



Will skills save us? Rethinking the relationships between vocational education, skills development policies, and social policy in South Africa

Stephanie Allais

Education Policy Unit, University of the Witwatersrand, Johannesburg, South Africa

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ABSTRACT

This paper examines experiences with 'skills development' in South Africa to contribute to broader debates about 'skills' and the relationships between vocational education and development. Numerous policy interventions and the creation of new institutions and systems for skills development in South Africa are widely seen as having failed to lead to an increase in numbers of skilled workers. I analyze some of the underlying reasons for this by considering South African policies and systems in the light of research in developed countries. The dominant view in South African media and policy circles is that a skills shortage, coupled with an inflexible labour market, are the leading causes of unemployment. This has led to a policy preoccupation with skills as part of a 'self-help' agenda, alongside policies such as wage subsidies and a reduction of protective legislation for young workers, instead of collective responsibility for social welfare. Skills policies have also been part of a policy paradigm which emphasized state regulation through qualification and quality assurance reform, with very little emphasis on building provision systems and on curriculum development. The South African experience exemplifies how difficult it is to develop robust and coherent skills development in the context of inadequate social security, high levels of job insecurity, and high levels of inequalities. It also demonstrates some of the weaknesses of so-called 'market-led' vocational education.

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1. Introduction

Technical and vocational education and skills development are becoming increasingly important policy issues in developing countries (King, 2009; Palmer, 2009). This paper considers experiences of 'skills development' in South Africa to contribute to a broader debate about the idea of 'skills', and the relationships between vocational education and development. The South African case is posed as an example of some of the limitations of what McGrath (2012) refers to as the global 'TVET toolkit'. This 'toolkit' represents a global consensus on how vocational education systems need to be reformed in developing countries. It includes: systemic reform focused on giving more power to shape policy directions to employers, often through qualifications frameworks; quality assurance systems; outcomes-based and 'institutionally-neutral' funding (such as voucher type systems), and managed autonomy for public providers. The 'toolkit' aims to bring the poor into the social and economic mainstream by improved 'employability', which is posed as the best alternative to what is argued to be the failure or impossibility of redistribution of wealth (McGrath, 2010, p.150). This paper explores some of the problems with this

consensus in practice in a developing country, as well as its conceptual and political limitations.

Complex policies in complex areas of social intervention are difficult to analyze, and it is easy to get lost in the minutiae of problems and disagreements. In the messy world of policy implementation, particularly in developing countries where corruption or rent-seeking is less institutionalized and more visible than it is in the developed world, policy analysis can be trapped in myriad everyday obstacles. In order to get closer to the underlying problems, and to reflect more systematically on what is revealed by the South African case, I juxtapose it with two sets of international studies. This leads to a discussion of three substantial problems with the 'global toolkit'. First, despite the best intentions of policy makers, the policy choices taken have entrenched a narrow idea of 'skills development' (skills as 'tasks') as a logical consequence of the notion of employer-specified competencies in an unregulated labour market. Second, an extremely complex qualifications and quality assurance system has been introduced for a small and weak provision system. Third, because 'skills' are separated from power, social policy, the structuring of labour markets, and the organization of occupations and jobs, they are presented as a substitute for even very modest redistribution of wealth.

I suggest that vocational education and skills development in South Africa provide a clear example of how education policy can

E-mail address: stephanie.matseleng@gmail.com.

be trapped in a paradigm of 'self-help', 'employability', and labour market flexibility that *works against the possibility of achieving improved levels of education and skills*. This is not an argument against expansion of both general and vocational education in developing countries, for economic reasons and human rights reasons. Rather, I am contributing to what McGrath (2012) and Carton (in this issue) refer to as the need for better theoretical understandings of the relationships between vocational education and development. I suggest two important agendas for research and policy development, in order to contribute to improving understanding of vocational education in developing countries, as well as to contribute to better policies. The one is locating vocational education policy in broader social policy—better-regulated labour markets, job security, more egalitarian social welfare, and an expanded vision of citizenship. The other is, ironically, that 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.

Terminology in the area of vocational education varies substantially across countries. Vocational education, occupational education, and professional education are all used in South Africa to designate education designed to prepare for the workplace. Vocational education, which includes components of general education (specifically language and mathematics), is generally broader than occupational education, which mainly teaches specific skills needed for specific jobs. Professional education is usually linked with a three or four-year degree, or higher qualification. 'Skills development' sometimes refers to occupational education and workplace-based training programmes such as apprenticeships or shorter training programmes in the workplace, but sometimes refers to *all education and training which is aimed at the workplace*. I am generally invoking the latter use of skills development in this paper. These usages are fluid and contested within South Africa, and to some extent represent previous divisions in government more than substantive divisions. I therefore attempt to make it clear from the context how terms are being used.

