examined here.

The most natural expansion route for the DA would be the black middle class about which so much has been made over the last decade. As Southall (2007:81) notes, the hype has tended to elide the fact that, even by inclusive definitions, the 'black middle class' remains disproportionately small. Nevertheless, there does appear to be substantial growth in a social layer fitting the polysomic variants of 'middle class' that may be expected to relate favourably to the DA's liberal, aggressive anti-corruption politics (Southall 2007:82). The DA has claimed some success in this regard, evinced in its slowly discolouring leadership. However, it is commonly noted that the creation of a black middle class over the last decades has been deeply tied to BEE and accumulation within the state (Freund 2007). Any beneficiaries of this are likely to exhibit a close loyalty to the ANC. There is reason to believe that this loyalty may not be inexhaustible – increasing avenues into private accumulation may erode dependencies on the state and provide a constituency more partial to centrist politics outside of the ANC. At the same time, however, the DA will face growing competition for such a constituency, especially if it fails to find common ground for an allegiance with AgangSA, a new political initiative by prominent intellectual and businesswoman Mamphele Ramphele. Securing mass support for the DA and becoming a viable alternative to the ANC in any medium timeframe thus entails finding some means of appealing to the poor and working class black population. Achieving this within the DA's liberal idiom, whilst not compromising the interests of a core wealthy, white constituency, will prove incredibly difficult (Leon 2013).

Already, the influx of new constituencies and social groups over the last decade and the needs of adapting to a political strategy more suited to the ideological landscape of contemporary South Africa are straining the DA's liberal identity (Munusamy 2013). A spate of very public confrontations over leadership and ideology in recent months has offered an uncommon window into contestations within a party usually very adept at protecting its inner workings from the public gaze. Two broad factions can be discerned from these conflicts. The one side is generally younger and includes most of the DA's black leadership who argue for a more ductile, pragmatic outlook that can meet the party's complex needs in the current conjuncture, in which achieving 'equality of opportunity' in the face of massive, entrenched inequality may require policies with which orthodox liberalism has been uncomfortable. But their opponents insist that the ultimate casualty of 'opportunistic' attempts to graft popular 'communalistic' ideas (such as Ubuntu) to the DA's ideology, will be liberalism itself (Johnson 2012). The obverse, however, is likely to be stagnation and marginalisation. Certainly, it would seem that more open-ended approaches are needed if the DA is to succeed in challenging the immense hegemony that the ANC retains over the black population in South Africa, reflected in its taking 65.9% of the votes in the 2009 general elections.

It is generally regarded that a significant proportion of grassroots support for the ANC is mobilised by its Alliance partner, COSATU, which represents close to two million workers in most sectors of the economy. The federation may have suffered setbacks in recent years with the informalisation of the work and, more recently,

rebellions against bureaucratisation and closeness to management – but it retains a mass force – demonstrated in hundreds of thousands that heeded the call for a general strike against labour broking in March 2012. COSATU remains ideologically one of the most militant socialist unions of its size in the world, even if its corporatist Alliance with the ANC has fostered a consistent disjuncture between its rhetoric and political practice in the last decades. It represents an inveterately hostile force to the DA. But mushrooming unemployment and precariousness means that organised labour *directly* represents an increasingly small section of the broader working class.

Pundits on all sides of the political spectrum have been quick to predict the expiration of the ANC's 'liberation dividend' and its displacement as the sole legitimate vehicle for the political aspirations of the masses. Certainly, almost two decades of neoliberal economics under an ANC government appear to be antagonising pervasive social unrest as real wages have stagnated for most income deciles and broad unemployment has ballooned. The most emblematic expression of this has been the so-called 'service delivery' protests – sudden, usually violent flare ups in poor communities ostensibly aimed at poor delivery but in reality coalescing around a wide spectrum of grievances often distantly related to the immediate trigger. More recently, the centre of social rebellion seems to be shifting towards the labour movement, dramatically evinced in militant wildcat strikes on the mines and Western Cape farms in the wake of the Marikana massacre. However, a common narrative which finds exponents on both poles of the political spectrum is that the real axis of social discord in South Africa is the significant, primarily youthful 'underclass' trapped in long-term exclusion from the formal labour market and subsisting in the informal hinterlands of the economy and on state and familial dependency networks. A corollary to this is that the living conditions and political interests of this group is progressively diverging from a core of largely unionised, formal sector workers who have been able to capture an increasing proportion of the surplus. The picture that emerges is one of class fragmentation – two classes, not one. If ideological anti-unionism and free market, wage compression economics inevitably opposes the DA to the mass of organised workers, it is the second of these classes, the marginalised 'underclass', to which the party must turn. DA strategists are surely aware of this. But effectively winning the support of these layers will mean repelling them from residual affection for the Alliance and deepening the rifts with the 'privileged' core of the working class.

It is easy to see why the YWS is functional in this regard: it allows the DA to develop a popular narrative that neatly counterpoises 'unemployed' to 'organised workers'. The economic logic of the YWS can be explained fairly intuitively. With no understanding of deeper economic circumstance it is not easy to see why the YWS does not constitute sensible economic policy. This opens the way for proponents to explain its constantly deferred implementation by the influence of unions who are portrayed as an 'interest group' that protects the jobs of older, fee paying members at the expense of job creation for the youth. Evidence of this strategy can be seen in the decision to march on COSATU's Johannesburg head offices in May 2012, demanding

the union retract its opposition to the subsidy. A counter-demonstration led to clashes that left many wounded on both sides. If the above is an accurate rendering of the strategic perspectives of the DA leadership then it explains clearly why a relatively minor labour market policy, over and above any genuine belief in its economic utility, has become a centre-point of the party's political platform.

It is noteworthy that a party that has assumed a persistent adversarial role in parliament has had very little to differ with the ruling party over economic policy in general. Indeed, the DA often lavished ample praise on former Finance Minister Trevor Manual and his department, which was responsible for engineering the ANC's pro-market macroeconomic policy. Narrow consensus between dominant parties over economic policy is not a local phenomenon: the neoliberal turn in most advanced economies reoriented the co-ordinates of parliamentary politics to establish what has been called the 'extreme tyranny of the political centre' delimited by some version of Washington Consensus economics. In these circumstances the public economic debate has commonly been reduced to haggling over the decimal points of one-size-fits-all policies. But that set-up could not work in South Africa where the radical lineage of the ruling party and the imagery of the National Democratic Revolution mean that the boundaries of public political and economic discourse are at least much wider, even if the content is muddied by 'talk-left, walk-right' obfuscation. In these conditions it has been hard for the DA to stake out an independent economic identity for itself – not a minor shortcoming but one that obstructs the party from proposing clear alternatives on the issues that dominate the lives of South Africans. The YWS distinguishes itself here too – by giving the DA just such a clear alternative as well as a means of blaming economic failures on the leftward compromises of the Alliance.

The DA may succeed in convincing some proportion of the unemployed that the ANC is too compromised by its allegiance to a 'labour aristocracy' – represented by COSATU – to offer any solution to the unemployment crisis. However, it is unlikely that this strategy will succeed in securing a mass social base for the party in the unemployed and the precarious. In the first place, this is because its sociological underpinnings in theories of total working class bifurcation are questionable.

A common strand in the scholarship on working class differentiation has emphasised polarisation in the workplace that has increased the resources of a core of formal workers against a periphery of under- and un-employed (Van Holdt & Webster 2005). But will these trends affect shifts in a class formation if not matched by polarisation in the sphere of reproduction? As Ceruti (2010) points out – little privilege is gained if the increased resources of the core are matched by an increased burden of dependents. Dependency networks are deeply inscribed in a country with massive structural unemployment: Ceruti's study of survey data in Soweto found that about two-thirds of the inhabitants lived in a household with at least one employed person and COSATU has claimed that the average wage of its members supports ten people. Moreover, Bhorat and Leibbrandt (1996) found that 70% of the unemployed depend on wages for their reproduction. As Mosoetsa (2011) has shown, such networks are not always a feted 'altruism of the poor' but can themselves become sites

of familial, often gendered, conflict. Nevertheless, they may be enough to suggest that there exists sufficient interdependence and common solidarity to cast doubt on theories that posit a complete divergence of objective interest between fractions of the working class.

It is clear that some theories of class polarisation omit the significant mobility of working class people into, outside and between worlds of work – suggested by South Africa's 'churning' labour market (Ceruti 2010:81). Ceruti (ibid) argues that Marx's schema of labour and its 'reserve army' may be the appropriate lens through which to view the convulsions in the South African class formation, which, it may be argued, is an example of the convulsions that the anarchy of capitalist accumulation produces in general. This it does by the need to constantly 're-tool' segments of the workforce, rendering other portions surplus and demanding fresh inputs against the parts of labour that are worn out by the grind of exploitation. She finds 'both polarization and a substantial middle ground, both at the household level and as regards work trajectories' amongst working class communities in Soweto (ibid:96). Nevertheless, she contends that there may exist the commonalities for a proletarian 'community of fate', not least in the geographic interspersion of differentiated working class groups, who nonetheless retain a common dependence on the 'need to avail themselves for exploitation' (ibid). The local antagonisms that obtain between the active labour force and the 'reserve army' function, as always, as a 'lever of accumulation' driving wages down and increasing the rate of exploitation. In the eyes of business the YWS may stand out for its ability to function as an ameliorative to unemployment which, by intensifying churning and aggravating divisions, does not simultaneously moderate the downward pressure of the 'reserve army' on wages. Its preference to a broader incomes policy, such as job guarantees or social grants, is thus obvious. The latter are commonly maligned for a putative tendency to create a 'dependency culture' or lessen the appeal of formal employment, although little evidence exists in favour of this view (Surender et al 2010).

Ultimately, it does not appear that the transmutations of the South African working class will produce the kind of ideological and political ruptures that would allow the DA easy access to a constituency from which it has been historically isolated. Appeals to the unemployed which are strongly opposed by organised workers are unlikely to gain much traction. Effectively winning the support of the black working class may be contingent on a populist re-working of liberalism that may seriously antagonise the DA's current core constituency. If the policy remains suspended due to COSATU's opposition, it is certain that the DA will continue to use its considerable resources and organisational efficiency to position the YWS at the centre of the political stage in South Africa. On the other hand, if, as now seems likely, the ANC government moves to implement the YWS, it may cease to function as a political cudgel for the opposition and instead become yet another source of tension within the Alliance.

Conclusion

On 31 October 2013, Parliament adopted the Youth Wage Subsidy Bill and on 18 December 2013, President Jacob Zuma signed the Employment Tax Incentive Act (No. 26 of 2013) into law. ANC MPs' support for the YWS constitutes a complete reversal on the decision of an ANC policy conference in June 2012 where a commission claimed that a YWS would be like 'throwing money down the drain'. The volte-face came as a surprise to many, myself included, who predicted that the policy would be conceded as the ruling party finds itself in growing conflicts with its union ally over e-tolling, labour broking and the unaltered state of the economy. Now it is being viewed by many as yet another sign of a right-wing consolidation within the ANC leadership that seems set to oversee a deepening of the economic dispensation inaugurated by the Growth, Employment and Redistribution (GEAR) strategy.

For all the tensions, the infighting and the signs of disillusionment amongst the rank-and-file, no strong opposition to Zuma's re-election presented itself at Mangaung. Unlike Polokwane, the congress did not emerge with any promises for a re-direction in economic or social policy. In fact, with the censoring of the nationalisation debate, the election of business tycoon Cyril Ramaphosa to the Deputy Presidency and the rapid (critics say undemocratic) adoption of the NDP, the party signalled its intent to stay the current course with perhaps an even greater accommodation to business. The NDP is thin on detail, styling itself as 'broad social vision' rather than rigorous policy statement, but as Coleman (2013) points out, beneath a progressive varnish it clearly enshrines a continuation of GEAR's macroeconomic policy, an endorsement of de-industrialisation (in contrast to the New Growth Path [NGP] and the Industrial Action Policy Plan [IPAP]) and an acceptance of the view that labour markets are over-regulated. It has become the subject of an intense ideological battle within COSATU and the Alliance with NUMSA declaring that they will not campaign for the ANC if it forms part of the party's 2014 election manifesto. The ANC's acceptance of the YWS will only strengthen the claims of NUMSA and others that the Alliance is not providing for workers and that radical changes are needed. While it is unlikely to have much effect in providing desperately needed jobs for young people in South Africa, the YWS's primary impact may well derive from its political symbolism in a period of major realignment.

The fractious struggle over an ancillary labour market intervention may have contributed to the World Economic Forum ranking South Africa as the country with the worst business-labour relations (Bond 2012). That may not come as good news within the current economic dispensation but, on the other hand, it may suggest the vitality of the social forces that could lead a shift towards a wage-led growth regime (Stockhammer 2011). Only a major state-led effort has any hope of making a serious dent in South Africa's structural unemployment. Palliatives and stop-gaps should, of course, be implemented where possible but only insofar as they do not jeopardise the

accumulation of social forces that will drive radical, public sector led alternatives. Any assessment of the YWS should be made with this in mind.

References

Ashman, S., Fine, B. & Newman, S., 2011a, 'Amnesty International? The nature, scale and impact of capital flight from South Africa', *Journal of Southern African Studies*, 37(1), 7–25.

Ashman, S., Fine, B. & Newman, S., 2011b, 'Systems of accumulation and the evolving minerals-energy complex', in B. Fine, J. Saraswati & D. Tavasci (eds.), *Beyond the developmental state: Industrial policy into the 21st century*, Pluto, London.

Banerjee, A., Galiani, S., Levinsohn, J., McLaren, Z. & Woolard, I., 2008, 'Why has unemployment risen in the New South Africa?', *Economics of Transition*, 16(4), 715–740.

Benjamin, P., Bhorat, H. & Cheadle, H., 2010, 'The cost of doing business and labour regulation: The case of South Africa', *International Labour Review*, 149(1), 73–91.

Betcherman, G. & Daysal, N.M., 2009, *Do employment subsidies work? Evidence from regionally targeted subsidies in Turkey*, Inter-American Development Bank.

Betcherman, G., Godfrey, M., Puerto, S., Rother, F. & Stavreska, A., 2007, *Global inventory of interventions to support young workers synthesis report*, World Bank, Washington, DC.

Betcherman, G., Olivas, K. & Dar, A., 2004, 'Impacts of active labor market programs: New evidence from evaluations with particular attention to developing and transition countries', Social Protection Discussion Paper, 0402, World Bank, Washington, DC.

Bhorat, H., 2011, 'Unemployment in South Africa: Descriptors and determinants', unpublished document.

Bhorat, H., Kanbur, R. & Mayet, N., 2011, 'Minimum wage violation in South Africa', Development Policy and Research Unit, University of Cape Town.

Bhorat, H. & Leibbrandt, M., 1996, 'Understanding unemployment: The relationship between the employed and the jobless', in J. Baskin (ed.), *Against the current: Labour and economic policy in South Africa*, Ravan Press, Johannesburg.

Bond, P., 2007, Two economies – or one system of exploitation? *Journal of Development Studies*. 37(2).

Bond, P., 2012, 'How the Marikana moment stunned neo-liberal South Africa', *Counterpunch*, retrieved 25 February 2013, from http://www.counterpunch.org/2012/10/19/how-the-marikana-movement-stunned-neoliberal-south-africa/.

Burns, J., Edwards, L. & Pauw, K., 2010, 'Wage subsidies to combat unemployment and poverty: Assessing South Africa's options', SALDRU Working Paper, Number 45, University of Cape Town.

Card, D., Kluve, J. & Weber, A., 2009, 'Active labour market policies: A meta-analysis', IZA Discussion Paper, 4002, Bonn.

Ceruti, C., 2010, 'One class or two? The labour reserve and surplus population in Marx and contemporary Soweto', *South African Review of Sociology*, 41(2), 77–103.

Coleman, N., 2013, 'The economics of the NDP', in N. Reddy & D. Forslund (eds.), *The NDP: Seven critical appraisals*, Alternative Information and Development Centre (AIDC), Cape Town.

Congress of South African Trade Unions (COSATU), 2012, 'Youth wage subsidy in South Africa. Response of COSATU (to the National Treasury and Democratic Alliance)', retrieved 21 February 2013, from http://www.cosatu.org.za/docs/discussion/2012/YouthWageSubsidy-SA.pdf.

Dar, A. & Tzannatos, P.Z., 1999, 'Active labor market programs: A review of the evidence from evaluations', Social Protection Discussion Paper, 9901, World Bank, Washington, DC.

Democratic Alliance (DA), 2012, 'Youth wage subsidy now', retrieved 23 February 2013, from http://www.da.org.za/newsroom.htm?action=view-news-item&id=10688.

Fine, B. & Rustomjee, Z., 1996, *The political economy of South Africa: From minerals-energy complex to industrialization*, Westview Press, Boulder, CO.

Fine, B. & Milonakis, D., 2009, *From political economy to economics*, Routledge, Abingdon.

Freund, B., 2007, 'The end of apartheid and the emergence of the BEE elite', *Review of African Political Economy*, 34(114), 661–678.

Hinks, T., 2004, 'Changing nature of work and a-typical forms of employment in South Africa', National Institute for Economic Policy, Commissioned by the South African Department of Labour.

International Labour Organisation (ILO), 2011, *Tackling youth employment challenges: An overview of possible actions and policy considerations*, International Labour Office, Geneva.

Jaenichen, U. & Stephan, G., 2007, 'The effectiveness of targeted wage subsidies for hard-to-place workers', IAB, Discussion Paper, 16.

Johnson, R.W., 2012, 'The Democratic Alliance: Liberal or nothing', *Politicsweb*, retrieved 22 February 2013, from http://www.politicsweb.co.za/politicsweb/view/politicsweb/en/page71619?oid=261023&sn=Detail.

Kamhunga, S., 2012, 'Cash hoard tops R530bn as firms hesitate to invest amid uncertainty', *Business Day*, retrieved 25 February 2013, from http://www.bdlive.co.za/articles/2012/06/18/cash-hoard-tops-r530bn-as-firms-hesitate-to-invest-amid-uncertainty.

Katz, L.F., 1996, 'Wage subsidies for the disadvantaged', NBER Working Paper No. 5679, National Bureau of Economic Research, Cambridge, MA.

Kluve, J., Lehmann, H. & Schmidt, C., 2007, 'Disentangling treatment effects of active labor market policies: The role of labor force status sequences', DARRT Working Paper, 620.

Larsson, L., 2003, 'Evaluation of Swedish youth programmes', *Journal of Human Resources*, 38(4): 891–927.

Leetma, R., Vôrk, A., Eamets, R. & Kaja, S., 2003, 'Evaluation of active labour market programmes in Estonia', Working Paper Praxis, Centre for Policy Studies, Tallinn.

Leon, T., 2013, 'The key dilemma facing the DA', *Politicsweb*, retrieved 22 February 2013, from http://www.politicsweb.co.za/politicsweb/view/politicsweb/en/page71619?oid=352724&sn=Detail&pid=71619.

Levinsohn, J., 2007, 'Two Policies to Alleviate Unemployment in South Africa', Ford School of Public Policy University of Michigan and NBER, retrieved 23 February 2013, from http://levinsohn.commons.yale.edu/files/2010/10/Policies_SA.pdf0----

Marrian, N., 2012, 'ANC policy meeting rejects wage subsidy', *Moneyweb*, retrieved 28 February 2013, from http://www.moneyweb.co.za/moneyweb-political-economy/anc-policy-meeting-rejects-wage-subsidy.

Marx, I., 2005, 'Job subsidies and cuts in employers' social security contributions: The verdict of empirical evaluation studies', paper presented at the Conference on Changing Social Policies for Low-income Families and Less-skilled Workers in the EU and the US, University of Michigan, Ann Arbor, US, 7–8 April.

Mlatsheni, C. & Rospabe, S., 2002, 'Why is youth unemployment so high and unusually spread in South Africa?', Working Paper 02/65, Development Policy Research Unit, University of Cape Town.

Mosoetsa, S., 2011, *Eating from one pot*, Wits University Press, Johannesburg.

Muller, S, 2014, 'Modelling the Economy', *Progressive Economics Bulletin 3*, retrieved March 2014, from http://www.aidc.org.za/programmes/political-economy/progressive-economic-bulletin.html.

Munusamy, R., 2013, 'DA's future: When Ubuntu, Africanness and Liberalism collide', *Daily Maverick*, retrieved 22 February 2013, from http://www.dailymaverick.co.za/article/2013-01-25-the-das-future-when-ubuntu-africanness-and-liberalism-collide/.

National Planning Commission (NPC), 2011, *National Development Plan*, NPC, Pretoria.

National Treasury (NT), 2011, 'Confronting youth unemployment: Policy options for South Africa', Discussion Paper, NT, Pretoria.

National Treasury (NT), 2012, 'Medium-term budget policy statement', retrieved 25 February 2013, from http://www.treasury.gov.za/documents/mtbps/2012/.

O'Leary, C.J., 1998, 'Evaluating the effectiveness of active labour programs in Poland', Technical Report, 98-012, Upjohn Institute, Kalamazoo, MI.

Organisation for Economic Co-operation and Development (OECD), 2013, *Report*, OECD, Paris.

Reddy, N. & Strauss, I., 2012, 'Treasury evidence on the youth wage subsidy suspect', *South African Labour Bulletin*, 36(3), 45–48.

Redelinghuys, M., 2013, 'The liberal project and DA discontent', *Thoughtleader*, retrieved 22 February 2013, from http://www.thoughtleader.co.za/mariusredelinghuys/2013/02/05/the-liberal-project-and-da-discontent/.

Roberts, M., 2013, 'The global crawl', retrieved 18 February 2013, from http://thenextrecession.wordpress.com/2013/01/22/the-global-crawl/.

Rossouw, M., 2011, 'Youth wage subsidy not cast in stone', *Mail and Guardian*, retrieved 28 February 2013, from http://mg.co.za/article/2011-02-25-youth-wage-subsidy-not-cast-in-stone.

Schünemann, L., Lechner, M. & Wunsch, C., 2011, 'Do long-term unemployed workers benefit from targeted wage subsidies?', Discussion Paper, 2011-26, Department of Economics, University of St. Gallen, Gallen.

Seekings, J. & Nattrass, N., 2005, *Class, race and inequality in South Africa*, Yale University Press, New Haven, CT.

Smith, C., 2006, *International experience with worker-side and employer-side wage and employment subsidies, and job search assistance programs: Implications for South Africa*, Employment Growth and Development Initiative, HSRC Press, Pretoria.

Southall, R., 2007, 'Ten propositions on black economic empowerment in South Africa', *Review of African Political Economy*, 34(111), 67–84.

Statistics South Africa (StatsSA), 2012, *Quarterly labour force survey*, Quarter 4, http://www.statssa.gov.za/publications/P0211/P02114thQuarter2012.pdf.

Stockhammer, E., 2011, 'Wage-led growth: An introduction', Economics Discussion Papers, Kingston University London, retrieved 21 February 2013, from http://eprints.kingston.ac.uk/22985/.

Surender, R., Noble, M., Wright, G. & Ntshongwana, P., 2010, 'Social assistance and dependency in South Africa: An analysis of attitudes to paid work and social grants', *Journal of Social Policy*, 39(2), 203–221.

Theron, J., Godfrey, S. & Lewis, P., 2005, 'The rise of labour broking and its policy implications', Development and Labour Law Monograph Series, 1/2005, Institute of Development and Labour Law, University of Cape Town.

Valodia, I., Libani, L., Skinner, C. & Devey, R., 2006, 'Low-waged and informal employment in South Africa', *Transformation: Critical Perspectives on Southern Africa*, 60, 90–126.

Van Holdt, K. & Webster, E., 2005, 'Work restructuring and the crisis of social reproduction', in E. Webster & K. von Holdt (eds.), *Beyond the apartheid workplace*, University of KwaZulu-Natal Press, Scottsville.

Webster, E., Benya, A., Dilata, X., Joynt, C., Ngoepe, K. & Tsoei, M., 2008, 'Making visible the invisible: Confronting South Africa's decent work deficit', HSRC, DPRU & SWOP, Research Report commissioned by the Department of Labour of South Africa.

Wegerif, M., Russell, B. & Grundling, I., 2005, *Still searching for security: The reality of farm worker evictions in South Africa*, Nkuzi Development Association, Polokwane North.

World Bank, 2012, *World development report 2013: Jobs*, World Bank, Washington, DC.

11

EPISTEMIC INJUSTICE

and the Struggle for Recognition: Human Dignity and the Recognition of Prior Learning

Elana Michelson

It is an essential attribute of personhood to be able to participate in the spread of knowledge . . . and to enjoy the respect enshrined in the proper relations of trust that are its prerequisite

— Iris Marion Young

The master's tools will never demolish the master's house

— Audre Lorde

Introduction

The recognition of prior learning (RPL) has been a vehicle for assessing the informally gained experiential learning of workers in many countries in the world (Evans 2000; Michelson & Mandell 2004). Approaches have ranged from the liberal humanist cultivating of self-knowledge and self-affirmation to the instrumentalist testing of workers against the needs of global capital, with the common denominator being a focus, humanistic or technicist as the case may be, on the atomised individual.

The introduction of RPL to South Africa held out the promise of a different approach, namely, the use of RPL as a mechanism for collective social and economic redress. Recognition of prior learning was intended to affirm workers' knowledge by recognising broad equivalencies between informally and formally gained expertise, eliminating 'artificial hierarchies' of prestige (DoE 1995:2,5) and creating parity of esteem among unequally valued communities of knowledge

and practice. The expectation was that RPL would 'open doors of opportunity for people whose academic or career paths [had] been needlessly blocked because their prior learning… [had] not been assessed and certified' (ibid). This, in turn, would 'facilitate access… mobility and progression' and thus 'accelerate the redress of past unfair discrimination' (ibid:2,2). While this rhetoric tellingly stressed mobility for individuals, it also reflected a sense that workers as a whole, and black workers in particular, might be affirmed in their human dignity and economic rights by RPL.

Indeed, within the union movement whose vision RPL originally was in South Africa, the ability of RPL to serve both individual and collective ends appeared to be taken for granted. It can be used to redress past imbalances by recognising skills gained in working life and by assisting to develop a culture of learning.

- At the level of the society as a whole, RPL aims to build capacity so that workers feel part of and can contribute to the broader economic and community environment.
- At the level of the workplace, RPL can be part of affirmative action initiatives, as it seeks to redress the imbalances of past injustices in education and promotion in the workplace.
- At an individual level, RPL can 'fast track' people by acknowledging what they already know, and thus can open new opportunities for them. This can assist to develop each person's abilities – and can be affirming and motivational and can build confidence. It can also validate the work people do by improving their situation with better pay and working conditions (COSATU 2000:3).

An extensive critique now exists of what has thus far proved a disappointing history for RPL, the most thorough contributions to which are Blom, Parker and Keevy's (2007) background report to the Organisation for Economic Cooperation and Development (OECD) and, because it touches on so many related issues, French's (2009) discussion of the NQF and its worlds. These two critiques engage multiple issues that impacted the ability of RPL mechanisms to further individual and collective ends. Organisationally, these included a discrepancy between policies on paper and the realities of implementing them; the development of an ornate but dysfunctional bureaucratic labyrinth; and a lack of funding mechanisms. Conceptually, RPL was caught between two contending but equally simplistic notions concerning knowledge, both of which served to keep workers' knowledge invisible: the 'isi-SAQA'[1] of unit standards that confused the map with the territory and the rigid insistence on the part of many academics on the dualistic incommensurability between formal and informal knowledge. Overly ambitious schemes matched by lack of capacity to implement them; naivety – or downright hostility – concerning the attendant difficulties of analysing knowledge systems; and illusions concerning the success of similar structures internationally all set the stage for disappointment.

The technicist discourse in which RPL now finds itself is, of course, also the product of many of the same developments within neoliberalism as are treated

elsewhere in this volume, including the assumed relationship between individual skills attainment and employability, the general rewriting of social goals in service to global capital, and the narrowing of approaches to education to technicist and corporatist ends. In the case of RPL, these were exacerbated by the ambivalence of workers and trade unionists concerning the relationship between workers' current knowledge and their need for a variety of forms of education for both critical political engagement and the global economy. French (2009:25) maintains that the Congress of South African Trade Unions (COSATU), South Africa's historically black trade union federation, faced a 'conundrum' vis à vis workers' knowledge, in which both deep wells of knowledge and skill in the workplace and the devastating effects of lack of formal education were the stuff of daily life.

> Insight into the poor general readiness of workers for training had to be set against the huge respect that many poorly-educated workers deserved. Many were highly skilled in very specific ways, without the credentials. Some could be brilliantly resourceful in solving situated problems – technical, communal, interpersonal, ethical – where they might put those with high levels of formal education in the shade for wisdom and endurance. This situation became intolerable given the formal lack of access to recognition of rich capabilities.

It can thus be argued that RPL has floundered on the shoals of an unwieldy, underfunded system and a series of misconceived initiatives. Alternatively, it can be argued that RPL's proponents have had to contend with the power of neoliberal discourses and structures, ambivalence concerning the status of workers' knowledge, and the overwhelming challenges and lack of sufficient capacity among those charged with furthering the interests of workers. Whatever the reasons, with a number of important and often impressive exceptions (Gunning, Van Kleep & Werquin 2008),[2] RPL in the South African workplace has failed to serve any of its myriad and often-conflicting goals, neither rationalising the workforce along neoliberalist lines nor acknowledging and rewarding the 'manifold forms of heritage' (Nzimande 2012:6) through which value has been created and human life sustained.

As Sitas (2011) has noted, such failures reflect, not a technical problem, but a deeply sociological one. Recognition of prior learning is embedded in questions of social visibility and cultural respect; in the relationships between knowledge and power; and in the value-laden discourses within which human worth and socially useful knowledge are judged. As a vehicle of assessment and reward in a highly uneven power-driven field, RPL is a classic case in point for the argument that epistemology (ie, theories of knowledge) is politics by other means.

There are certain indications that RPL is currently the subject of renewed attention as both a focus of public policy and a site of contestation. Such recent documents as the DHET's *Green Paper for Post-school Education and Training* (2012); Sitas and Mosoetsa's *Report Commissioned by the Minister of Higher Education and Training for the Charter for Humanities and Social Sciences* (2011); the issue of the *SAQA Bulletin* (2012) that followed SAQA's 2011 Conference on RPL; and, most recently,

the DHET's *Ministerial Task Team on a National Strategy for the Recognition of Prior Learning: Final Report Incorporating a Proposal for the National Implementation Strategy* (2013), all contain substantive political and theoretical frames for RPL.

None of these new documents, of course, guarantees a new approach to RPL that will more adequately respond either to initial expectations or to the current and ongoing need. That said, they further both a renewed commitment to RPL and, at least potentially, a progressive agenda. The report of the Ministerial Task Team (DHET 2013:10), for example, notes that RPL has always had two goals – social justice on the one hand, and access to opportunities for lifelong learning for individuals, on the other. In raising the question of whose knowledge will be privileged in any RPL practice, it sees RPL as both recognising the 'complex relationships between different forms of knowledge' and helping to 'mediate these contradictions in constructive and emancipatory ways'.

As a contribution to the development of a more politically salient and theoretically sound framing for RPL, I want to focus on two of the issues that play out in the too-brief history traced above, namely: the question of individual versus collective aspirations; and the failure to engage the complex relationship among formal and informal cultures of knowledge. Both these issues are legitimately difficult. Given the current configuration, it is not at all clear how the relationship might be most powerfully articulated between individual mobility and class equity in either the South African or global context. Nor is there anything easy about the hard work of delineating workers' knowledge, with its tacit and implicit theory, alternative systems for measurement and analysis, and complex relationship to formal literacies.

Together, however, these two issues form what might be considered the crux of the original vision for a South African RPL: epistemological justice in the service of economic justice. In what follows, I will invoke an earlier moment in the history of RPL in which two possibilities seemed real, namely, the furthering of both epistemic and economic justice by rendering workers' knowledge visible, and joining individual aspirations for education and employment to class aspirations for dignity and equity.

To engage these issues and, hopefully, begin a conversation that takes RPL out of its current trajectory of disappointed expectations, I will bring RPL into dialogue with Honneth's work on recognition and Fricker's work on epistemic justice. I then will trace the outline of an approach to RPL that puts both workplace knowledge and the mapping of that knowledge back in the hands of workers, thus holding out the promise of a collective recognition of workers' epistemological agency.

Honneth's Delineation of Recognition

Honneth (1995) argues that a healthy relationship to self depends on three distinct forms of interpersonal recognition by others, namely: love, rights, and what he refers to variously as solidarity, accomplishment, and achievement. The first form of recognition, which is not the concern of this chapter, begins in infancy with the

individual's recognition of self as a vulnerable, separate but interdependent physical being entitled to care and affection. The second and third forms of recognition, which Honneth sees as developing less within structures of intimate relationships than within social and economic history,[3] concern individuals' recognition of their equality with others on the one hand, and their uniqueness on the other.

Honneth (1995) traces the emergence of these two latter forms of recognition to the early modern period. He argues that the forms of recognition that obtain in traditional societies rest on a social structure in which individual and collective identity are virtually identical; people are granted recognition as members of a particular status group in a fixed social hierarchy. With the emergence of capitalism, when individual accomplishment is at least legally uncoupled from inherited position, two forms of recognition branch out of that single, fixed public identity. On the one hand, people become the bearers of rights under a social contract that recognises their sameness, that is, their equal human status as moral agents within a political order. On the other hand, people can be recognised for their uniqueness, that is, their achievements as atomised individuals. A just society is one in which conditions allow for 'a form of mutual recognition . . . in which each individual is affirmed not only as a member of his or her community, but just as much as a biographically individuated subject' (ibid:81).

Honneth knows, of course, that this last form of recognition is not distributed equally across society because, in the racialised and gendered capitalist division of labour, not all activities and achievements are deemed equally worthy of respect. He sees economic maldistribution as stemming from a distorted view of which activities and qualities are valuable; what is recognised as skill as opposed to innate nature; what is seen to constitute productive work; and what the institutional and cultural frames are that determine social esteem. In part, because of the emphasis he places on distorted values, he sees the struggle for economic justice as a form of struggle for recognition, that is, the struggle against the systemic devaluing of a person's achievements and the achievements of his/her group.

There are a number of aspects of this formulation that are helpful in thinking about the valuing of knowledge at the workplace in general and the recognition of prior learning specifically. Firstly, Honneth's attention to the term 'recognition' is itself suggestive. The English word 'recognition' is ambiguous; it can mean, epistemologically, 'to identify something as already known' or, ontologically, 'to grant someone or something affirmative status'. German has two distinct words for those two uses of the English word, *Wiedererkennung* and *Anerkennung*, respectively (ibid:viii). Honneth's work is on *Anerkennun*, that is, recognition as affirmative ontological status.