2. A brief overview of skills development in South Africa

The basic elements of skills development under apartheid are well established: low skills production, voluntarism on behalf of employers, artisan training for white men through state-owned enterprises, and a highly unequal public education system (McGrath, 1996; Gamble, 2004a; McGrath et al., 2004). As in many countries, work-related curricula have been associated with low achieving learners, and the control of 'social deviancy' (Badroodien, 2004). Over time a system emerged which was highly racialized, low status, fragmented, and separated from the rest of the education system (Gamble, 2003).

In response to economic difficulties, the late apartheid state attempted to transform the skills regime by moving the system away from its apartheid 'low skill' origins towards a framework based on free market regulation, a revived apprenticeship system, and a new institutional environment (Kraak, 2004c). Industry Training Boards were established in all industries, and given control over administration and certification of training. Jeanne Gamble (2004a) describes how the shape and form of the apprenticeship system followed changes in work organization, with the move to mechanization prompting the teaching of Mathematics and Science in colleges, and later, with a move to standardization in mass production, the introduction of competence-based modular

training. Kraak (2004c) describes this change, through which the time-based training system was converted into a competence-based one, as a key innovation. Ironically, as I will show later, this same 'innovation' was (re)introduced by the democratic government.

In 1994, when the first democratically elected government came to power, education and training were split between a Ministry of Education (responsible for schools, adult education, colleges, and universities) and a Ministry of Labour that was in charge of 'skills development'.

The Department of Labour (1997) introduced a *National Skills Development Strategy*, to replace the apartheid 'skills' system. Sectoral Education and Training Authorities (Setas) were set up, to replace the Industry Training Boards. Setas are stakeholder bodies, with employer and trade union representatives on their boards. They were set up through a levy-grant system, through which employers pay one percent of payroll costs, 80% of which goes to the Seta. The Setas distribute some of the money back to employers upon receipt of training plans and reports, and the rest is supposed to be spent on discretionary projects in the sector. The system was intended to create an incentive for employers to train, to support training, and to supply information about the training needs of each sector. The remaining 20% of the skills levy goes to a *National Skills Fund*, which was intended to fund training for disadvantaged groups, particularly the unemployed.

Underpinning the skills development strategy as well as broader education policy was a National Qualifications Framework (NQF), which was intended to replace all existing qualifications in the country with a set of new outcomes-based qualifications designed by new stakeholder-based structures (Republic of South Africa, 1995; SAQA, 2000a, 2000b).

The system as a whole was intended to be "a demand-led enterprise training policy... underpinned by appropriate supply-side measures" (Kraak, 2004b, p.126). The idea was to ensure that a regulated market of provision of training would ensure that training was responsive to employers' needs. Stakeholders, including employers, would define the competences (learning outcomes) that they required learners to have. These would be registered as qualifications and unit standards (part qualifications) on the NQF. Providers could then apply to Setas and other quality assurance bodies to be 'accredited' to offer programmes leading to qualifications or unit standards of their choice. This was also intended to lead to new provision as well as to many individuals getting qualifications based on existing knowledge and skills.

As part of the National Skills Development Strategy, the Department of Labour announced the phasing out of the old apprenticeship system, to be replaced by 'learnerships'. The main institutions that had historically been the sites of theoretical training for the apprenticeship system were the FET colleges, formally known as technical colleges. Previously, college lecturers had taught a nationally prescribed curriculum in three-month blocks, preparing learners for national examinations which, coupled with work experience for the remainder of the year, were requirements for sitting a trade test and becoming a qualified artisan. When the Department of Labour announced that the apprenticeship system, to which the colleges' main learning programme contributed, would be terminated, the then Department of Education developed a new curriculum, and a new qualification for the colleges to offer. This qualification, the National Certificate (Vocational) was designed as a 'general vocational qualification'. The intention was for the curriculum to be broader and more substantial than the old courses for the apprenticeships system. At the same time, new qualifications were being developed and registered on the NQF, based on employer and stakeholder specified competencies, and, through the Setas, the Department of Labour, and SAQA, learnerships started to be offered based on these qualifications.

3. Successes and failures?

Kraak (2004b) argues that the levy-grant scheme gave the state influence in the economy and in the formation of skills, and describes the *National Skills Fund* as an “important innovation that cedes real leverage to the state over the market” (Kraak, 2004b, p.125). Kraak (2004a) also suggests that the *Skills Development Strategy* is good example of a model which emphasizes simultaneous upskilling in the low, intermediate and high skill sectors, getting away from an economy trapped in ‘low skills’, but also not focusing exclusively on training for ‘high skills’¹. In later work Kraak argues (2011, pp.98–99) that

The Learnerships system has survived its bad publicity rather well over the past ten years as some of the HSRC 2008 survey results show. Completion rates were 65%, and 57% of completed learners found employment (HSRC 2008a). In a difficult youth labour market, these are extraordinarily good outcomes and they should be embraced and built upon.

The research that he cites did not, though, evaluate the substance of the learning programmes, or the nature of the jobs found. It argues that in terms of the system’s own (arguably questionable) targets, the system has not been a *total* failure. There is no doubt, however, that levels of training for artisans and other mid-level skills remain extremely low (Mukora, 2009). Numbers enrolled in vocational and occupational education programmes are low. The quality of provision is very erratic. Throughput rates of the colleges are very low (Taylor, 2011). In short, the *Skills Development Strategy* led to little ‘skills development’.

There are, inevitably, many problems which can be identified. The levy-grant system has been much criticized. One line of argument has been that many employers simply treat the levy as an additional tax. Although 65% of employers who should pay the levy are paying it, by 2004, only 10% of levy paying employers were participating effectively in the system (Kraak, 2004b). Some blame overly bureaucratic and incompetent Setas for this, and others argue that employers do not want to train their staff. There are many other criticisms of the Setas. They are supposed to be the key intermediaries in the relationship between training and economic and social requirements, but their labour market analysis is based only on reports from workplaces, and not research (Erasmus, 2009). There are large amounts of money in the system, much of which has remained unspent, in both the Setas and the *National Skills Fund*. Corruption and poor governance in the Setas has received much media coverage. Although an evaluation commissioned by the Presidency suggest that in general they receive better audits than most government departments (Singizi Consulting, 2007), this is in terms of following accounting procedures, and not a positive statement about the value for money of their spending.

There is confusion about learnerships and apprenticeships, and the old college courses (the theory component of apprenticeships) have been reintroduced; it now seems as if apprenticeships will continue to operate in parallel to learnerships. Despite the weaknesses of these old courses, it seems that many employers still have more faith in the old pre-1994 apprenticeship system than the new learnerships (Marock, 2011).

An ongoing problem is a lack of qualifications and curricula for artisan training, despite the proliferation of new qualifications through the NQF. Through the NQF, over 787 new outcomes-based qualifications and over 10,000 unit standards have been created, but there has been very little corresponding provision: by 2007,

172 unit-standards based qualifications and 2211 unit standards had awards made against them, to a total of 37,841 and 562,174 learners respectively (Allais, 2011b).

In 2009 a new President was sworn into office. Although this government replaced a government led by the same political party, (the African National Congress), dramatic shifts within the configuration of party leadership enabled the new government to present itself as substantially changing economic and political policy (Marais, 2011). A new Cabinet was announced, with substantial changes for education and training. Instead of a single Minister of education, there is now a Minister of Basic Education, and a Minister of Higher Education and Training. Skills development has been moved from the Ministry of Labour to the Minister of Higher Education and Training. The creation of this Ministry has, for the first time, located the entire post-school education and training system in a single Ministry, including workplace-based training, and the complex host of institutions surrounding the levy-grant system. The new Department of Higher Education and Training seems to be more focused on building and supporting education institutions. It is attempting to bring the Setas under greater central control, and to direct skills levy funding to formal public institutions (DHET, 2011b). State-owned enterprises have committed themselves to take on apprentices again (DHET, 2011a). Also in 2009, the original design of the NQF, as well as much of the quality assurance system built around it was completely changed (Allais, 2011b).

These changes have coincided with a dramatic (if perhaps somewhat rhetorical) shift, in the broader political and economic realm, away from the neoliberal notions of a regulatory state, and towards a (again, perhaps rhetorical) project of a ‘developmental state’. The notion of a ‘developmental’ state is contested one, and its application to South Africa is even more contested (Fine, 2011), which cannot be explored here. However, there have been some shifts in economic policy, as fiscal austerity has started to be replaced with infrastructure rehabilitation and expansion, redrawn industrial policy, and more generous social protection (although Hein Marais (2011) argues that they may pre-date the changes in the ruling party in 2009).

In order understand what this unfolding policy environment tells us about the role of vocational education in development, I turn to two sets of international studies. The first (Brockmann et al., 2011a,b) discusses different notions of ‘skilled’ labour, and how they are shaped by the nature of the labour market; how different qualifications are produced, understood, and valued; and how they correspond with different occupational divisions of labour. The second (Iverson and Stephens, 2008), located in the literature on ‘varieties of capitalism’, distinguishes three regimes of skill formation, each reflective of a particular underlying class coalition and political-economic institutional structure.

4. Skills, labour markets, and qualification reform

The notion of ‘skill’ is a highly contested one. Sociologists who study the labour market argue that it is socially and politically constructed. For example, Charles Tilly (1988, pp.452–3) classically argued,

As a historical concept, skill is a thundercloud: solid and clearly bounded when seen from a distance, vaporous and full of shocks close up. The commonsense notion—that “skill” denotes a hierarchy of objective individual traits—will not stand up to historical scrutiny; skill is a social product, a negotiated identity. Although knowledge, experience, and cleverness all contribute to skill, ultimately skill lies not in characteristics of individual workers, but in relations between workers and employers; a skilled worker is one who is hard to replace or do

¹ The debate around ‘high skills’ routes for reforming vocational education and improving economic performance was one which grabbed the imagination of South African policy makers, like policy makers in many other countries (see Ashton, 2004; Kraak, 2004a).

without, an unskilled worker one who is easily substitutable or dispensable.