Anerkennung non-formalen und informellen Lernens, the generally accepted term for RPL in German, employs the word for recognition in its ontological sense. It thus points to an aspect of RPL that is obfuscated by the dual meanings of the English term. Specifically, it problematises the conventional explanation given to adult learners that RPL is not a judgment of their human worth (ie, recognition in

the ontological sense), but rather an assessment of their learning according to one particular, limited set of epistemological criteria.

This oddity of translation raises the question of the relationship between RPL and the ways in which, according to Honneth (ibid:95), individual and collective self-worth is constituted through what he calls, in increasingly wider concentric human contexts, love, rights, and achievement. What is the relationship between the epistemological visibility and respect a person gains as a bearer of socially valued knowledge and the kind of ontological recognition that is implied in such English phrases as 'the recognition of the rights of all peoples to self-determination' or, to draw on the initial post-apartheid *White Paper on Education and Training* (DoE 1995:3,3), 'the recognition of the inalienable worth, dignity, and equality of each person under the law'?

Secondly, Honneth (1995:133–134) reminds readers of the psychic damage caused by the public denigration of ways of life and ways of knowing:

> If this hierarchy of values is so constituted as to downgrade individual forms of life and manners of belief as inferior or deficient, then it robs the subjects in question of every opportunity to attribute social value to their own abilities or experience themselves as full-fledged social partners equally endowed with moral rights.

Writing at a time in which, for a variety of historical reasons, social struggles over the distribution of economic goods are seen to be declining relative to struggles for cultural respect,[4] Honneth (ibid) reframes recognition in terms that take us people beyond simplistic identity politics and into the realm of collective value judgments concerning what their goals are as a human community; how different ways of being contribute to their realisation; how specific human traits and abilities are perceived, measured, and rewarded; and how social status, political rights, and economic rewards are adjudicated.

Thirdly, although Honneth does not say as much, what he treats as questions of moral agency and moral standing are at least as well understood as epistemological ones. His second form of recognition especially, namely, the right to participate as an equal partner in public deliberations, requires that a person 'is recognised for having the capacity for autonomously forming judgments' (ibid:118–119). 'One must be able to suppose that these legal subjects have at least the capacity to make reasonable, autonomous decisions regarding moral questions' as rights-bearing human beings (ibid:114). This points readers specifically to the relationship between epistemological agency and human dignity and encourages them to consider the overlap between what Honneth calls misrecognition and what Fricker (2007:44) calls epistemic injustice, that is, the kind of injustice done to the person who is 'injured in her capacity as a knower'. To be 'degraded *qua* knower,' Fricker argues, is to be 'degraded *qua* human (ibid:6), 'wronged in an essential aspect of one's humanity' (ibid:44). In effect, Fricker invites readers to bring the epistemological and ontological meanings of 'recognition' together to explore the terms under which hidden and/or taken-for-

granted knowledges in the workplace might be rendered visible and how that might support struggles for social justice and gender and racial equity.

Recognition, Epistemic Justice, and Recognition of Prior Learning

I have a number of problems with Honneth's work, most notably his subsuming of struggles for redistribution under the heading of struggles for recognition, and in what follows I will draw on American political theorist Fraser's critique of Honneth on that specific point. That said, Honneth's work gives readers a vocabulary for talking about RPL that helps them to consider both the continued importance and current limitations of RPL and, more broadly, to reframe the discussion of RPL in terms of the relationship between economic and epistemic justice. To begin to engage with RPL in these terms, I will focus on three relationships, namely: between struggles for recognition and redistribution; between Honneth's second and third forms of recognition, that is, the collective recognition of human sameness and the individual recognition of achievement; and between testimonial and hermeneutic manifestations of epistemic injustice.

Redistribution versus recognition

Honneth (ibid:171), as has been seen, sees struggles over material goods such as wages as 'a specific kind of struggle for recognition in which the appropriate evaluation of the social contributions of individuals or groups is contested'. He cites labour historians such as EP Thompson as demonstrating that working class movements are never sparked by economic hardship alone, but rather are constituted 'within a horizon of moral experience that admits of normative claims to recognition and respect' (ibid:166).

The need to differentiate between struggles for recognition and redistribution is at the centre of the challenge to Honneth posed by Fraser (Fraser & Honneth 2003). Fraser argues that struggles for social justice are 'rooted at once in the economic structure and the status order of society' and 'involve injustices that are traceable to both'. Socially subordinated groups endure both maldistribution and misrecognition '*in forms where neither of these injustices is an indirect effect of the other, but where both are primary and co-original*' (ibid:19; italics in original). The struggle for social justice thus requires closely related, but separate, struggles for both economic restructuring and cultural revaluing.

If Fraser is correct, if these two dimensions of the struggle for social justice interweave continually and at multiple points but are irreducible to each other, then RPL can be understood as a central node in which the two come together, not least because of the ways in which a low-wage economy is justified by the negating of workers' knowledge and because of the mutually sustaining structures of cultural

devaluation and economic inequity. In other words, RPL can be understood as a demand both for economic recognition in the form of wages, working conditions, job titles, and access to education and promotion, and also as a demand for social and cultural recognition of a person's agency as a social actor whose ways of knowing and working are worthy of respect.[5]

Recognition as collective or individual

This, in turn, takes us back to Honneth's distinction between two forms of recognition, those of the moral and cognitive equality that makes people similar to others and the individual achievements that distinguish them from others. Recognition of prior leaning is conventionally understood to apply to the latter in the form of assessments of knowledge and skill that adhere in the individual. This is problematic in a context such as South Africa, where RPL must be understood as an attempt to redress, not only the misvaluing of individuals, but systemic social bias and inequity.

Honneth's treatment of racism and sexism is not always clear,[6] but by and large he treats them as distortions in the third category, that is, as misrecognitions of individual achievement based on a distorted perception of the value of what that individual contributes to the community. The kind of misrecognition that characterises viciously racist and sexist societies, however, which of course means any human society up to now, is much closer to the second kind of distortion, the one that denies the cognitive, moral, and epistemological capacity of some groups of people to engage equally in the public realm, 'the certain traits', in other words, that make us 'persons at all' (Honneth 1995:113). In societies such as South Africa, in which in historical discourses concerning lack of 'readiness' for modernity still haunt contemporary public debates (Chakrabarty 2000; Mamdani 1996), the precise question is whether or not oppressed groups have been recognised for their equal moral, cognitive, and epistemological worth. To portray working-class, anti-racist, anti-colonialist, and anti-sexist struggles as focused on recognition of individual achievement is to mislocate the depth in which oppressed groups are required to struggle for their 'full-fledged membership in the political [and human] community' (Honneth 1995:116).[7]

This suggests that, even under capitalist individualism, Honneth's second and third forms of recognition cannot finally be separated. It can therefore be understood that RPL as a demand, not only for upgrading jobs and wages based on individual achievement – the thing that RPL is currently set up to do, however ineffectively – but for redressing the collective disparagement of workers as the bearers of knowledge and expertise. Fricker (2007) makes the case that epistemic injustice is never purely an individual matter. It is based on a socially inculcated belief system concerning what particular kinds of people are to be trusted concerning particular kinds of things. Epistemic injustice systemically distorts the credibility of groups and individuals and runs from the credibility of literal testimony, at a trial, for example, to faith in the ability of an individual to do a certain job.

The question, then, becomes: Without disparaging the aspirations of individuals for economic betterment, how might RPL be a mechanism for recognition in terms of Honneth's second category of collective recognition? How, that is, might RPL be structured to redress historical forms of epistemic injustice; to recognise the collective knowledge-bearing agency of workers; and begin to create the conditions under which the knowledge of workers can be made visible, thereby challenging the disparagement and misrecognition of workers as a whole? How might an RPL practice be structured that would itself be affirming of workers as equal rights-bearing epistemological and social agents apart from the specific promotions, pay raises, and opportunities given to individual workers who 'pass' the RPL exercise?

Testimonial versus hermeneutic injustice

Part of the answer to that the above lies in a distinction that Fricker (2007:7) makes concerning two types of epistemic injustice, namely: testimonial and hermeneutic. In testimonial injustice, someone is wronged 'in their capacity as a giver of knowledge'. Their accounts of reality are dismissed, either because they are considered to be intellectually incompetent (women are irrational; Africans are superstitious) or because they are thought to be withholding accurate information (Jews are crafty; Asians are inscrutable). In hermeneutical injustice, on the other hand, someone is wronged 'in their capacity as a subject of social understanding' (ibid); that is, their accounts of reality are dismissed because the ways in which they construct knowledge are not valued or understood. This

> comes about when the knowledge practices are not grasped within the mainstream culture because of a gap...in our shared tools of social interpretation. ... People can be hermeneutically marginalised in that they are not allowed equal participation in the social practices through which things are given meaning' (ibid:6).

Resisting testimonial and especially hermeneutic injustice is not a matter simply of becoming what Fricker (ibid:5) calls 'virtuous listeners', that is, people who 'reliably succeed in correcting for the influence of prejudice'. The undermining of a speaker's credibility is inevitably constructed through and by the broader relationship between hearer and speaker; the forms of power that are enacted in and by that relationship; the kinds of people the listener and speaker are seen to be; and the communities they are understood to represent. Resisting epistemic injustice requires a systematic awareness of how the terms in which knowledge is recognised are written into and embodied in the language, conceptual categories, and persons of the not-only epistemologically entitled. It requires an openness to alternative explanatory frameworks for problem-solving, measurement, and analysis. Hermeneutic injustice especially adheres in ways of knowing and doing and in the structures of visibility and invisibility in which all of us are embedded; in the explanatory frameworks we use and the language in

which we use them; and in the relationships among languages, material structures, ways of knowing, and the forms of production and service that are called labour.

Because RPL is enacted against a background of both testimonial and hermeneutic injustice, RPL projects cannot fully succeed as long as they continue to marginalise the ways in which knowledge is actually produced, used, and shared in the workplace. That is, if the representations of knowledge through which workers are 'RPL'ed' are alien to their own knowledge-practices, then even being found competent entails a lack of recognition. This is because competence is being implicitly defined in terms of extrinsic standards of judgment that demean the enactments of knowledge through which workers lay claim to themselves as knowledgeable. In other words, while I do not agree with Honneth that a struggle for job reclassification and higher wages must be seen as a subset of the struggle for recognition. However, I do believe what is in effect the inverse, that RPL cannot promote epistemic justice without engaging with forms of recognition that are both ontological and epistemological and that recognise workers' knowledge in its own hermeneutic terms.

As indicated previously, the status of workers' ways of knowing in South Africa is a difficult and contentious issue. The various perspectives in this debate reflect what is certainly a complex interweaving of motives, values, assumptions, and personal and collective histories. One strain within them, however, is the devaluing of workers' knowledge and, to be clear, the knowledge-practices of Africa, that workers and their representatives share with the broader society. I would argue that the debate concerning RPL within the labour movement and the left draws both on legitimate aspirations for access to the power of professional and technological knowledge *and* on what Mudimbe (1988:6) has called the 'already too well-known evolutionary hallucination' that Africans', and in this case, workers' ways of knowing have little validity in their own right and can only be validated using explanatory systems, vocabularies, and forms of measurement imposed from outside.

Relocating RPL

This chapter, among other things, is an attempt to rehearse the need for RPL projects in the South African workplace that will grapple with epistemic injustice in both its testimonial and hermeneutic varieties and with recognition in both the ontological and epistemological senses of the word. It is necessary to begin to envision forms of RPL that can recognise the collective knowledge-bearing agency of workers and begin to create the conditions under which the knowledge of workers can be made visible.

What might an RPL exercise look like that began to address both testimonial and hermeneutic justice and both of Honneth's forms of social recognition? RPL takes place within structures of epistemic authority that are part of the matrix of economic power relationships and racialised and gendered global inequities. Simultaneously, it enters into a contentious politics of knowledge that is currently pitting critical

race theory, feminist epistemology, indigenous knowledge systems, materialism and neo-Marxism, and postmodernism against conventional empiricist and positivist knowledge practices. A revisioned RPL is thus a huge question, and this short chapter cannot begin to do it justice.

That said, it is at least arguable that, if the politics of knowledge that characterised modernity have a single paradigmatic location, that location is the workplace, using 'workplace' narrowly for the moment as an organised space in which some people give other people money to perform various tasks in the formal economy. Taylorism to the contrary, disparate knowledge systems interact in the workplace on a daily basis, with marginalised knowledge systems relied upon and taken for granted at the same time they are denied. For that reason, ways might be found to relocate the recognition of workplace knowledge within the workplace itself, drawing on the communities of trust, mentorship, and respect through which workers both enact their expertise and affirm each other's human dignity in the face of a dehumanising environment. I want to end this discussion, but hopefully begin a conversation, by pointing briefly to some of the dimensions of an alternative RPL.

Understanding RPL as a form of power-laden ethnographic research

Recognition of prior learning in any form must be understood to be a type of research based, as all research is, on some explicit or implicit framework for judgment. Like any research project, it includes:

- a conceptual framework and rules of evidence established by some people and not others;
- a variety of role-players, including those designated as a 'researcher' and given the authority to label, interrogate, and evaluate;
- a selection of methodologies for accumulating data;
- a system for coding and categorising the data obtained;
- rules for what counts as evidence; and
- standards for determining credibility and validity.

All too regularly, RPL in South Africa has taken the form of ethnographic research in power-laden postcolonial contexts, in which those being studied have historically been precluded from naming the terms of the research for themselves (Chilisa 2012:7). This is made worse by its being conducted within a workforce that still largely mirrors the racial structure of legal apartheid as well as the gendered division of labour.

The same issues concerning research currently being raised by critical social theory must therefore be raised concerning RPL. What is the relationship between the researcher and the objects of research? How do various stakeholders understand

the purpose of the research? How are the data accumulated and coded? Who is empowered to analyse the data and legitimate the analysis? To whom do the data belong? Negotiating those issues fully and transparently has to be the first step in any alternative RPL exercise.

Replacing pre-determined and imposed categorisations of knowledge

The existence of pre-determined structures of knowledge like those inscribed in unit standards must be carefully examined for their potential hermeneutical injustice. Unit standards – the word standard is key here – assume that there is only one legitimate explanatory framework for organising, interpreting, and understanding a body of knowledge. They render alternative analytical frameworks invisible because structures of underlying knowledge and interpretive strategies are assumed to be set. Moreover, they presume a particular relationship between things called theory and practice; specific outcomes and critical cross-field outcomes; and practical knowledge and essential embedded knowledge. For that matter, they assume that we know what we are talking about when we use words like 'essential', 'field', and 'outcome', each of which, in classic Foucauldian fashion, constructs the very phenomenon it purports to explain. That means, among other things, that when the terms of recognition are those of the historically privileged – written into and embodied in the language, conceptual categories, and persons of the powerful – what is on offer, at best, is individual, but not collective, recognition and testimonial, but not hermeneutic, epistemic justice.

Drawing on communities of shared expertise

Fricker (2007) makes the point that people's membership in their own communities, in which they are taken to be credible sources of knowledge, not only creates the space for alternative interpretations of phenomena, but provides the basis for psychological resistance to epistemic injustice and is thus vital to personal and collective resilience. Trustful conversation – the sharing in dialogue in which one believes in the credibility of others and is believed to be credible in return – is 'the basic mechanism by which the mind steadies itself' (ibid:52) because people are affirmed as subjects of knowledge and thus of essential human worth. An alternative approach to RPL that sought to affirm workers' knowledge would begin with the networks of respect that circulate in workplaces based on who really knows; who creates new knowledge and more efficient and effective practices; who really teaches and advises; and who passes on traditions of skill and expertise.

An alternative approach to RPL would draw on workers themselves to articulate criteria of evidence and expertise and the structure of knowledge as it moves within and informs their daily practices. It would begin with a group of workers brought together to frame the terms of the assessment by articulating the categories and

characteristics through which knowledge and skill are understood at their workplace. How is the work organised, and according to which grouping of responsibility and expertise? What constitutes best practice and 'good-enough' practice? What makes a worker trustworthy in a particular job? Similar questions might be asked concerning what is usually referred to as informal or tacit theory. How are things explained among and between workers? How are cause and effect understood? Which ideas have predictive power? How are problems identified and solved? Finally, through which informal networks is knowledge created and shared? Who are the mentors everyone turns to when there is a problem? What does that person know?

Building the collective recognition of workers as epistemological agents into the design of the RPL exercise, not its looked-for results

The key to such a project lies in workers' collective participation in framing the epistemological and social terms through which individuals will be assessed. Because it would recognise workers as cognitive agents in the very organisation of the project, and because it would draw on the networks of trust and credibility that workers give each other, it would grant recognition of Honneth's second type before the first worker was 'RPL'ed'. In drawing on local networks of expertise at all stages of design and implementation, such a project, moreover, would address both of Fricker's forms of epistemic injustice, hermeneutic as well as testimonial; giving workers a voice in framing the terms of assessment not only affirms them as knowing and trust-worthy speakers, but recognises the conceptual framework through which they understand what they do. Respect for language is key here, not only in the literal sense of conducting assessments in the language(s) of the workplace, but also in the forms of communication and explication in which knowledge is carried in culturally specific forms.

Conclusion

The possibility for such an approach to RPL is open to question on multiple levels. It is not yet clear whether the recognition of alternative knowledges can be achieved in South African society which is largely stratified by race, class, and gender. Nor is it clear whether alternative epistemological practices can be granted the status of 'knowledge' in the face of entrenched interests, both academic and corporate, in the current 'knowledge economy'. Finally, while this chapter has focused on wage labour in the formal economy, the question remains concerning the ability of RPL exercises to uncover the 'creative and cognitively enhanced activities' (Sitas 2011:18) through which life is sustained 'among people who have neither economic nor educational forms of capital' but who 'form instrumental defensive combinations, create cultural

formations, and create networks of solidarity and care' through family, community and organizational life' (ibid).