For the purpose of the current paper, I examined how different qualifications are produced, understood, and valued, and how they correspond with different occupational divisions of labour, by focusing on a set of European studies, specifically on England, France, Germany and the Netherlands (Brockmann, Clarke, Clarke and Westerhuis, Hanf, Méhaut, Méhaut and Winch, Winch, and Westerhuis, in Brockmann et al. (2011a,b)). An important point which emerges is the idea of division between two main systems of vocational education. Michaela Brockmann (2011), drawing on the work of Felix Rauner (2007), distinguishes between vocational education and training systems which focus on education for a well-regulated and protected occupation, such as the German dual system, and education aimed at 'employability'. 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.

Here, vocational education aims to develop vocational competence and identity. An occupation is a formally recognized social category, with regulative structure concerning qualifications, promotion, and range of knowledge (theoretical and practical) required (Clarke, 2011). Because the employment relationship is a long-term one, it is founded on abilities that are multi-dimensional and holistic. Students are expected to 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. They are prepared for careers in an occupational labour market which relates occupations to the corresponding tracks of vocational education.

Clarke (2011, p.108) argues that, notwithstanding substantial differences between Germany, France, and the Netherlands, when these three countries are juxtaposed to the English system, they have some commonalities: "VET is provided through comprehensive programmes that are part of the national education system and thus constitute the continuation of 'education' (commonly based on a curriculum, with a broad content) rather than 'training' as more narrowly focused on the labour market and the job". There is concern with ability to plan, carry out, and evaluate, based on professional judgement and responsible decision-making. For example, bricklaying in Germany is an occupation which involves project conception and execution. In Germany the concept of a *Beruf* structures the labour market and the vocational education system, mainly at the level of intermediate qualifications (between unqualified/unskilled workers and academically qualified/professional workers) (Hanf, 2011). The concept of a *Beruf* organizes and reduces competition in the labour market at this level. *Berufe* are strongly linked to the collective bargaining system as well as the welfare system. The concept is part of a broader notion of 'cultivated and qualified' labour, as part of the idea of dignity in work, as opposed to humiliating forms of work (Hanf, 2011, p.55). To pursue a *Beruf*, an individual needs a systematic combination of formal knowledge, skills, and experience-based competence, not linked to a specific workplace.

In the second model, which is prevalent in Anglo-Saxon (liberal market) countries,

a '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, pp.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 (Brockmann, 2011). Vocational education is regulated through this 'market of qualifications'. Rauner (2007, p.118) argues that

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].

In this second approach, the labour process is fragmented into discrete work processes, and employers are interested in skills for the immediate job at hand. Intellectual functions (planning, coordinating, evaluating, controlling) are sharply separated from execution. Wages for labourers are based on outputs, generally at variable rates (Clarke, 2011). 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 series of skills—or, a set of related tasks bundled together (Winch, 2011).

The 'market of qualifications' approach is associated with qualification reform and qualifications frameworks, (although the USA has not really tried to regulate qualifications in the same way, or to use them as a tool for reform, except for some mainly unsuccessful attempts at regulating skills standards (Bailey and Berg, 2010)). The starting point is an analysis of a 'mismatch' between skills 'supply' and 'demand'. This is attributed to the education system.² One assumption of this model is that education and work have become too 'far away' from each other, and need to be brought closer together. Another assumption is that qualifications comprised of statements of competence (or learning outcomes) created with employer involvement provide a mechanism to bring the two worlds closer; in other words, that the starting point for thinking about education must be a description of the needs and practices of the workplace.

The English³ model, introduced in the 1980s, was the "the first national attempt to base vocational qualifications on the idea of competences" (Young, 2009, pp.6). A framework of National Vocational Qualifications (NVQs) was introduced as an attempt to solve Britain's relative economic decline (Hyland, 1994). Some reformers from left wing political perspectives also supported the competency/outcomes approach, because it seemed to offer possibilities to open up access to education institutions which were seen as overly academic and self-interested, (Wolf, 1995;

² In fact, the reasons are complex. For example, Breier (2009, p.127) argues that while, in overall terms, we are training enough doctors in South Africa, "There can be little doubt that there is a shortage of medical doctors in South Africa, concentrated in the public and rural service. 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. Chang (2010) points out that bright Koreans are increasingly becoming doctors, rather than engineers or scientists, not because there is no need for the latter two professions in industry, but because, the government has reduced already low social security nets, and many companies retrench or otherwise get rid of older people. Because this is not a threat for doctors, medicine is seen as a more secure profession. These are merely two examples of a whole host of complicated reasons why education systems may not 'produce' according to 'demand'.