At the time of writing, the next moves in the development of RPL are likely to stem from the *Report* of the RPL Task Team to the Minister for Higher Education and Training (DHET 2013). That report is both hopeful and worrisome for having, in effect, two sets of recommendations: one political and epistemological and the other administrative and bureaucratic. The former, cast as recommendations for practices that take place in the South African context, include:

- an understanding of RPL as a power- and culture-laden social process, rather than simply a technical exercise;
- explicit interventions to overcome the cultural and organisational legacy of the apartheid workplace;
- respectful attention to workers' knowledge, indigenous knowledge and other knowledge traditions outside the formal, Eurocentric academy (ibid:31).

That same group of recommendations notes the need: to resource the direct and indirect costs of RPL; to understand the pedagogical dimensions of RPL; to develop broad expertise; and to guarantee access to learning opportunities. Other progressive recommendations for implementation include the involvement of the public sector workforce through the Department of Public Service and Administration (DPSA) and the Public Administration Leadership and Management Academy (Palama); the development of RPL projects in the agricultural sector that engage issues of 'community development, indigenous knowledge and food security' (ibid:109); and the need to professionalise RPL practitioners in a way that includes representatives from multiple social locations, not only that of formal education. A proposed national RPL institute also has the potential to bring trade union-, community-, and activist-driven agendas to bear on future developments.[8]

Recognition of prior learning sits, uncomfortably, at the interface of inequity and aspiration, both a 'soft' intervention that does not appear to challenge capital as such and a radical intervention into the discourses and structures that justify its inequities. At its best, it asks us to rethink the relationships around which human status revolves, namely: the dignity of work, the meaning of socially useful knowledge, and parity of merit and respect. Thus, while perhaps overly idealistic, the hopes placed in RPL in the mid-1990s were not misplaced, since RPL speaks to the individual's need to be recognised, both ontologically and epistemologically, both culturally and economically, as the bearer of useful knowledge and a contributor to the collective good.

Notes

1. As far as I know, this felicitous phrase was originally Colin Bundy's.

2. The OECD's review report on RPL in South Africa noted 'islands of good practice' but also noted the relative isolation of 'commendable' practitioners (Gunning, Van Cleef & Werquin 2008:23).
3. This, of course, ignores the ways in which intimate relationships are also part of social and economic history.
4. Honneth has in mind the rise of identity politics and the relative decline of the world socialist movement. These are, of course, highly contested matters and beyond the scope of this chapter, thus I will not try to engage them here.
5. In her more recent work, *Scales of justice: Reimagining political space in a globalizing world* (2010), Fraser adds a third 'R,' representation, in order to add an explicitly political dimension to the economic and cultural dimensions indicated by redistribution and recognition. This third dimension, she argues, is necessitated by injustices that foreclose the participation of those who are not counted as members within a given, bounded political space in spite of the fact that they have much at stake in decisions being made (ibid:6).
   Specifically, Fraser argues that, while recognition and redistribution are, of course, political, globalisation has destabilised the viability of the political structure within which claims to recognition and redistribution are adjudicated. The typical case in point is one in which decisions made in a powerful nation-state deeply impact the lives of those in another, less powerful region: 'I mean political in a more specific, constitutive sense, which concerns the scope of the state's jurisdiction and the decision rules by which it structures contestation. The political in this sense furnishes the stage on which struggles over distribution and recognition are played out. Establishing criteria of social belonging, and thus determining who counts as a member, the political dimension of justice specifies the reach of those other dimensions: it tells us who is included in, and who is excluded from, the circle of those entitled to a just distribution and reciprocal recognition…' (ibid:17).
   I have not chosen to engage this third dimension directly in this chapter because RPL currently remains an intra-state issue, the exception being the need within the European community to determine the commensurability of employment qualifications gained in disparate member nations. The success of RPL, to be sure, is vitally dependent on who has a seat at the table and the 'inclusion or exclusion from the community of those entitled to make justice claims on one another' (ibid). But 'the procedures that structure public processes of contestation' (ibid) concerning RPL in South Africa are currently a matter of struggle among South African stake-holders, most pressingly, I would argue, to be taken up by the trade union movement and its allies.
   Questions of distribution and agency under capitalism are, of course, always political in Fraser's sense because privatised and profit-driven decision-making excludes most of those affected from membership in the decision-making community. That said, for purposes of this discussion at least I will take the political to adhere sufficiently within struggles for redistribution and recognition, part of the ongoing tensions between capitalism and the formally democratic state.
6. On the one hand, Honneth (1995) identifies social biases such as racism and sexism as misrecognitions of the third sort, which is located in the individual, but he also discusses them as a denigration of group cultural characteristics. It is as if, having distinguished individual accomplishment from group membership, he remerges them in what is, in effect, a collective whose need for recognition is still individual. Aside from the incoherence of this, it implies that even those whose individual contribution is demeaned because of membership in demographic category group can still respect herself or himself as an equal member of the body politic, a notion that I believe needs to be challenged. At one point, Honneth (ibid:120–121) himself seems to recognise this. Arguing that the psychological importance of this form of recognition is best viewed by

considering the devastating effects of its absence, he refers the reader to accounts from the US civil rights movement of the 1950s and 1960s of 'the psychological significance of legal recognition for the self-respect of excluded collectivities'.

7. While Honneth's (1995:84) theory of human development is deeply social, holding the social world as prior to the individual and his/her relationship-to-self as constituted through his/her relation to others, he sees the evolution of the moral society in the highly individualised terms of 'increasing personal autonomy' and individual self-realisation. He therefore sees the injury as first and foremost individual and psychological. Fraser, on the other hand, argues that we must examine systemic patterns of misrecognition for their social, not only their psychic, effects. According to Fraser (2003:29), 'misrecognition is neither a psychical deformation nor an impediment to ethical self-realization. Rather, it constitutes an institutional relationship of *subordination* and a violation of justice . . . that prevent one from participating as a peer in social life'. Thus, 'recognition is a remedy for social injustice, not the satisfaction of a generic human need' (ibid:45).
8. At the same time, because the task team recommendations embed future action within current statutory structures such as the Quality Councils and SETAs, the possibility exists that RPL will remain a technicist and bureaucratic exercise. The question of who and what RPL will serve – employers or workers, disparate individuals or workers as a whole, global capital or social justice – is an open one, but that very openness provides an important space. It will be up to progressive workers and trade unions, academics, and community activists to make RPL a site of ongoing struggle for 'reducing inequalities in society that are based on privileging certain forms of knowledge over others', as the *Report* (DHET 2013:10) has it, and requiring 'people to be formally recognised and honoured for what they already know'.

References

Blom, R., Parker, B. & Keevy, J., 2007, 'The recognition of non-formal and informal learning in South Africa', country background report prepared for the OECD thematic review on recognition of non-formal and informal learning, Hatfield, SAQA.

Chakrabarty, D., 2000, *Provincializing Europe: Postcolonial thought and historical difference*, Princeton University Press, Princeton, NJ.

Chilisa, B., 2012, *Indigenous research methodologies*, Sage, Los Angeles, CA.

Congress of South African Trade Unions (COSATU), 2000, *Learning and work: RPL*, COSATU, Johannesburg.

Department of Higher Education (DoE), 1995, *White Paper on Education and Training*, DoE, Pretoria.

Department of Higher Education and Training (DHET), 2012, *Green Paper for Post-school Education and Training*, DHET, Pretoria.

Department of Higher Education and Training (DHET), 2013, *Ministerial Task Team on a National Strategy for the Recognition of Prior Learning: Final Report Incorporating a Proposal for the National Implementation Strategy*, DHET, Pretoria.

Evans, N. (ed.), 2000, *Experiential learning around the world: employability and the global economy*, Kingsley, London.

Fraser, N., 2010, *Scales of justice: Reimagining political space in a globalizing world*, Columbia University Press, New York, NY.

Fraser, N. & Honneth, A., 2003, *Redistribution or recognition? A political-philosophical exchange*, Verso, New York, NY.

French, E., 2009, *The South African NQF and its worlds: Thinking for the future about context, power and contestation in the story of the NQF*, SAQA, Waterkloof.

Fricker, M., 2007, *Epistemic injustice: Power & the ethics of knowing*, Oxford University Press, New York, NY.

Gunning, D., Van Kleef, J. & Werquin, P., 2008, *Recognition of non-formal and informal learning: Country note for South Africa*, OECD, Paris.

Honneth, A., 1995, *The struggle for recognition: The moral grammar of social conflicts*, MIT Press, Cambridge, MA.

Mamdani, M., 1996, *Citizen and subject: Contemporary Africa and the legacy of late colonialism*, Princeton University Press, Princeton, NJ.

Michelson, E. & Mandell, A., 2004, *Portfolio development and the assessment of prior learning*, Stylus, Sterling, VA.

Mudimbe, V.Y., 1988, *The invention of Africa: Gnosis, philosophy, and the order of knowledge*, Indiana University Press, Bloomington, IN.

Nzimande, B.E., 2012, 'Foreword', in A. Sitas & S. Mosoetsa, *Report Commissioned by the Minister of Higher Education and Training for the Charter for Humanities and Social Sciences: Final Report*, DHET, Pretoria.

Sitas, A., 2011, 'Why are we so disabled? Higher education and the RPL challenge', in proceedings of National RPL Conference: Bridging and Expanding Existing Islands of Excellent Practice, SAQA, Waterkloof.

Sitas, A. & Mosoetsa, S., 2011, *Report Commissioned by the Minister of Higher Education and Training for the Charter for Humanities and Social Sciences: Final Report*, DHET, Pretoria.

South African Qualifications Authority (SAQA), 2012, 'Recognition of prior learning in South Africa: Taking RPL to scale', *SAQA Bulletin*, 12(3).

12

(RE)CLAIMING WORKERS' EDUCATION

Sheri Hamilton

Introduction

This chapter explores the meaning of workers' education; the lack of clarity about its conceptualisation; its uses in contemporary policy and practice; and the challenges facing working class organisations. All of these challenges are bedevilled by the most recent and protracted crisis of global capitalism that commenced in 2008. This crisis has compelled workers and their organisations to rethink and challenge the accepted orthodoxies of the past. There is a growing confidence among workers as evidenced in the increasing levels of struggles in which workers have played a leading role. These include the anti-globalisation movement of the late 1990s; the anti-war movement in the early 21st century; and the election into office of a number of left governments in Latin America. The Arab Spring marked the end of the first decade of the 21st century on a hopeful note while Tahrir Square inspired the Occupation Movement in the United States (US), the Indignados in Spain and working class opposition to austerity measures in a number of European countries including through a series of general strikes in Greece.

The strike waves in the mines of South Africa after the Marikana massacre, suggest a qualitative change in the level of consciousness about socio-economic issues following the years of community protests against the lack of 'service delivery'. While these struggles have not been fully translated onto the plane of electoral politics, because many workers and especially the youth remain sceptical of political parties, they remain critical to the emergent challenges to capitalism all over the world. This chapter argues in support of reclaiming workers' education for the purpose of supporting such struggles by sharing the lessons of the past, and providing a platform to test out ideas, strategies and tactics.

The Congress of South African Trade Unions (COSATU) has over many years debated the question of workers' education. More recently, government task teams have been established to develop policy on workers' education while university-based researchers have been appointed to research the area. The renewed interest

in workers' education signals 'pressure from below', and as a reaction to the consequences of an educational dispensation which Cooper (2007) has argued is oriented towards prioritising international competitiveness and attracting foreign investment. There are many questions concerning the renewed interest in workers' education by policy makers. Does it represent the fear of a backlash from rank and file workers against the new education and training system and its elaborate frameworks, institutions, impenetrable terms and acronyms, emphasising skills development? Is there an attempt by government, business and the labour bureaucracy to find new and more persuasive means to contain the working class through a particular approach to education and training? Or, does the embrace of workers' education by some unions, represent a shift towards a more radical tradition? Whatever the answers, there is a need to clarify the concepts and definitions of workers' education and to review its meaning in the context of a critique of neoliberalism and its most common assumptions.

Workers' education has a critical role to play in a period in which COSATU, the most powerful organisation of the working class not only in South Africa but on the continent, is threatened with disintegration and thereby severely weakening what once was the strongest weapon at the disposal of the working class in South Africa, that is, its unity. Although the reasoning here relies on the development of workers' education in South Africa, it could be argued that these issues have much wider significance for working class organisations in all countries.

(Dis)Continuities Between Adult And Workers' Education

There is no common local and international vocabulary about what workers' education refers to or means. There is no fixed definition because, according to Cooper, Andrews, Grossman and Vally (2002:112), its boundaries are fluid and dynamic. The many different conceptualisations of workers' education are reflections of the evolution of its history in different parts of the world and the state of the workers' movement globally. Most importantly, they are reflections of the philosophical orientation of the programmes purporting to be workers' education (Cooper 2007; ILO 2007; Salt 2000).

Further complicating the picture of workers' education is its close association with adult education which, in South Africa, as Walters (1997) explains was traditionally concerned with social, political, personal and cultural development and later with its relationship to the political struggle against apartheid. As a result, for most of the early history of workers' education – in its broader meaning of more than just trade union education – it was intertwined with adult education. Bird (1984), for example, describes how in the first half of the twentieth century, adult education in the form of the black adult night school movement demonstrated this relationship between educational programmes and their wider political and ideological considerations.

Therefore, the early history of adult education in South Africa was linked to the 'proletarianisation' of large sections of the population being forced off the land to sell their labour power in the newly industrialising urban centres and towns of the country. Consequently, the development of adult education in South Africa was closely tied to the need for black workers to develop their formal knowledge and skills to improve their chances for better wages and conditions but also to understand the working of and resistance to apartheid capitalism.

While the fundamental idea of the liberal tradition of adult education is that democracy is ultimately built on adult and popular education (Walters 1997), one conceptualisation of adult education in this tradition is that 'the education of adults is any educational process in which those who regard themselves as socially mature participate' (Jarvis 1983:46). In its more radical form, it is associated with the notions of social transformation most popularly espoused by Freire and what became known as the popular education movement. Freire maintained that education can never be neutral and that it should enable participants to become critically conscious 'to act upon the world to endeavour to create a better society' (Jarvis 1983:46). This broader conceptualisation of workers' education was part of an attempt to differentiate itself from the more liberal notion of adult education in order to identify with a kind of education that was more 'emancipatory'.

Changing Approaches to Workers' Education in South Africa: FOSATU and COSATU

In their studies of the changing approaches to workers' education in South Africa, Vally (1994) and Cooper et al (2002) show how the labour movement moved from an emancipatory educational discourse of the anti-apartheid struggle to its role in the development of education and training policies in the transition to democracy. They describe how training discourses have impacted on union education and shifted the labour movement's understanding of knowledge production; the social purpose of education; and the meaning of worker experiences and its significance for learning. One of the outcomes of the changing discourses was the support for the National Qualifications Framework (NQF), the key instrument through which educational reform was implemented. For the unions, which played a major role in its development, recognition of prior learning (RPL) and experience and accreditation of worker education offered a stepping stone towards realising the promise of equality of opportunity in post-apartheid South Africa for some, while for others, it meant surrendering to the forces of neoliberalism (COSATU 2012). During this time, more and more union education programmes acceded to the pressures of accreditation including in respect of shop stewards' training which many unions now outsource to accredited service providers.

This situation is in stark contrast to how Vally (1994) and Cooper et al (2002) describe worker education in South Africa in the 1970s and 1980s. They recount

how in the 1990s, organisations that had produced a variety of education initiatives and media began to experience tensions about the focus and purpose of workers' education. Essentially, the tensions concerned the relationship between workers' education and its political role and the individual career advancement of workers. In the 1980s, following the formation of the Federation of South African Trade Unions (FOSATU), and in the wake of the ongoing mass struggles inspired by 1973 strikes and later by the 1976 Soweto Uprisings, these tensions were about whether to shift away from the intensive organising strategies pioneered during the Durban strikes, towards adopting the methods of mass mobilisation that were being tested out in community unions (Cooper et al 2002:119). In other words, to shift towards adopting a more explicitly political orientation in the struggle against apartheid and capitalism, or to continue focussing on workplace struggles. Aspects of this division were reflected in what later came to be known as the difference between the 'populists' and 'workerists' factions in FOSATU, the predecessor of COSATU.

Fuelled by the intensifying struggles against the regime in the early to mid-1980s, COSATU at the time of its launch in 1985, adopted what Cooper (ibid:121) refers to as a more self-conscious philosophy of what 'workers' education' means in the context of the workers' movement. 'A vision of workers education came to be popularised in the speeches of COSATU office bearers that posed workers education as a socialist alternative to Bantu education' (ibid). However, by 1988, as the negotiated settlement loomed larger, pressure increased on the labour movement to review its role and strategies of posing as opponents and enemies of business and government towards a position that reflected a relationship of equal partner (ibid:123).

Cooper et al (ibid) note two significant impacts of these changes on workers' education, namely: shifts in the priorities, form of delivery and key target audience of trade union education; and the increasing involvement in workplace training issues. Hence, by its Third Education Conference in 1991, COSATU's resolutions on workers' education no longer stressed its role in emancipating the working class but increasingly referred to the knowledge and skills that would build capacity to engage with the 'detailed workings of labour law and increasingly bourgeois ideological vision of the "complexities" of economic policy and development' (ibid:124). COSATU's conference resolutions therefore played an influential role in shaping the education and training policies put forward by the new African National Congress (ANC) government after 1994 (ibid).

A key aspect of this education reform, as mentioned before, was the NQF that was intended to facilitate skills transferability, mobility, career pathways and RPL, amongst other goals.

The workers' education debate continued in COSATU albeit in a considerably subdued form in the two decades after the transition, with some unions putting forward positions reminiscent of FOSATU's more radical traditions. Much of the contestation in education has been around whether or not to accredit workers' education especially in respect of the training of shop stewards. But this too was formalised through the Trade Union Practices Qualification offered by the Ditsela Workers' Institute

and through short credit bearing courses offered by accredited service providers. However, it now appears that the pendulum has begun to swing away from full-scale accreditation, exposing the fault lines of the divisions in COSATU. The dilemma of accreditation is reflected more widely in education in what Allais (2003:305) has described in relation to South Africa's NQF, as 'a democratic project trapped in a neoliberal paradigm'. More recently at COSATU's 2012 Education and Skills Conference, its Draft Strategy Paper proposed a set of questions to guide the review of its position on workers' education.

Workers' Education and Lifelong Learning – Evolving and Contested Understandings

Outside these developments in South Africa there has also been a debate about the contested understanding of the role and purposes of workers' education. Based on her literature review for the Global Labour University's research group on 'workers education and political consciousness', Sauviat (2012) refers to Holford's (2009) study tracing the evolution of workers' education from the beginning of the last century to the present day. Holford describes how unions in the United Kingdom (UK) moved from educating workers as members of unions and as members of the working class; to delivering education services to their members; and finally, to participating in the development of government educational policies in order to enable members to survive and advance in the labour market. Sauviat (2012) refers to Baatjes (2003), Cooper (1998) and others who point to similar developments in South Africa where adult education increasingly supports economic productivity and growth.

Sauviat (2012) cites Holford (2009), Hopkins (1985) and Ryklief (2009) in whose work the term 'workers' education' has been displaced by or is considered part of 'adult education', 'adult learning' or 'popular education'. She explains how the concept 'lifelong learning', which began to appear in international policy in the early 1990s, also refers to adult education and covers 'workers' education'.

Lifelong learning is advocated in the Constitution of the International Trade Union Council (ITUC) which:

> recognises lifelong learning as a basic human right, not only for those employed in knowledge-based economies, but for all workers, wherever they are employed and whatever their employment. It is within this context of lifelong learning as a human right that union education is situated: it is simultaneously a way of building unionism and part of the struggle for decent education for all workers. Labour organizations are committed to both union education (education to build the effectiveness of unions) and workers' education (which is more focused on the general education of working people)' (ILO 2007:4).

According to this conceptualisation, union education forms part of a broadly defined lifelong learning. The International Labour Organisation (ILO) divides education

involving workers into three categories, namely: the first category is union education which covers functional education and training of members in the operation of their unions and education related to subjects like economics as applied to union issues. In the second category it refers to programmes aimed at the educational attainment by workers of literacy, numeracy, learning a second language and other general educational activities. It is not clear whether this category includes specific workplace education activities or forms part of the lifelong or adult education which Walters (2006), points out "is commonly equated with either personal development for the middle classes or literacy and basic education for the poor" (Walters 2006). The third category refers to labour studies that 'involve the open, impartial and critical study of labour in society as practised by universities' (ILO 2007:1).

Gustavson (1997:238) proposes lifelong learning as an integrative concept constituted by two dimensions - vertical integration in that learning and education is possible from the cradle to the grave and horizontally between the home, local community, economic environment and the mass media. He locates his conception of lifelong learning within the popular education strand of adult education in which 'learning takes place in action in social movement, amongst people in action' (Gustavson 1997:242.) He notes further that many people have their central insights and starting points from studies and experiences rooted in social movements. 'Social movements are recognised as carriers of historical projects of importance to all people. They concern universal problems, such as relations between man and woman (women's liberation movement), human kind and nature (the environmental movement), and master and slave (labour movement and movements for human rights)'. Gustavson maintains that in this way people produce culture and new knowledge through their praxis.

In the context of workers' education in South Africa, the training discourses framed by the rhetoric of lifelong learning displaced this understanding of knowledge production, the social purpose of education and the meaning of workers' experience and its significance for learning (Cooper et al 2002). One of the tasks of workers' education therefore is to reclaim this knowledge in action as part of the collective.

Notwithstanding Gustavson's critical approach to lifelong learning, Mojab (2009:6) cautions against the 'knowledge explosion on lifelong learning' which she says is theoretically and methodologically diverse and therefore calls for a more nuanced approach. Mojab (ibid:4) grounds her analysis of the relations between work and lifelong learning in a historical materialist understanding of society in which capitalism develops unevenly, and is the material basis of social life shaping the ways in which people live, learn, work, relate and think. She argues further that the contradictions of capitalism have shaped the political and ideological struggles in adult education and that these contradictions have been exacerbated by what she refers to as the current round of globalisation (ibid:4)

Mojab's critique is based on three observations: firstly, she argues that while lifelong learning is contested, its central concept is in 'the hegemonic claim that the lack of skills caused unemployment; it supposes that constant retraining prepares

workers to be ultimately adaptable and always ready to acquire new skills as the needs of capital dictate'. She maintains that 'lifelong learning has been marshalled as an ideological concept in two ways . . . it shifts the burden of increasing adaptability to the workers and at the same time, offers it as a ray of hope for a more democratic engaged citizenry' (ibid:5).

Her second observation is that despite the sizeable body of literature on lifelong learning offering a critique of capitalism in that it, 'does provide an understanding of the relationship between adult education and capitalist social relations', it does not offer the 'critical tools to engage in more rigorous analysis of the ideological link between lifelong learning and the capitalist mode of production'. In other words, 'it offers a critique without being critical of the policy and the practice of lifelong learning and its implications for work, training and adult education' (Mojab 2009:6).

Thirdly, Mojab (ibid:7) observes that one of the outcomes of the 'conceptual messiness' is that it has 'normalised capitalism'. She asserts that 'the descriptive critique of lifelong learning and work renders capitalist relations invisible. Lifelong learning in a critical analysis will be interpreted as the logic of capital' (ibid). In other words, 'the policy attention to a skilled labour force and the need for training and re-training is a capitalist response to its own logic' (ibid). Thus, worker's education which is now considered part of lifelong learning as described above assumes in the main its workplace manifestation which has been transported into workers' education controlled by workers themselves.

Another way of analysing workers' education is offered by Steele and Taylor (2004) who conceptualise it within a spectrum of intermediate perspectives. At one extreme is the state bureaucracy, concerned both with social control issues and with 'appropriate' procedures and the setting of standards attached to financing and employers who require a skilled but compliant workforce; in the middle are Workers' Education Associations (WEAs) and, increasingly throughout the twentieth century, are the university extramural departments. On the explicitly socialist left are the National Council of Labour Colleges (NCLC) and the Communist Party that had been established in 1920s (Steele 2004:582).

According to Sauviat (2012), the definition of workers' education by activist scholars and practitioners supportive of radical definitions of workers' education is different from and opposed to those supportive of employers and governments. She explains by reference to Spooner (2001), how many workers' education organisations have close relations with state institutions and others, especially in developing countries, receive financial aid from the state. Sauviat (2012) examines the meaning of workers' education by isolating four different approaches: its format and content; pedagogy; purpose and how it relates to employers and government. She also describes the target group of workers' education as 'those persons who have to sell their labour power to earn a living'. This target group not only includes employees in the formal and informal sector but also the unemployed, the self-employed, the youth who are already in the labour market as well as persons undertaking vocational training and others. She expresses a preference for the definition of Hopkins (1985:2): 'that sector

of adult education which caters for adults in their capacity as workers and especially as members of workers' organisations'.

These critical approaches to workers' education will now be used to suggest an analytical framework useful for the meaning of workers' education in South Africa.

Workers' Education in South Africa – Representations of Diverse Interests

Cooper (2007) argues that workers' political consciousness must be located in a historical context and cannot be answered outside of it. This context has been shaped partly by the idea that for most of the 1990s and the early twenty-first century, capitalism remained largely uncontested and hegemonic. This was reflected in the work of writers like Fukuyama (1992) who regarded the capitalist system as 'the end of history'. A view that has in fact taken hold of the consciousness of significant layers of the working class leadership itself especially in the more advanced capitalist countries. There, representatives of workers in trade unions and political parties had for the most part retreated from their prior commitment to socialism which for many decades framed the meaning and practice of workers' education. This retreat was the result of the counter offensive to restore profitability by taking back the economic concessions of the Keynesian era and to discipline workers through higher unemployment and an attack on trade union rights (Walsh 2006). Following these developments, social compacts became the order of the day and in South Africa they found their way into the governance structures, the raft of laws, rules and procedures of the new democratic order.

Cooper (2007) argues that the South African trade union movement today faces a dramatically changed terrain compared with twenty years ago. She maintains that during the 1980s, the trade union movement was at the forefront of the popular struggle against apartheid that radicalised organised workers and contributed to a growing mood of political militancy inside the country. Since the 1990s, the broader economic, social and political environment experienced dramatic changes with far-reaching implications for the labour movement and worker educators. In her view, the labour movement has shifted its role from opponent of the apartheid state, towards the goal of 'equal partner' with the African National Congress (ANC) government. She elaborates that despite COSATU's stated policies of a commitment to socialist transformation, trade unionists have become involved in national tripartite forums debating economic policies and participating in the development of new institutional frameworks.

In her literature review of workers' education in South Africa, Jones (2013) drawing on Cooper, points to its purpose as having 'a strong emancipatory objective, emphasising the value of experience in the collective struggle to build new knowledge and in developing democratic participation and decision-making for a socialist society' (Cooper 2005:3). Jones refers to Cooper's observation that formally

organised education was only a small part of the unions' teaching and learning, which took place to a large extent 'by doing through organisation and struggle', and 'experiences and actions of hundreds of thousands of workers'. Cooper argues that in 'the transition to democracy, a human capital approach to worker education, which emphasises individual access to vocational education and training and upward educational and economic mobility, has gained ascendancy in trade unions'(Cooper 2009:1).

COSATU (2012) explains that workers' education comprises many strands that have clustered around two dominant approaches: a radical, 'transformative' approach which emphasises the building of class consciousness and can be located in a long-standing radical or socialist tradition, and an alternative 'instrumental' approach which can be located within a reformist tradition of trade unionism and which prioritises training for organisation-building to facilitate the conduct of union 'business' (Cooper, 2007). COSATU declares its position as within the radical or socialist tradition. In its view, 'education and knowledge is embedded in class relations' that under capitalism 'reflects, reinforces and replicates the values and practices of capital which is based on inequality' (COSATU, 2012).

The implication for South Africa, with reference to Steel and Taylor's (2004) classification, is that on the one end is workplace based education and training offered by employers and private providers. Unions themselves now outsource shop steward training to private providers who are accredited in order to access funding through Sector Education and Training Authorities (SETAs) from the state levy on employers. On the other end are labour service organisations, such as DITSELA; the Labour Research Services (LRS); the International Labour Research and Information Group (ILRIG); the Industrial Health and Research Group (IHRG); Workers World Media Productions (WWMP); Khanya College; and the recently formed NUMSA Research and Policy Institute which themselves can be regarded as explicitly on the socialist left end of the spectrum. In the middle are university based offerings, such as those of the University of the Witwatersrand's Certificate and Honours courses under the auspices of its Public and Development Management Programme; the Master's Programme forming part of the Global Labour University network; as well as the University of KwaZulu-Natal's degree programme provided through the Workers' College in Durban.

These institutions and organisations, some of which are referred to as labour service organisations (LSOs), offer a range of education and research services to organised labour and also to some social movements. Those involved in education and training typically provide either one or a combination of programmes, such as: introductory shop steward training courses that generally cover an understanding of the role, history and structures of trade unions; and labour legislation and workplace disputes (grievances, discipline and conflict). Some of these institutions also provide intermediate to advanced courses focusing on organising and collective bargaining, health and safety and political economy as well as the role of women in education. The menu of courses offered by most of the institutions involved in education and

training is contained in the collection of unit standards that constitute the Trade Union Practices Further Education and Training Certificate. It categorises the different components of union education into fundamentals (Communication and Maths Literacy), a core component that includes basic shop steward training described above and some subjects in the intermediate range, as well as electives that cover more in-depth studies in specific subjects. Some include skills-based programmes focusing on research, negotiation tactics, report writing, information and communications technology, relating to the media and finances. Others, the LRS in particular, conduct research into wage and inflation trends and the COSATU aligned Naledi, examines membership attitudes and other labour related research. Finally, the *South African Labour Bulletin* (SALB), one of the oldest labour journals on the continent, offers analytical articles of interest to the labour movement including about education and training.

In reality there appears to be a conflation of diverse approaches and perspectives motivated by the demand to engage with institutions of the 'developmental state' and through the NQF – an institutional and financial framework to regulate all forms of workplace training, for both work-related skills and social development. According to Jones (2013) the NQF 'looks both ways', to 'social upliftment through enabling access to educational opportunities for people to improve their lives, but at the same time commodifies education, training and experience and ascribes it with a market value; a credit currency' (Jones 2013). Operationalised through the SETAs, 'labour or human capital, at every level, can be assessed and ascribed a credit worth and an economic value' (Jones 2013). As Cooper has observed, some unions continue their own shop stewards training at the same time as whole departments within others and in federations have been established to engage with education and skills development structures, often, at the expense of more radical approaches to workers' education. In the skills terrain alone, trade unions are represented in 21 SETAs together with representatives from government and business, and many require more than one representative from each stakeholder to serve on their sub-structures.

Some Critical Challenges

Jones (2013) citing Cooper (2005) confirms a decline in trade union education, with less attention being given to membership education and an increased focus on leadership development. As a result very few of the trade unions still have structures through which workers have control over their own union education. Ironically, she says that attempts to regularise and formalise trade union education has led to reduced education capacity of trade unions because once the trade unionists obtain formal training and accreditation they tend to move into management positions or into government (Cooper 2012 pers. comm. in Jones 2013). Given the collapse of many of the internal union education structures, positions put forward at such bodies

are caricatured as union representatives 'representing their own jackets' because of the absence of mandates.

COSATU acknowledges that the critical challenge is how to use 'an (essentially conservative bourgeois) education system that until "recently" served ruling class interests to now empower the organised working class' (COSATU 2012). However, although the education system in the post-apartheid era may have become more progressive in its efforts to embrace the principles of the country's Constitution, it can be argued that it has not moved away from its 'essentially bourgeois' character in promoting global competitiveness, entrepreneurship, privatisation and the market. This is evident in many government documents linking development and economic growth to the acquisition of skills such as the New Growth Path (Economic Development Department 2010) the National Development Plan, (National Planning Commission 2011); Nationals Skills Development Strategy III (Department of Higher Education and Training 2009), and the Industrial Policy Action Programme II (Department of Trade and Industry 2011). It is within this context that COSATU's national education committee (NEDCOM) has raised concerns and questions about the purpose of workers' education, about whether or not the skills dispensation allows space for critical engagement and whether or not in the process it will lead to compromising FOSATU's core principles which it states as 'independence, workers' control and accountability' (COSATU 2012).

Sauviat (2012) concurs with the view that workers' education is broader than union education and incorporates the education offered by labour organisations and movements. Based on this view workers' education must be concerned with all forms of education provided for and by the working class. This includes education in public schools, colleges and universities, adult education centres, workplaces, and as Cooper (1998) has suggested, 'labour's schools'. Workers' education provided by employers and government cannot be viewed as neutral especially when they fall outside the ambit of independent and worker-controlled mandates and resolutions. It can be argued that the best approach to workers' education is one that contains within it, its target group and its purpose, 'all forms of education for and by the working class with the aim of promoting and advancing its interests and raising its class consciousness'.

This would be consistent with the approach adopted by COSATU more recently (COSATU, 2012) arguing that 'workers' education MUST be under worker control'. It must be independent of the state, and independent of class forces antithetical to the interests of workers. The workers' movement must control both the form and content of its own education and determine for itself what its priorities should be. In addition, workers' education must concern itself with the forms of education not under its direct control but must exert pressure to support its class interests. In other words, education outside of workers' control should not be left in the hands of the state and of employers but must represent the direct and purposive interests of the working class.

In clarifying a conceptualisation of workers' education for the purpose of supporting the struggle of workers in a period of heightened consciousness and

confidence, it will be necessary to not only see, as Mojab (2009) points out, the unity and conflict of opposites of the labour/capital relation but also its 'negation'. In other words, to 'envision alternatives to capitalism' which suggests that because of the contradictions inherent in the very nature of capitalism it will always be untenable and a brake on human development. Such a critical view of the role of education is necessary to the development of new political and mobilising strategies that ensures continuity with past struggles in which there were organic connections between workers in their communities and in the workplace.

Conclusion

This chapter examined the context in which ideas about workers' education have evolved over the last few decades in particular with a view to exploring the role of workers' education as an effective tool which trade unions and workers' organisations must reconceptualise, advocate and organise for. Weak ways of understanding workers' education have not facilitated an understanding of the contradictory nature of capitalism and the relations of power it generates and consequently have not been able to mount effective programmes representing worker interests in education. I have argued that these programmes have in fact been largely influenced by and been absorbed into a global neoliberal agenda which reduces the power of workers to assert their rights and subsumes these under the interests of other social classes and of corporate global capital in particular. What is required is a conception of workers' education as politically emancipatory and assertive of the interests of the working class in particular and a re-commitment to the ideals upon which the workers' movement has been built.