³ Also Northern Ireland and Wales.

Young, 2009). Reformers hoped that the 'new standards' would provide a rigorous and more 'relevant' alternative to the 'knowledge-based' approach to standards associated with written examinations (Young, 2009). The outcomes-based approach was also intended to make a break from two main elements of qualification design prior to the 1980s: the specification of time for an apprenticeship, and the specified syllabus (Young, 2009). Apprenticeships had been linked to specified time-periods, sometimes as long as seven years, which governments in the 1980s saw as leaving too much control to the trade unions (Wolf, 1995; Raggat and Williams, 1999). The specification of the syllabus as the basis for teaching programmes and the assessment of off-the-job learning were seen as giving too much control to teachers, colleges and Awarding Bodies (Young, 2009). Instead, the new standards would specify the expectations and requirements of employers, in terms of expected work performance, expressed as outcomes (Stewart and Sambrook, 1995, p.98). Qualifications would not be linked to a curriculum, but would rather be derived from an analysis of work functions, and rely on assessment in the workplace. This is the basis for this approach being referred to as 'market' or 'industry'-led, despite its very weak linkages with labour markets.

In short, attempts to regulate the 'market of qualifications' in the UK attempted to compensate for the lack of clear and well-defined and protected occupational roles in the labour market by trying to link vocational education to the workplace through employer-specified competence statements. Because reform of vocational qualifications in the UK in the 1980s was designed to legitimate constantly shifting, job-type specifications, by making them easier to accredit (Winch, 2011), there was a strong emphasis on the development of separate 'units of competence'. This, perhaps, explains why Clarke and Westerhuis (2011, p.146) argue that, "In its almost exclusive focus on skills, the English meaning of competence... is almost incomprehensible in most countries". The English notion of competence is seen as narrow and 'task-based', as opposed to a broader, more holistic notion in continental European countries. There is a strong contrast between bundles of 'skills', usually called competences, which are frequently descriptions of task-related activities and processes, and the skill and knowledge associated with regulated occupations and professions. Technical occupations rely on systematic knowledge as well as operational experience and ability. Professions are regulated by charters, with a defined knowledge base, controlled entry, and well-understood and longstanding qualifications based in higher education, with relatively independent disciplinary and accountability arrangements. Méhaut (2011) argues that the 'kernels' of competence in France are bigger than they are in the English model.

A problem which dogs the 'units of competence' approach is that in order to provide sufficient clarity to the range of possible users, the outcomes/competences tend to become both very narrow and very overspecified (Wolf, 1995; Allais, 2007b, 2010).⁴ This is partly because of the need for the competence statements to be interpreted by a wide range of people, and partly because when "reference to workplace ability is almost exclusively centred around skill, it becomes difficult to allow for the concept of

occupational integration, as skill is a fragmenting rather than an integrating concept" (Winch, 2011, p.92). Drawing on Braverman, Winch goes on to point out that, ironically, 'skill' is suited to conceptualizing the segmentation of the labour process into particular episodes of work or tasks, but at the limit this fragmenting removes any aspect of personal ability, or skill, from an operation. This is the dilemma of casualized and precarious work, and it is the dilemma of the 'market of qualifications' approach. Winch suggests that the prominence of the word 'skill' in labour markets, policy, and discourse may reflect growing dominance of fragmented and casualized labour force. Brockmann et al. (2011a, 2011b) show that subcontracting, and outsourcing are a serious problem for work-based learning and the acquisition of qualifications. As Standing (2011, p.40) asks, rhetorically, "Why invest in an occupational skill if I have no control over how I can use and develop it?"

While policy makers may believe they are creating a 'demand-led' system, it is focused on employers' short-term labour market needs, rather than long-term educational needs of young people or even, perhaps, the long-term needs of the economy. Employers build on the 'skills of yesterday'. Ironically, this leads to lack of labour market currency for many occupational qualifications:

If a qualification seeks only to mimic a traditional, restricted and shrinking area of labour market activity, then it will inevitably have low labour market currency and become quickly out of tune with changes in the labour market. It is the educational element, in particular the integration of the theoretical knowledge component with practice, which gives a qualification its longer-term value and which can in turn facilitate rather than impede the development of the labour process.

(Clarke and Westerhuis, 2011, p.143)

This may explain why the 'industry-led' Australian competence-based training system has "weak links between vocational education and training and employment" (Cooney and Long, 2010, p.29). Another irony is pointed out by Brockman et al. (2011, p.6):

...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.