The meaning of workers' education has been explored in order to enable unions in particular and progressive educators in general to engage more effectively in education debates and examine policy making more critically. This chapter argues that unions as the most organised formation of the working class should reclaim workers' education for the purposes of raising class consciousness to support fundamental social transformation.

References

Allais, S. M., 2003, 'The National Qualifications Framework in South Africa: A democratic project trapped in a neo-liberal paradigm?', *Journal of Education and Work*, 16 (3), pp. 305–323.

Baatjes, I., 2003, 'Neoliberal fatalism and corporatisation of higher education in South Africa', *Quarterly Review of Education and Training*, University of theWitwatersrand Education Policy Unit (EPU), Johannesburg.

Bird, A., 1984, 'The adult night school movements for blacks on the Witwatersrand 1920–1980', in P. Kallaway (ed.), 1984, *Apartheid and education. The education of black South Africans*, pp. 192–221, Ravan Press, Johannesburg.

Congress of South African Trade Unions (COSATU), 2007, 'Workers' education and political consciousness: A case study from South Africa', *Economic and Labour Relations Review*, 17(Source Issue 2).

Congress of South African Trade Unions (COSATU), 2012, COSATU Education and Skills Conference, final draft strategy paper, unpublished document.

Cooper, L., 1998, 'From rolling mass action to "RPL": The changing discourse of experience and learning in the South African Labour Movement', *Studies in Continuing Education*, 20(2), 143–157.

Cooper, L., 2005, 'Towards a theory of pedagogy, learning, and knowledge in an everyday context: A case study of South African trade unions', PhD dissertation, School of Education, University of Cape Town.

Cooper, L., 2007, 'Workers' political consciousness: A case study from South Africa', *Economic & Labour Relations Review*, 17(2), 183–198.

Cooper, L., Andrews, S., Grossman, J. & Vally, S., 2002, '"Schools of labour" and "labour's schools": Worker education under apartheid', in P. Kallaway (ed.), *The history of education under apartheid, 1948–1994: The doors of learning and culture shall be opened*, pp. 111–133, Pearson Education, Cape Town.

Department of Higher Education and Training (DHET), 2009, *National Skills Development Strategy III*, DHET, Pretoria.

Department of Trade and Industry (DTI), 2011, *Industrial Policy Action Plan II* (2012/13–1014/15), DTI, Pretoria.

Economic Development Department, 2010 (23 November), 'The new growth path: The framework', retrieved 14 April 2013, from www.info.gov.za: http://www.info.gov.za.

Fukuyama, F., 1992, *The end of history*, Avon Books, New York, NY.

Gustavsson, B., 1997, 'Lifelong learning reconsidered', in S. Walters (ed.), *Globalisation, adult education and training, impacts and issues*, Global Perspectives on Adult Education Series, Zed Books, London.

Holford, J., 2009, 'Trade unions. From workers' education to lifelong learning', in P. Jarvis (ed.), *Routledge international handbook of lifelong learning*, Routledge, New York.

Hopkins, P. G. H., 1985, *Workers' Education: An International Perspective*, Open University Press.

International Labour Organisation (ILO), 2007, *The role of trade unions in workers' education: The key to trade union capacity building*, ILO, Geneva.

Jarvis, P., 1983, *Adult education and continuing education – Theory and practice*, Croom and Helm, Kent.

Jones, B., 2013, Desktop review of workers' education in South Africa, unpublished document.

Kallaway, P. (ed.), 1984, *Apartheid and education: The education of black South Africans*, Ravan Press, Johannesburg.

Mojab, S., 2009, 'Turning work and lifelong learning inside out: A Marxist feminist perspective', in L.A. Cooper, *Learning/Work – Turning work and learning inside out*, HSRC Press, Cape Town.

National Planning Commission (NPC). 2011. *National Development Plan*, NPC, Pretoria.

Ryklief, S., 2009, 'Adult learning as a global challenge', paper presented at the 90th Anniversary Seminar of the Workers' Educational Association of Finland (TSL), Helsinki, 1 September, retrieved 16 October 2011, from http://www.tsl.fi/@Bin/2342722/TSL+presentation+1092009SR.pdf.

Salt, B., Cervero, R. M. & Herod, A., 2000, 'Workers' Education and Neoliberal Globalisation: An adequate response to transnational corporations', *Adult Education Quarterly*, 51(1), pp. 9–31.

Sauviat, L., 2012, The meaning of workers' education, literature review of the Global Labour University Research Group, unpublished document.

Spooner, D., 2001, 'Workers' education and workers in the informal economy', retrieved 21 May 2013, from http://www.globallabour.info/en/2010/10/workers_education_and_workers.html.

Steele, T. & Taylor, R., 2004, 'Marxism and adult education in Britain', *Policy Futures in Education*, 2(3&4), 578–592.

Vally, S., 1994, 'Worker education in South Africa 1973–1993', Master's thesis, University of the Witwatersrand, Johannesburg.

Walsh, L., 2006, 'Review of capitalism unleashed', *Socialism Today*, 13 November.

Walters, S., 2006, 'Adult learning within lifelong learning: A different lens, a different light, *Journal of Education*, 39, University of KwaZulu-Natal, Pietermaritzburg.

Walters, S. (ed.), 1997, *Globalisation and adult education and training: Impacts and issues*, Zed Books, London.

13

SKILLS DEVELOPMENT

In Post-Apartheid South Africa: Issues and Contestations

Siphelo Ngcwangu

Introduction

South Africa's transition from the apartheid system to a post-apartheid democratic system began in a historical moment that coincided broadly with the 'collapse' of the Soviet Union and the ushering in of a new global order of capitalist economic domination often referred to as the 'unipolar' world system. This moment was followed by large-scale global capitalist restructuring which pressured many developing countries to embrace neoliberal economic policy reforms.

The post-apartheid state ushered in a period of wide-scale reform of public policies, amongst which were reforms to the country's education and training systems. These reforms were proposed as a means to begin to redress the historical imbalances created by apartheid's racialised labour market, which had resulted in what McGrath, Badroodien, Kraak and Unwin (2004) have characterised as a 'low skills regime'. A key challenge facing the new government was to develop policies that could address this historical legacy while simultaneously overseeing the integration of the South African economy into a hostile global capitalist economic system. This resulted in an expectation that the post-apartheid state would develop policies that will redress the historical imbalances that occurred as a result of apartheid. Scholars such as Motala, Vally and Spreen (2010:241) have argued:

> At the end of apartheid there was a real expectation that the death of a racist, fragmented, incoherent, yet planned education and training system together with its policies and practices – the manufactured bureaucracies spawned to give effects to the intentions of apartheid ideologues and political leaders and its deleterious outcomes, would be terminated once and for all.

In light of the various, conflicting pressures for policy reforms from domestic and global forces, the democratic government has chosen contradictory approaches to development. These are directed at redressing the historical imbalances, on the one hand, and economic and social policy choices that have so far been unsuccessful in transforming the character of the South African economy, on the other. The discourse on skills development therefore is an expression of ideological and political contestations emerging within this broader framework of policy development in the period of the political transition. My contention is that the prevalence of human capital theory assumptions on skills as evidenced in the broad acceptance of outcomes-based education (OBE) reforms and the National Qualifications Framework (NQF) in the post-apartheid state have contributed immensely to the current situation defined as a crisis of skills development. According to Allais (2011a:11),

> the key problem with skills development in South Africa is the underlying qualification model, which, despite rhetoric to the contrary, is based on, and reinforces atomised skills for fragmented jobs. The ensuing qualification model has been cumbersome and difficult to use, because of the tendency of competency-based systems to lead to narrow but lengthy over specified qualification documentation, which has made the work of government institutions as well as providers difficult, and ironically has made it harder for providers to be responsive to employers' needs.

In the following section, the basic premise of Human Capital Theory (HCT) will be discussed briefly in order illustrate how it has gained ideological power over the skills development system of South Africa.

Human Capital Theory: A Dominant Approach to Skills Development

The other critical ideological dimension to the skills question is related to the perspective of proponents such as Becker (1964) as human capital which corresponds to any stock of knowledge or characteristics the worker has (either innate or acquired) that contributes to his/her 'productivity'. Becker's conception associates 'skills' with the neoclassical ideas of HCT, which seeks to extend economic theory to explain the entirety of human behaviour. Becker's approach can be considered 'utilitarian' as it privileges the dominant role of the market in defining 'skills'. A range of policy propositions, developmental plans, job creation schemes and education policies in South Africa have been premised on this problematic rationale. Even the notion of 'skills shortages' and 'scarcity of skills' presupposes that a pre-existing market is waiting readily to 'absorb' the skilled cohorts of workers and trainees. Critiques of HCT have maintained that 'Human Capital Theory may be a logical outcome of the sort of reasoning utilitarians get up to but it does not help us to understand human behaviour' (Fevre 1999:6). Others have gone further to argue that: 'Capitalism is

based on profit maximization rather than universal skills upgrading. It is naive to assume that economic competitiveness will lead employers to invest in upgrading skills throughout the economy' (Brown 2001:35).

In contrast to HCT, scholars such as Ashton and Green (1996), Crouch et al (1999), and Brown, Green and Lauder (2001), have developed alternative approaches which are based on the acknowledgement that skills are socially constructed and are driven by social institutions. For instance, Brown (2001:32) argues: 'In the new political economy issues of income distribution, opportunity, democratic participation, and the ways people come together in pursuit of their individual interests and collective goals, are seen to have a decisive impact on national skill formation strategies'. What emerges is that the notion of human capital is insufficient to describe the variety of forces that drive the development of human beings; neither is it sufficient to provide a holistic critique of the myriad factors that contribute to unemployment, inequality and poverty. One of the issues that affect researchers of skills development is whether technological change itself results in an improvement of skills or instead results in what Braverman (1974) refers to as 'de-skilling'. Sears (2003:59) argues that, 'Technological change in capitalist society has not usually been associated with a generalized increase in skill requirements'. While Livingstone (2012:108) maintains that the biggest challenge to HCT is the societal underemployment of credentialed knowledge when he states that

> all of those efforts to repair human capital theory remain in jeopardy because of their failure to account for a growing general gap between people's increasing learning efforts and knowledge bases on the one hand, and the diminishing numbers of commensurate jobs to apply their increasing knowledge investments on the other hand.

The issue of underemployment receives very little attention within the South African policy discussion on skills as it exposes the fact that even those citizens with high level qualifications often find themselves in employment that rewards them less than their acquired skill/knowledge. My experience as a former Sector Education and Training Authority (SETA) employee is that the policies and most programmes of SETAs do not pay attention to underemployment due to the dominance of the 'scarce skills' approach. It is mostly organisations, such as the South African Graduates Development Association (SAGDA) and others, which regularly raise this issue within the context of lobbying for the interests of unemployed graduates.

Early Critiques of the NQF and Neoliberal Skills Development Policies

The post-apartheid government had to contend with a prevalent neoliberal discourse of 'skilling' which basically diluted the initial emphasis in the African National Congress's (ANC) 'Yellow Book' which emphasised the need for an articulated

education and training system. It is interesting to note how the term 'skills' has gained currency since the 2000s as opposed to the notion of education and training which was espoused in the 1990s. The term 'skills' denotes a particular form of task-oriented work and signals a normative departure from an all-encompassing educational process integrated with training. The skills challenge had been identified within the Macro Economic Research Group's (MERG 1992) work as part of the structural issues that needed to be attended to in a post-apartheid society. Two articles critical of the NQF by Samson and Vally (1996a, 1996b) appeared in the *South African Labour Bulletin* posing critical questions that the labour movement had to consider as possible consequences of the implementation of the NQF.

The general critique of the outcomes-based NQF model for education and training provided by Samson and Vally (ibid) centred on four key areas, namely: (1) that the NQF system would create an unwieldy bureaucracy with Standard Generation Bodies and similar structures resulting in an extensive 'paper chase'; (2) drawing on international experiences they criticised outcomes-based systems for focussing on what people can do to the exclusion of other knowledge which they may have; (3) they criticised the assumptions informing outcomes-based qualifications as they are based on the belief that there is a direct link between education and economic growth; and lastly, (4) they argued that the post-Fordist production methods would influence the logic of the development of the NQF. Post-Fordism basically is a system of production which involves smaller production units, relying on a multi-skilled, flexible and problem-solving workforce capable of producing smaller runs for specialised international markets.

It is worth noting that almost all the issues that were raised by critics of the skills system and the outcomes-based NQF remain relevant almost 20 years after their warnings about the potential failures of the system had been highlighted. For instance, the *Green Paper for Post-School Education and Training* (DHET 2012:15) acknowledges these challenges in the implementation as such:

> Our system has created a proliferation of qualifications and unit standards, but there has been no corresponding proliferation of learning or of educational provision . . . there is little evidence that the NQF has in fact facilitated judgements about equivalence. In some instances attempts to create equivalence between different qualifications have added complexity to the regulatory system, as well as leading to undesirable consequences.

This acknowledgement by the government of the failures within the system are ironic given that most of the concerns about possible pitfalls of the system, which is 'demand led' and driven by outcomes-based qualifications frameworks, were raised by Samson and Vally (1996a) years before the Skills Development Act (No. 97 of 1998) was promulgated. This is how the ideological power of HCT has remained dominant over the South African skills system largely due to its common-sensical way of explaining the relationship between education, skills and the economy. However, the conceptualisation of the nature of this relationship between education

and jobs has been criticised by Motala (2012), particularly some of its assumptions, for instance, that once there are skills in the market, jobs will follow. Motala (ibid:8) questions:

> What is the actual nature of the relationship between education, skills development and employment? Is it simply the linear cause and effect that it is purported to be or are there a range of historical and contextual factors which inform the conditions and possibilities affecting that relationship? And what indeed would be the role of public policy and provision in stimulating these alternative possibilities.

I interviewed Samson who co-authored one of the early critiques of the NQF and was later National Union of Metalworkers South Africa (NUMSA) Education and Training Secretary. She maintained strong views on the skills question and gave it a wider context:

> It was not just about skills but also about how the union positions itself in relation to global capital. I sided with the approach that argued that we shouldn't be shifting our strategy to accommodate capital. Many people bought into the system because of the notion that South African workers had developed all these skills and that OBE will lead to RPL. Argument against that can be that you can have RPL without it being skills based (Samson interview with author 2013).

An apt characterisation of this unwieldy bureaucracy which still underpins the criticisms of the skills system came from one policy maker interviewed who used the notion of a skills revolution which ran into a skills crisis to explain the nature of the challenge in skills which has resulted in a complex system:

> I think some of the problems that I felt in the skills environment was that they put a huge, I mean there was a coherent policy framework but it was new, it was complex but it made major demands on the institutions and the parties; and somebody captures it quite well, it was in the late '90s right through to today to some extent, *the skills revolutions sort of ran into the skills crisis.* And the crisis of skill I think just became a real tight constraint on the skills revolution; and I mean I think it will be difficult to argue now that that the revolution really succeeded from the late 1990s, certainly it has made huge difference but there were a number of systemic and structural problems that were just hugely difficult to deal with (Macun interview with author 2012).

Allais (2011a:264) argues that

> the outcomes-based qualifications framework approach may draw attention away from economic problems, as well as political and economic policies. For example , governments which do not want to intervene in labour market policy, or feel compelled to sign tariff agreements or privatise state enterprises, can easily blame education and training as well as individuals for economic woes.

It is within this context that I now turn to the specific roles which were played by the different policy actors in the making of the South African skills development system.

The Role of Policy Actors (State, Labour and Capital)

Mayer and Solga (2008:5) have asked

> under which conditions of policy making and in which kinds of ensembles of various collective actors are training systems put in place, maintained, and developed? How important is the involvement of the state, trade unions, and employers' associations in shaping and regulating training systems?

There are three critical pressure points that have influenced the formulation of the South African skills development policies since the democratic breakthrough of 27 April 1994. The first pressure point is that of economic competitiveness – this is premised on the assumptions of capitalist globalisation. Jessop (1994) describes this process of reforms within the state as based on the development of 'Schumpetarian workfare states' as they are structured to strengthen as far as possible the structural competitiveness of the national economy intervening on the supply side and to subordinate social policy to the needs of labour market flexibility and/or the constraints of international competition. The second pressure point is premised on the necessity for racial redress through employment equity, black empowerment and a variety of policies aimed at the creation of a stratum of skilled black professionals to participate in the formal economy of South Africa. However, the Commission for Employment Equity Report (2012–2013) seems to suggest that very little progress is being made on the transformation (equity) issue at a workplace level, particularly within the private sector. The third pressure point emerges from within the realm of technological change and skilling. This is due to the fact that while the outcome of 'high' skilling in the new forms of production techniques are adopted by companies in the industrial sector, technological restructuring often results in retrenchments. One empirical example of this was communicated to me by Godongwana, a former Deputy Minister and current Head of the ANC's Economic Transformation Committee:

> If we go into a car assembling plant and you compare that car assembling plant to a plant 10 years. For example go into H plant in Mercedes and see changes. Body shop where they assemble there are robots there, there were no robots in the past which are fairly efficient. I went to a GM plant in Oshawa they are doing more cars now, every 58 seconds you will get a car coming out. At the time that plant was producing more cars per annum than South Africa's seven plants. It will tell you the body of the car, the robots are running around these workers and it doesn't make any mistake, when that car comes up, down with six, when that car comes down, this robot knows which, there are the five robots there roaming, the rightful robot will run and that car is on the move as

> it goes to the right seats and the right colour then come down. The worker sits there and marks this and the other guy goes to check the seat (Godongwana interview with author 2012)

The South African Government recently (2012) facilitated the signing of an agreement/commitment by Labour, Business and the State to Skills Development named the 'National Skills Accord' which is seen as a catalyst for the creation of 5 million jobs by the year 2020. The basic assumption of the Accord is that a more bureaucratically efficient skills development institutional machinery of SETAs, Further Education and Training (FET) colleges and other institutions will provide the basis for the widening of access and an expansion of skills in the country. According to Streeck (1989:103),

> democratic corporatism may have a future after all, and in particular in areas like *training* where it seems that both trade unions and employers may, for partly different and partly identical reasons, be about to discover a joint interest in jointly preventing market as well as state failure.

The role of the state

There is significant literature on the developmental state both in South Africa (Edigheji 2010; Gumede 2011; Kondlo 2011; Maimela 2011) and internationally (Burawoy 1985; Corbridge, Williams, Srivastava & Vérnon 2005; Evans & Rueschmeyer 1985; Leftwitch 2007; Polanyi 2001) which looks primarily at the role of the state as a policy actor in the advancement of the agenda of economic accumulation or the distributional role that the state plays within an existing capitalist economic structure. According to Evans and Rueschmeyer (1990:56), the theoretical debate on the state has to be placed in a comparative historical context as: 'States are not standardised commodities. They come in a wide array of sizes, shapes and styles'.

Thaver and Thaver (2009) posit a conception of the mutually constitutive relationship of the state-society and higher education by borrowing from Migdal's (2001) State in Society Framework in which they argue for the necessity of a shift in the relationship between state and society from a problem of structure to one of process. By so doing they would be able to, in contrast to conventional theories, capture the dynamics of the state within itself and within society as these occur in actual practice (Thaver & Thaver 2009:59). The framework of the state-in-society relationship is useful in understanding the myriad of policies, programmes and institutions of the democratic government as part of a wider social process rather than narrowly as structures. There has been a tendency to conflate the welfare aspects of the state with the essentially developmental aspects, while the developmental aspects are also conflated with the regulatory aspects. As a result of this ideological contestation, Nzimande and Cronin (2007) published a paper responding to the ANC's document 'State and Social Transformation' titled 'We Need Transformation not a Balancing Act'. The authors critiqued the notion of the state as a 'mediator'

between capital and labour in a 'golden triangle' or as a 'neutral state'. Nzimande and Cronin (ibid:3) write:

> The discussion paper perspective begs the very important question of how one reconciles the notion of a golden triangle, of both labour and capital standing equally at the centre of improving the conditions of life of the people, with the leadership of the working class and its allies over the national democratic revolution.

This critique essentially accused the ANC of a 'technicist' and 'class neutral' approach to the character of the 'developmental state'.

Restructuring the labour market – an ILO Country Review

The state pursued the establishment of an equitable education and training regime by, among other things, appointing the International Labour Organisation (ILO) to conduct a study on restructuring the South African labour market. The study was commissioned to ostensibly recommend how apartheid policies could be overhauled and lay the basis for a new labour market system. The ILO review's outlook can be described as basically focussed on the effect of 'active labour market policies' and the need for overcoming disadvantages and discrimination within the labour market. The study signals one of the key 'intellectual capital' interventions by the post-apartheid government in shaping the form and character of the labour market. The structural legacy of the apartheid system meant that two main preliminaries informed the basis of the ILO study, these were: (1) strategies to address persistent unemployment; and (2) strategies to deal with 'labour market flexibility' as a means of intervening in the unemployment crisis. The ILO country review study viewed the training issue as explicitly connected to other aspects of labour market reform and structural features of the economy. The authors maintain:

> It is not valid to isolate assessments of 'training' from structural features of the economy and labour market. Skill formation is intimately linked to job structures, and one cannot deduce much about the levels or distribution of skills in the population from statistics on the structure of employment (Standing et al 1996:449).

The ILO country review was premised on seeking a wider understanding of the skills training system as a system consisting of a series of interventions in order to serve a variety of functions, the review argues that these interventions include *inter alia*:

> assisting in worker socialisation and imposition of work discipline, raising technical efficiency, assisting in the restructuring of production and employment, reducing unemployment, promoting labour mobility, and influencing income distribution. One can also conceptualise the skill formation process as potentially involving a set of levels

The ILO analysis sought to discard the idea of narrow skills training for limited 'tasks' relevant only to specific workplaces. Another critical debate that emerges within the ILO country review is around the matter of training being market led and employer dominated. According to Standing et al (1996), a market led system raised two types of problems for the training system: (1) Task analysis narrows what needs to be learned to the minimal technical inputs required for a single task. It is almost always carried out by, or on behalf of employers and endorsed by them; (2) a substantial problem with employer training practices has been an obsession with cost-minimisation measures at the expense of other more strategic criteria for longer-term growth (ibid:450) . It is within this context and policy processes that the National Skills Development Strategies have been developed.

National Skills Development Strategy (NSDS) I–III: 1998 to 2012

The promulgation of the Skills Development Act ([SDA] No. 97 of 1998) and the Skills Development Levies Act ([SDLA] No. 9 of 1999) ushered in a new era for the South African Skills Development system – an era which saw the institutional establishment of SETAs. The transition from the apartheid system's Industry Training Boards to the new SETAs resulted in some changes in the bureaucratic framework and co-ordination of the skills system from the perspective of the state. A senior government official at the time in the Department of Labour and formerly a NUMSA activist in the 1980s and 1990s, Sam Morotoba, responded to a question on this change by providing seven reasons that necessitated the institutional change.

> Firstly, the 33 ITBs covered a narrow industry scope as they were established along industry lines. Secondly, the establishment of ITBs was likely to continue rapidly and we could have ended with 100 to 150 ITBs. Thirdly, there was a lack of co-ordination and a serious amount of duplication amongst ITBs. Fourthly, most ITBs' scope of training coverage was narrow as they focused mainly on artisans. Fifthly, South African Qualifications Authority (SAQA) legislation determines that a distinction should exist between training provision and quality assurance. Some ITBs were setting standards, providing training and conducting quality assurance. Sixthly, the ITBs were not overly representative, with most only recently including employees on their boards. Seventhly, government departments were not participating in the activities of the ITBs and we wanted to ensure that a partnership exists between the public and private sectors (Vlok & Morotoba 2000:27)

Kraak (2004) defines the NSDS as a new institutional regime for skills formation in post-apartheid South Africa which he argues has some comparable characteristics of high skills systems elsewhere in the world. The key driver of the NSDS has been the creation of institutions such as SETAs, the National Skills Fund (NSF) and the National Skills Authority (NSA) which are created as platforms for stakeholder engagement on skills development. As Kraak (2004:119) maintains, 'underpinning

the construction of this new institutional environment is the assumption that collective institutional pressures will oblige individual employers to increase their investments in and co-ordination of skills formation'.

The role of the state in the skills development policy can be characterised as straddling two main discourses; (1) a discourse of restoration of competitiveness (and economic growth) through radical skilling programmes and the restructuring of the supply side measures through the basic and higher education systems to meet the immediate requirements of the market economy; (2) a discourse of social renewal in which the emphasis on skilling is placed as a definite part of the solutions to what is referred to as the 'triple challenge' of unemployment, inequality and poverty in South Africa.

Writings on the NSDS such as Badroodien (2004) reflect on the 'size' of the skills development training and how government driven indicators through the levy system indicate the progress on training at an enterprise level. However, the low levels of participation rates of employers are of concern because it also distorts the data that is available for sector skills plans and various other skill planning processes. According to Baadroodien (ibid:143), by September 2002

> of the 208 697 employers who are required by the Skills Development Act to participate in the levy-grant system by virtue of the size of their payroll, only 65.5% of firms actually paid the levy as of September 2002. Amongst those 136 645 firms who pay the levy, only 14 261 grants were disbursed to them in 2002.

This trend has more or less remained the same on a national scale but varying by sector and company size. Big companies have the internal systems to comply with the levy grant system while medium and smaller size organisations tend to have lower levels of compliance (and commitment) to skills development.

These evaluations of the skills system are useful in pointing out the bureaucratic aspects of the system but the reality is that mere compliance is not enough to define whether a process is successful because there also exists 'malicious' compliance. Both the Department of Labour (when SETAs reported to it) and the DHET regularly indicate the need for credible workplace skill[1] planning processes, to the extent that Goal no. 1 of the current NSDS talks of 'Building a credible mechanism for Skills Planning'.[1] My experience of having worked in the BANKSETA is that the internal processes within SETAs that relate to skills planning proceed on the very economistic notions of supply and demand of skills without interrogating what this means for planning. It is a perennial weakness of SETA managers and consultants that the wider economic structural questions are not interrogated sufficiently and interpreted within a context of skills development.

Archer (2012) maintains that the conception of the intermediary role (of institutions like SETAs) in the skills training system shows one way they need to be assessed in achieving efficiency and equity goals. However, Archer (ibid) goes further to argue that there is still no certainty about the role of the intermediary institutions in effectively countering market failures in practice. At the core of the debate is the

character and role of the state in skills development. The SETAs and other related institutions are directed at complementing the existing strategies of employers or the sector despite the deficiencies in information from many private sector companies. Underpinning all of the above analysis is the fact that the skilling process is driven by a largely neoliberal assumption about economic transformation which does not sufficiently interrogate the need for a skills agenda which is linked to the fundamental transformation of society.

The role of labour: 1980s to 1991

In the late 1980s and the early 1990s, trade unions were confronted with the challenges of a rapid transformation of the global economy. This period saw changes in the method of production from mass employment Fordist systems to post-Fordist production methods which resulted in the introduction of new technologies in sectors like engineering. This development meant that some companies ended up employing fewer workers. As Buhlungu (2010:84) notes,

> by the early 1990s it had become clear to management that the South African economy and individual enterprises could not compete in the global economy on their own terms and that competitiveness was no longer just an option but a necessity. Following the lifting of sanction, many enterprises went through a sharp learning curve and soon picked up the jargon of the times about 'benchmarking', 'global competitiveness'and 'flexible' production methods.

Furthermore, Hirschohn (1995) has noted that by creating the industry-based training committees, the amended Manpower Training Act (No. 96 of 1991) stimulated COSATU to become directly involved in the governance of training structures.

There was a growing realisation by trade unions such as NUMSA that skills training would provide a better employment basis for their members in light of the increase in skilled foreign workers being imported into the country at a higher rate of pay. As Forrest (2011:217) states 'there was also a realisation in NUMSA that its semi-skilled and unskilled membership base was becoming disposable. The acquisition of skills would bring higher pay and give the retrenched a better chance of finding work'.

The phase of the development of Research and Development Groups (RDGs) within NUMSA during the mid to late 1990s occurred in an environment where skills determined pay whereas the majority of NUMSA members (as employees) were considered 'unskilled' during that period. Numsa was faced with extending the power of labour in a hostile economic environment and was also witnessing the relentless loss of its semi-skilled and unskilled membership. For Forrest (ibid:216), 'it [NUMSA] came to see skills acquisition as a way of moving members to the centre of industrial production and giving them the ability to control production issues.'

The basic conclusion of the work of the RDGs with regard to skilling was that if pay is determined by skilling then NUMSA should fight for skills accumulation

for its members. Out of this discourse NUMSA's three year strategy was directed at the reduction of grades or 'broad banding' and promoted the development of a 'High Skills, High Wage Economy'. There were many deep ideological contestations of this position because linking skills with pay can undermine worker solidarity and at the same time there are many workers with skills (and experience) which are not recognised in the context of the workplace. One of the issues which were contested is the notion of skills-based career progression path. Kgobe (1997:21) has argued that:

> South Africa's workplaces are not constructed on the basis of a skills knowledge hierarchy. They are made up of a large, relatively homogenous group of workers with roughly equivalent skills and a small group of more skilled jobs. What sense does a skills-based career path have in this context?

There has also been a relative decline in shop-floor level activism on skills development matters by many trade unions. The multiplicity of state institutions (like SETAs) have resulted in a bureaucratisation of the union's approach to the skills development issues. According to Buhlungu (2010), the expanded political and representational role of COSATU has resulted in a decline in the union's focus on shop-floor level matters including skills development. For Buhlungu (ibid:170):

> Union membership is now increasingly motivated by a sort of instrumental pragmatism, where support for the union is driven more by material benefits that members can extract from the union than by a genuine support for the policy positions that the union espouses.

The role of labour: 1996 to the early 2000s

COSATU's position on skills development in the post-apartheid era should be traced as far back as 1996 when the labour representatives developed the *Social Equity and Job Creation* document as a contribution to the debate on the National Growth and Development Strategy (NGDS). The document was developed as a critique of the neoliberal policy framework which had emerged within the ANC and which emphasised and accepted the logic of a 'trickle down' approach to development. The *Social Equity and Job Creation* document had four main objectives:

- redirecting of spending by the state towards social services for the poor and expanding public works programmes;
- adopting fiscal measures to encourage production for the domestic market, including the beneficiation of local raw materials;
- promoting public and private investment in training and retraining of workers in order to improve productivity ; and
- advancing trade liberalisation on condition that it does not lead to the loss of jobs

The position of labour has not changed fundamentally on these issues since 1996 and all of the aforementioned objectives in principle remain the same with minor adaptations and tactical emphases. Buhlungu (2010:95) has stated that 'the restructuring of work that we have witnessed in the last twenty years or so threatens the very existence of trade unionism by fragmenting workers and undermining the basis of solidarity. In other words, restructuring poses a threat to the existing model of unionism which is premised on full-time, permanent employment based on rights and protections underwritten by a sympathetic interventionist state'.

By its own admission COSATU experienced a lull in the area of skills development for a protracted period since the late 1990s till 2009 when COSATU convened an 'Education and Skills Conference' to reflect on the skills development matters. The draft strategy paper for the conference articulated a clear critique that the popular public discourse seems to present a scenario in which the 'skills crisis' is posited as the major development challenge rather than the jobs crisis. The document (COSATU 2009: 20) states:

> The assumption is that unemployment and low standards of living are a result of the inability of workers to keep up with technological change. The reality of course is that alarming levels of unemployment will continue unless there is a radical change to the economic structure and the way economic decisions are made.

This position needs to be probed further because the dominant skills discourse rests mainly on the notion of 'scarcity of skills' and the notion of a 'skills crisis'. It is quite clear judging from the above discussion that labour's call for a fundamental restructuring of the economy and the direction of development towards the 'public good' is critical for an overall success of the skills development agenda. The 'scarce skills' thesis has been the basis of the entire measurement regime on skills development particularly in the SETAs, the existential logic of the SETAs is that there are scarce and critical skills and therefore the resources for skilling need to be directed to these 'scarce skills'. The common-sense and positivistic way in which this view is presented has become easily acceptable even by labour.

Baskin (2000:54) has stated that participating in structures of concertation or tri-partism has imposed heavy responsibility on organised labour: 'It suggests the union movement needs a renewal strategy, a revisiting of organisational structure, capacity constraints and its vision of social and economic transformation. Without this the unions are unlikely to make the transition from resistance to engagement'.

The decline of waged employment and the increasing casualisation of workers have had an effect of weakening the power of unions in the terrain of collective bargaining. Barchiesi (2011:74) has suggested that: 'After apartheid, waged employment remained remarkably vulnerable and unstable for most South African workers. Economic liberalization made work, rather than a remedy for poverty and inequality, a contributing factor in their reproduction'. This suggests that workers are

increasingly outside of standard waged employment and even when in employment that employment is increasingly precarious.

The role of capital

In his PhD dissertation, Crankshaw (1994) states that it was not only until the end of the 1970s that new interest arose in the changing patterns of racial inequality in employment. This time however most of this interest was generated by official concern about the shortage of skilled white labour and its attendant policy implications. However, Davies (1979) maintains that capital's restructuring of the racial division of labour was not only due to the shortage of skilled white labour. Instead, declining profits due to the shortage of foreign investment and the political struggles of urban Africans during the late 1970s had provided impetus for reform. For Crankshaw, (1994:50):

> The practice of allocating semi-skilled and machine operative work to Africans while reserving the skilled trades largely for whites was the method by which employers, the State and white labour resolved the chronic shortage of skilled white labour which intensified during the growth years of the 1960s and the early 1970s. This particular solution to some of the contradictions of Apartheid policy was facilitated by the convergence of certain interests of employers, the state and white labour.

The occupational category of semi-skilled machine operators became an area of heavy competition for white workers as black workers at the time were already employed within semi-skilled job levels although they were not officially certified due to apartheid job reservation policies.

The business community articulated its policy outlook for a democratic South Africa in a document titled *Growth for all* (1996) under the South African Foundation (SAF) basically advocating for a flexible 'two-tier' labour market which would supposedly be flexible and de-regulated allowing employers significant exemptions with regards to dealing with labour. According to Bezuidenhout and Kenny (2000), the proposals in the document did not favour flexibility based on the skills of the workers, but rather the flexibility of employers to determine wages and numbers. These developments were taking place in the period of the 1990s in which globalisation and the need for South African industries to integrate into the global markets was a major driver which had implications for skills development.

It is critical to note, as Lehulere (2013) has recently stated, that capital must be understood as a self-conscious class actor in the realm of skills as it pursues its interest of accumulation whether skills are readily available or not. Harvey (2011:60) notes that:

> There are many advantageous ways for capital to address problems of labour scarcity. Labour saving technologies and organisational innovations can throw

> people out of work and into the industrial reserve. The result is a 'floating' army of laid-off workers whose very existence puts downward pressure on wages. Capital simultaneously manipulates both the supply and demand for labour.