The English model has been replicated in many countries around the world, with assistance from UK-based agencies and organizations, as well as international organizations. As McGrath (2003a) argues, national qualifications frameworks are very much part of the 'toolkit' of reforms in developing countries. The South African, Botswana, and Mauritian NQFs, Australian competency-based training, NQFs in the Caribbean and some Asian countries, and labour competence frameworks in Latin America all drew on the English NVQs, and all generally follow the model of getting stakeholders, particularly representatives of employers, to develop qualifications, which individuals can then select, to enhance their 'employability' (Allais, 2010). Informal markets dominate these countries, and there is none of the labour market regulation and social policy which forms the basis of vocational education systems which have strong linkages with regulated occupations. In all cases the focus is on the creation of a framework of qualifications, using employers (and other stakeholders) to define 'competences' or 'learning outcomes' that are the basis of the qualifications, and the idea is that state will regulate both private and public providers against the stipulated outcomes.

⁴ Further, the process of designing the learning outcomes frequently leads to arcane and complex disputes over terminology that become increasingly opaque to people not involved in the processes—which then contradicts the aim of increased transparency and improved supply of information. The English National Vocational Qualifications (Young, 2009) and the South African National Qualifications Framework (Allais, 2009) provide particularly stark demonstrations of this. In South Africa, the unit standards became lengthy and unwieldy, new provision did not emerge, and existing education institutions were burdened with additional bureaucratic requirements. Outcomes-based qualifications frameworks for vocational education in Mauritius and Botswana, and for workplace training in Mexico, experienced similar problems (Allais, 2010).

The South African NQF is a clear example of how the former, narrow notion of skills has become entrenched by the outcomes-based qualification model, despite the good intentions of policy makers⁵. It is a particular irony and tragedy in South Africa that the NQF, together with the skills development strategy, was supposed to overcome the atomized and low-level skills that were produced by the apartheid system. As we have seen, citing Kraak (2004c) the late apartheid state in South Africa introduced similar reforms, following a similar logic—industry-led modular competence-based training through a regulated market. Although there were many significant differences between the policies of the democratic government and those of the apartheid state, this reliance on employer-specified competencies, and the breaking up of learning programmes into smaller pieces, is the same. This is in line with experiences in many countries, where competence-based systems are introduced to replace previously failed competence-based systems; the apparent logic of the idea of employers specifying competences holds so much sway, that the assumption is always that the previous methods for specification of competences were wrong, and not the underlying idea.

A further tragedy apparent in South Africa is that this approach creates new barriers for workers without formal education. Consider, for example, one of the many very low-level unit standards which were developed, this one for workers at check-out counters in shops. The unit standard is titled: 'Pack customer purchases at point of sales', and contains the following three specific outcomes:

Explain factors impacting on the packing of customer purchases.

The importance of packing customer parcels correctly is explained.

Pack customer purchases.

A worker who is perfectly competent in packing groceries, and has been doing so for years, may well not be found competent against these outcomes. Further, being found competent against them will not assist them in anyway—they will not be able to do anything other than continue to pack groceries.

Thus, the *first* key problem facing skills development in South Africa is the underlying qualification model, which, despite rhetoric to the contrary, is based on, and reinforces atomized 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 and overspecified 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. This problem has dogged those parts of the education and training system most directly linked to the world of work, because the formal education and training system did not, in the main, comply with the qualifications or quality assurance model of the NQF. Most of the formal education system (such as universities) ignored this qualification model, (although they did cosmetically rewrite their qualifications into outcomes-based formats). It is workplace-based providers, as well as providers attempting to offer learnerships and occupational qualifications, which have been compelled to use the new outcomes-based qualifications developed through the NQF. Notwithstanding the many real criticisms of the Setas, it is important to point out that, as new institutions, it was far more difficult for them to object to or side-step official policy prescriptions. It has also been in these parts of the education system that the quality assurance processes of the

Setas have been implemented, within a particular logic of provider accreditation and decentralized assessment (both firmly part of McGrath's (2003a) notion of a 'TVET toolkit'). These are all the weakest parts of the education and training system, and the parts without a coherent strong institutional base. This highlights the *second* key problem facing skills development: the quality assurance systems which emerged.

Outcomes-based qualifications frameworks are a quintessential neoliberal type of reform, because they are focused on state regulation of service delivery, instead of the state providing public goods (Allais, 2007a). It is no coincidence that early qualifications frameworks emerged in countries preoccupied with new public management as a way of reforming their civil services, as the logic is essentially the same (Strathdee, 2011; Allais, 2007a; Phillips, 1998). As I argue elsewhere (Allais, 2011a), outcomes-based qualifications frameworks also have a similar logic to neoclassical economics—they are built on the notion of rational individuals making rational choices about investments in their 'human capital', as well as notions of market imperfections due to information asymmetries. By specifying learning outcomes, qualifications frameworks are supposed to improve information in the market, thereby improving individual choices, and governments' ability to regulate and support markets to supply education and training.

An irony is how centralized and top-heavy this type of intervention can become, despite its avowed intention of being 'demand-led'. The regulatory state is not a small state. The regulated qualification model led in the UK to a domination of 'arms-length' state institutions "...whose aim is to facilitate employer needs, when employers are often reluctant to articulate these, not least because their needs are, in many cases, extremely limited" (Winch, 2011, p.85), drawing on Keep (2007). King (2012) points out that in India, for example, 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". What the South African case shows is how a policy which on the one hand, is strongly centralizing—in terms of control and accountability mechanisms, and standards specification—but on the other, strongly decentralizing—in terms of the management and delivery of education and the development of curriculum—has been very damaging to a sector which is extremely diverse and mainly institutionally weak.

This model made it unlikely that the *National Skills Development Strategy* could contribute to the development of a training system, because of its focus on regulatory systems instead of building and developing education institutions. An irony is that reliance on the market to expand provision may make it less likely that education is responsive to the needs of the economy or society. Loose (2008) argues that one of the biggest problems with the promotion of competency-based training in developing countries is that what these countries actually need is the creation of an effective training system—the development of institutions, programmes, and curricula. These are just the things that competency based training does not address: it provides "the definition of competencies and the methodology for assessing them; but it failed to provide the "T" in CBET, a learning process as the basis for the creation of training itself" (Loose, 2008, p.76, emphasis in original).

I now turn to a *third* problem with skills development in South Africa. Gerhard Bosch and Jean Charest (2010, p.22), in an international comparison of vocational education, argue that

...developments in vocational training cannot be understood solely by examining the inner dynamics of education and training systems. They do not acquire their societal significance and their value for companies and trainees until they are embedded in the labour market. In particular, differences in

⁵ For a discussion on the initial intentions of policy makers involved in the NQF, see French (2009).

industrial relations, welfare states, income distribution and product markets are the main reasons for the persistently high level of diversity in vocational training systems.

I turn therefore to a body of literature which looks more broadly at the relationship between the state, the economy, and social policy, and particular regimes of vocational education and training. Specifically, I consider a study by Iverson and Stephens (2008) which looks at different regimes of skills production in developed countries.

5. 'Varieties of capitalism' and South African skills policies

Iverson and Stephens (2008), working with in the 'varieties of capitalism' literature, as well as drawing on Esping-Anderson's (1991) classic *The Three Worlds of Welfare Capitalism*, compare different ways in which advanced capitalist economies are organized, to posit 'three worlds of human capital formation'.

The 'Varieties of Capitalism' literature is primarily an attempt to understand and compare the institutional basis of different production systems in the advanced economies. Like the studies considered in the previous section, it considers labour market structures, but also looks more broadly at other social policies. Elaborated by Hall and Soskice and collaborators (Hall and Soskice, 2001), it distinguishes between two main models of political economy in the rich democracies of the OECD. The first model, 'liberal market economies', includes capitalist economies which operate more closely to the textbook model of the unfettered 'free market' (United States, the United Kingdom, Australia, and Canada). The second, 'coordinated market economies' includes countries like those in Western Europe whose capitalist systems rest on multiple mechanisms of institutional coordination, including 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 high levels of social protection in the coordinated market economies encourage individuals to acquire specific skills. This supports a training system that enables firms to specialize in international niche markets—often with quasi-monopolistic competition, and high mark-ups. Workers at the lower end of the achievement distribution have strong incentives to work hard in high school to get into the best vocational schools or get the best apprenticeships. This raises skills at the low end, and supports a more compressed wage structure. In liberal market economies, by contrast, where there is little redistribution of wealth to public schooling and social insurance, the middle and upper-middle classes self-insure by attaining high levels of general education, generally through private institutions. 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 therefore low, and workers end up in poorly paying jobs with little prospect for advancement. Manufacturing uses mainly low and general skills. It is difficult for unions to gain bargaining leverage, as they are easily replaced, which in turn weakens unions, as incentive to join them is low.

Iverson and Stephens (2008) have built on and refined this argument by distinguishing between two major types *within* the coordinated market economies—those that have been dominated mainly by centre-left coalitions (the Scandinavian countries) and those similar to Germany, which has been dominated by Christian Democrat-led coalitions. Based on an analysis of differences in the organization of capitalism, electoral institutions, and partisan politics, with different implications for inequality and labour market stratification, they argue that there are not two but *three*

worlds of skill formation in the advanced capitalist countries, each reflective of a particular underlying class coalition and political-economic institutional structure (Iverson & Stephens, 2008). What they add to the debate is interesting differences *between* the different coordinated market economies.