This point is further accentuated by Brown et al (2001:113), 'governments have a political duty to privilege their citizens, but capitalism has no such loyalty. Where it is given room to breathe, it tirelessly accumulates capital in whatever ways it can with scant regard for existing arrangements'.

The skills debate arises in the main as a consequence of the skills requirements generated by capitalist labour processes and its organisation of work. The concepts of 'skills', 'de-skilling', and 'labour power' emerge as conceptual nodes which inform the development of 'human capital'. Under capitalism, as Mandel argues (1976:47):

> The capitalist is not *forced* to buy labour power on a continuous basis. He does it only if it is profitable to him. If not, he prefers to wait, to lay off workers, or even to close his plant down till better times. The worker, on the other hand is *under economic compulsion* to sell his labour-power, as he has no access to the means of production.

This implies that the compulsions which inform the need to work make differing demands on the 'owners' and 'purchasers' of labour power.

Crankshaw (1994) shows how the situation of the shortage of white artisans in the late 1960s and early 1970s resulted in a rapid change to mechanisation of production processes in the manufacturing, mining and building industries. which in turn meant that job opportunities were opened for black workers to do 'semi-skilled' work in order to ensure that production was maintained. During the apartheid era, the confluence of interests between employers, the apartheid state and white trade unions therefore resulted in a situation of low wages for black workers and their exclusion from the skilled trades. This historic account by Crankshaw is helpful in understanding recent developments in the discourse of skills development in South Africa because the same employers complain of 'high wage' demands from workers despite the workers' alleged lack of skill, yet the 'lack of skills' is part of a historically developed system of the racialised division of labour. This insight is suggested by the former Director General of the Department of Labour:

> I still think that business did not fully embrace the idea of skills development, they were very defensive, feel that they were just being pushed by the government to do something that they didn't want, they had too much pressure on them, so quite a lot of business is basically wrote-off, I think that's why we had SETAs that has lots of money, it is because business could not bother. We created a lot of useful frameworks but I think there was always going to be the danger that you establish institutions that are going to raise levels of dependency on state protection rather than on collective bargaining and collective engagement and using of, and those kind of pressures, and you could see that with the LRA and all of this, the strikes came down quite significantly (Pityana interview with author 2012).

This signifies the somewhat cynical view on the state driven skills development system by organised business despite being basically the main beneficiary from the number of skills development programs of the state. During the process of the development of policy proposals for the NSDS III the business community made submissions through Business Unity South Africa (BUSA). What can be gleaned from these submissions is that they are focussed more on the bureaucratic aspects of the reorganisation, structure, landscape and levy grants of SETAs and not instead on the actual developmental gains of the skills system. One comment in the BUSA document about the Department of Trade and Industry (DTI) proposal on Human Capital Development states:

> Busa recognises this as a pragmatic approach, but needs to see a stronger emphasis on supporting growth in the knowledge sectors of our economy. In essence the South African economy consists of over 75% services companies and over 70% small businesses. It is hoped that these key characteristics of the business sector be considered in the new landscape and approach to overall human capital development (BUSA 2010:6).

Another contentious issue that BUSA has raised relates to the broader role of SETAs, inclusive of social development issues that fall into the social development domain, in supporting governmental goals. The criticism by BUSA is that there seems to be a broadening of responsibilities of SETAs whereas the SETAs should be serving their members and workers in their sectors. There is also a concern by business about the ways in which SETAs support the SMME sector: 'BUSA recommends that a discussion on the levies for SMEs should be tabled as part of the SETA re-establishment and the NSDS III'. Another issue was around the red tape involved to get access to the funding, as BUSA (2010:7) argued, 'a possible method to overcome SME access to funding could be simplified claim forms implemented by all SETAs'. The perspective of industry can broadly be categorised as one of reduced regulation in order for the market to flourish.

The logic that 'scarce skills' is the most crucial constraint to the development of South Africa's economy is quite pervasive within the broad business sector. However, it should be noted that sceptics to this view such as Chang (2010), an academic at the University of Cambridge, who maintains that there is very little empirical basis for assuming that the 'lack of skills' will negatively affect economic productivity. Chang (ibid:182) asserts:

> The link between what a production line worker in a car factory learned in school physics and his productivity is rather tenuous. The importance of apprenticeship and on-the-job training in many professions testifies to the limited relevance of school education for worker productivity. So, even the supposedly productivity–oriented parts of education are not as relevant for raising productivity as we think. This is not an argument for less education or no education this is an argument that trying to make education 'relevant' to the market has proven to be somewhat rhetorical and within it having inherent contradictions because

even 'relevant' education or 'outcomes based' education may not be able to produce 'ready- made workers'.

Conclusion

Although the social democratic discourse rests on the presumption of consensus between the three main actors in capitalist society the analysis has shown that there are many areas of contestation and contradiction between labour, capital and the state and that the skills discourse emerges as one of the discourses that capital utilises to assert its hegemony over society. What I have sought to show in this chapter is that the moment of the political transition to democracy in South Africa (during the 1990s) presented new challenges to the various actors due to globalisation and the pressure to integrate with the rest of the world economy. I have highlighted that the issue of skills development is not 'ideologically neutral' and occurs within a wider rubric of capitalist strategies of accumulation and maximisation of profits. The notion of 'scarcity of skills' is often presented as the major constraints to increasing employment or to address social ills of inequality and poverty. This idea of 'scarcity of skills' has become so pervasive that even left orientated labour movements have come to accept it as the dominant discourse of skills development. I have shown in the section on Capital that recent international writing by scholars such as Chang (2010) demonstrates that the argument that education alone can resolve the challenge of skills and underdevelopment is flawed. As Chang has stated that even the 'productivity' orientated aspects of education are not as relevant to raising productivity as is usually stated.

The perspective which I hold is that outside of a fundamental restructuring of the South African economy dealing particularly with high levels of concentration, there can be no meaningful skills development agenda. Although the government's efforts through various policies to encourage artisanal training and vocational education are welcome, I caution that these may prove insufficient if they are not articulated within an economic structure that is far more equitable and systematically democratic allowing for a wider range of economic activities unconstrained by the dominant capitalist accumulation path that is currently being witnessed. The issues debated in this chapter are crucial as the left struggles to make sense of locating the skills development question within a rapidly changing landscape of political and economic development in South Africa.

Note

1. The DHET has embarked on a large-scale programme known as the Labour Market Information Programme (LMIP) in partnership with the HSRC and various research bodies. The logic of the programme is to craft a system that centralises all the necessary labour market information related to skills planning. This is an ongoing process which features as a critical part of government planning.

References

Allais, S.M., 2011a, '"Economics imperialism", education policy and educational theory', *Journal of Education Policy*, 27(2), 253–274.

Allais, S.M., 2011b, 'What are skills? Reflections on policy in South Africa in the light of international debates', paper presented at the Global University Conference, Johannesburg, South Africa, 28–30 September.

African National Congress (ANC), 1994, 'A policy framework for education and training', discussion document, ANC Education Department, Johannesburg.

Archer, S., 2012, 'Key issues in the assessment of South Africa's National Skills Development Strategy', in H. Perold, N. Cloete & J. Papier (eds.), *Shaping the future of South Africa's youth: Rethinking post-school education and training*, African Minds Press, Somerset West.

Ashton, D. N. & Green, F.,1996, *Education, Training and the Global Economy*, Edward Elgar Cheltenham.

Badroodien, A., 2004, 'Understanding the size of the problem: The National Skills Development Strategy and enterprise training in South Africa', in S. McGrath, A. Badroodien, A. Kraak & L. Unwin (eds.), *Shifting understandings of skills in South Africa: Overcoming the historical imprint of a low skills regime*, HSRC Press, Cape Town.

Barchiesi, F., 2011, *Precarious liberation: Workers, the state, and contested social citizenship in post-apartheid South Africa*, State University of New York Press, Albany, NY.

Baskin, J., 2000, 'Labour in South Africa's transition to democracy: Concentration in a third world setting' in G. Adler & E. Webster (eds.), *Trade unions and democratisation in South Africa, 1985*, Wits University Press, Johannesburg.

Becker, G.S., 1964, *Human capital: A theoretical and empirical analysis, with special reference to education*, 3rd ed., University of Chicago Press, Chicago, IL.

Bezuidenhout, A. & Kenny, B., 2000, 'The language of flexibility and the flexibility of language: Post-apartheid South African labour market debates', Sociology of Work Unit, University of the Witwatersrand, Johannesburg.

Braverman, H., 1974, 'Labor and monopoly capital', *Monthly Review Press*, New York, NY.

Brown, P., 2001, 'Skill formation in the twenty-first century', in P. Brown, A. Green & H. Lauder (eds.), *High skills: Globalisation, competitiveness and skill formation*, Oxford University Press, Oxford.

Brown, P., Green, A. & Lauder, H., 2001, *High skills: Globalisation, competitiveness and skill formation*, Oxford University Press, Oxford.

Brown, T., 2011, 'Spatial and financial fixes and the global financial crisis', paper presented at the International Conference on Researching Work and Learning (RWL), Shanghai, China, 4–6 December.

Buhlungu, S., 2010, *A paradox of victory: COSATU and the democratic transformation in South Africa*, University of KwaZulu-Natal Press, Pietermaritzburg.

Burawoy, M.,1985, *The Politics of Production*, Verso, London and New York.

Business Unity South Africa (BUSA), 2010, *Business submission: National Skills Development Strategy III (NSDS III)*, www.busa.org.za.

Chang, J.H., 2010, *23 things they don't tell you about capitalism*, Penguin Books, London.

Congress of South African Trade Unions (COSATU), 2009, *Forward to Education and Skills Development for Working Class Power!* Delegates Pack, COSATU Education and Skills Conference, Parktonian Hotel, Johannesburg.

Congress of South African Trade Unions (COSATU), 2012, Education and Skills Conference, The Lakes Hotel, Benoni, South Africa, 3–5 July.

Congress of South African Trade Unions (COSATU), National Council of Trade Unions (NACTU) and the Federation of South African Labour (FEDSAL), 1996, *Social Equity and Job Creation: The Key to a Stable Future*, NEDLAC Labour Caucus, Johannesburg.

Corbridge, S., Williams, G., Srivastava, M. & Véron, R., 2005, *Seeing the state: Governance and governmentality in India.*, Cambridge University Press, Cambridge.

Crankshaw, O., 1994, 'Race, class and the changing division of labour under apartheid', PhD dissertation, University of the Witwatersrand, Johannesburg.

Crouch, C., Finegold, D. & Sako, M., 1999, *Are skills the answer? The political economy of skill creation in advanced industrial countries*, Oxford University Press, Oxford.

Davies, R.H., 1979, *Capital, state and white labour in South Africa 1900–1960: A historical materialist analysis of class formation and class relations*, Harvester Press, Brighton.

Department of Finance (DoF), 1996, *Growth, Employment and Redistribution: A macro-economic strategy*, DoF, Pretoria.

Department of Higher Education and Training (DHET), 2012, *Green Paper for Post-school Education and Training*, DHET, Pretoria.

Department of Labour, 2013, 'Commission for Employment Equity: Annual Report 2012-2013', Department of Labour, Pretoria.

Edigheji, O. (ed.), 2010, *Constructing a democratic developmental state in South Africa: Potentials and challenges*, HSRC Press, Cape Town.

Evans, P.B., 1995, *Embedded autonomy: States and industrial transformation*, Princeton University Press, Princeton, NJ.

Evans, P. & Rueschmeyer, D., 1985, 'The state and economic transformation: Towards an analysis of the conditions underlying intervention', in P. Evans, D. Rueschmeyer & T. Skocpol (eds.), *Bringing the state back in*, Cambridge University Press, Cambridge.

Fevre, R., 1999, 'Some sociological alternatives to Human Capital Theory and their implications for research on post-compulsory education and training', *Journal of Education and Work*, 12(2), 117–140.

Forrest, K., 2011, *Metal that will not bend: National Union of Metalworkers of South Africa 1980–1995*, Wits University Press, Johannesburg.

Godongwana, E., 2012, Interview with Mr Siphelo Ngcwangu for PhD research, Johannesburg.

Gumede, W., 2011, The South African state in historical context, Mapungubwe Institute for Strategic Reflection (MISTRA), pp. 1–12, unpublished document.

Harvey, D., 2011, *The enigma of capital and the crises of capitalism*, Profile Books, London.

Hirschohn, P., 1995, 'The struggle over human resources development: Integrating the South African auto industry into the international economy', paper prepared for the Special Seminar of the International IR/HR Research Network on Autos held at the 10th World Congress of the International Industrial Relations Association, Washington, DC.

Jessop, B., 1994, 'Post-Fordism and the state', in A. Amin (ed.), *Post-Fordism: A reader*, Basil Blackwell Press, New York, NY.

Kgobe, T., 1997, 'The wrong path? The skills training debate', *SA Labour Bulletin*, 21(5), 74–76.

Kondlo, K., 2011, Towards a theory of the state in South Africa – A philosophical and socio-economic reflection, a think piece submitted to Mapungubwe Institute for Strategic Reflection (MISTRA), unpublished document.

Kraak, A., 2004, 'Training policies under late apartheid: The historical imprint of a low skills regime', in S. McGrath, A. Badroodien, A. Kraak & L. Unwin (eds.), *Shifting understandings of skills in South Africa: Overcoming the historical imprint of a low skills regime*, HSRC Press, Cape Town.

Leftwitch, A., 2007, 'The Political Approach to Institutional Formation, Maintenance and Change: A Literature Review Essay', Discussion Paper Series Number Fourteen, IPPG Programme Office, IDPM.

Lehulere, O., 2013, Speech delivered at CEPD/UWC workshop on Post School Education and Training, University of the Western Cape, Cape Town, 11 February.

Livingstone, D.W., 2012, 'Debunking the "knowledge economy": The limits of Human Capital Theory', in D.W. Livingstone & D. Guile (eds.), *The knowledge economy and lifelong learning: A critical reader*, Sense, Rotterdam.

Macun, I., 2012, Interview with Mr Siphelo Ngcwangu for PhD research, Johannesburg.

Maimela, D., 2011, 'The theory and practice of the "Developmental State" in South Africa?', Mapungubwe Institute for Strategic Reflection (MISTRA), pp. 1–13, unpublished document.

Mandel, E., 1976, *Introduction to Karl Marx's* Capital, vol. 1, Penguin Classics, London.

Mayer, K.U. & Solga, H., 2008, *Skill formation: Interdisciplinary and cross national perspectives*, Cambridge University Press, New York, NY.

Macro-Economic Research Group (MERG), 1992, 'Making democracy work: A framework for macroeconomic policy in South Africa', report to members of the Democratic Movement of South Africa / from the Macroeconomic Research Group, Bellville, Centre for Development Studies, University of the Western Cape, Cape Town.

McGrath, S. A., Badroodien, A., Kraak, A. & Unwin, L., 2004, *Shifting Understandings of Skills in South Africa*, HSRC Press, Cape Town.

Motala, E., 2012, Thoughts on the post-school system of education and skills development, unpublished document.

Motala, E., Vally, S. & Spreen, C.A., 2010, 'Transforming education and training, or reconstituting power and privilege?' in A. Desai, B. Maharaj & P. Bond (eds.), *Zuma's own goal*, Africa World Press, Trenton, NJ.

National Skills Accord, 2012, Accord 1: New Growth Path, Economic Development Department, Pretoria.

Nzimande, B. & Cronin, J., 2007, 'We Need Transformation not a Balancing Act', *African Communist*, 146 (First Quarter), pp. 1–5.

Pityana, S., 2012, Interview with Mr Siphelo Ngcwangu for PhD research, Johannesburg.

Polanyi, K., 2001, The Great Transformation: *The Political and Economic Origins of Our Time*, Beacon Press, Boston.

Republic of South Africa, 1998, *Skills Development Act*, No.97 of 1998, Government Printers, Pretoria.

Samson, M., 2013, Interview with Mr Siphelo Ngcwangu for PhD research, Johannesburg.

Samson, M. & Vally, S., 1996a, ' 'Snakes and ladders: Promises and potential pitfalls of the NQF', *South African Labour Bulletin*, 20(4), 7–14.

Samson, M. & Vally, S., 1996b, 'The NQF: Critical questions for labour', *South African Labour Bulletin*, 20(5), 23–29.

Schreiner, G., 1994, 'Beyond corporatism – towards new forms of public policy formulation in South Africa', *Transformation Journal*, 23, 1–23.

Sears, A., 2003, *Retooling the mind factory: Education in a lean state*, Garamond Press, Ontario.

South Africa Foundation (SAF), 1996, *Growth for all: An economic strategy for South Africa*, SAF, Johannesburg.

Standing, G., Sender, J. and Weeks, J., 1996, *Restructuring the labour market: The South African challenge*, International Labour Organisation (ILO), Geneva.

Streeck, W., 1989, 'Skills and the limits of neo-liberalism: The enterprise of the future as a place of learning', *Work, Employment & Society*, 3(1), 89–104.

Thaver, B. & Thaver, L., 2009, 'State-in-society: The mutual constitutiveness of the developmental state and higher education in South Africa', *African Sociological Review*, 13(1), 57–77.

Vlok, E. & Morotoba, S., 2000, 'Heita SETA: An introduction', *South African Labour Bulletin*, 24(2), 27–31.

INDEX

G

H

I