Iverson and Stephens argue that in coordinated market economies which are dominated by centre-left coalitions⁶, there is redistribution of wealth, as well as heavy investment in public education (including high quality public day care and preschool) and industry-specific and occupation-specific vocational skills. This model encourages both high levels of general skills and high levels of industry-specific skills, and allows flexibility in the labour market through extensive spending on retraining. The combination of heavy spending on general education and well-developed vocational training creates a compressed skill structure, as workers at the bottom have specific skills that the workers at the bottom in liberal market economies do not have, but they also have better general skills. This makes them more able to acquire more technical skills, enabling high value-added production in international niche markets. The high levels of general education also enable these countries to cope with the rise of services. Provision of public day care provides jobs, allows parents to enter the workforce or increase their working hours, provides early childhood education which is particularly important for children of less educated parents, and facilitates higher fertility rates (which enable more stability in the long-term funding of the welfare state).

On the other hand, in coordinated market economies where alliances are across class lines, such as in those dominated by Strong Christian Democratic parties, demands for redistribution are fewer. Support for heavy public spending on preschool and primary education is lower than in the Scandinavian countries, and overall education, higher education, and day care spending is similar to the liberal regimes. Nonetheless, general skills at the bottom are significantly higher. Most continental European countries have well functioning vocational training institutions, which offer opportunities for reasonable levels of general education. They also have strong collective bargaining systems. High social insurance and job protection, as well as strong vocational training in firm-specific and industry-specific skills, have facilitated acquisition of firm-specific and industry-specific skills. However, skilled workers are favoured, and the interests of low-skilled and semiskilled workers are not addressed as well.

There are many critiques of the varieties of capitalism literature, with and without the expanded version that distinguishes between types of coordinated market economies. Since the initial analysis was made, most of the 'coordinated' market economies have become increasingly similar to the liberal market economies, with implications in the long-term for their training systems. This lessens the descriptive purchase of this body of literature in today's world. Another major critique is that power relations are not sufficiently addressed, and the role of trade unions in building the welfare state is downplayed. And of course, it is a model of advanced capitalist countries. Nothing in the analysis helps developing countries to work out how best build their general and vocational skills systems. Nonetheless, the findings regarding complementarities between different systems of labour market, social policy, and training policy remain salient.

What is of interest in a consideration of the role of vocational education in developing countries is the identification of reinforcing relationships between systems of social insurance, systems of skill formation, and spending on public education. Specifically, Iverson and Stephens argue that *social equality* fosters the development of high levels of both general and specific skills, especially at the bottom end of the skill distribution, which in turn

⁶ Which they attribute to proportional representation electoral systems.

reinforces social equality. Specific and general skills at the bottom of the distribution are strongly linked to *employment protection and unemployment replacement rates*. General skills at this level are also strongly related to active *labour market policy* and *day care spending*, as well as to vocational education. Finally, Iverson and Stephens argue 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” (Iverson and Stephens, 2008, p.621).

What this study brings to the forefront when juxtaposed with the South Africa case is the insufficient linkages between education and training policy and social policy. South Africa is one of the most unequal countries in the world. The South African economy has 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 (Marais, 2011). All of these factors are unfavourable to the development of skills in the general population. The broader political and economic context in South Africa has been strongly determined by neoliberalism (Marais, 2011; Bond, 2000, 2005). Among the various factors that have affected vocational education and skills training since the transition to democracy, one was that there was no industrial policy in this period—the logic was that comparative advantage would emerge by ‘getting the fundamentals’ right. Macroeconomic policy focused on attracting foreign investment has led to deindustrialization and a shrinking manufacturing sector (Mohamed, 2010). Further, as Giovanni Arrighi et al. argue (2010, p.435), by ‘betting’ on capital, the South African government “forfeited the kind of investments in the welfare of the population (housing, public transport, health and, above all, mass lower and higher education) that would have been key developmental objectives in themselves and may well be the most essential, though by no means sufficient, condition of renewed economic expansion.” Instead, it embraced fiscal austerity.

Job insecurity, otherwise known as labour market flexibility, is on the rise⁷. Despite public perception of an inflexible labour market, the South African economy is characterized by extremely high unemployment and extreme job insecurity for many workers⁸. Marais (2011) points out that there are so many exemptions to wage agreements that in many cases they are empty shells. Further, the numbers of working poor have increased dramatically: “Vast numbers of workers earn low wages and do so on such insecure terms and so often without attendant benefits that their jobs do not shield them against poverty. Even formal sector employment is increasingly insecure, wages and benefits poor and less easily distinguishable from informal-sector employment”

⁷ Of course this is an international phenomenon, as well documented by Standing (2011). As Chang (2010, p.58) argues, “Job security has always been low in developing countries, but the share of insecure jobs in the so-called ‘informal sector’ – the collection of unregistered firms which do not pay taxes or observe laws, including those providing job security – has increased in many developing countries during the period, due to premature trade liberalization that destroyed a lot of secure ‘formal’ jobs in their industries. In the rich countries, job insecurity increased during the 1980s too, due to rising (compared to the 1950s–70s) unemployment, which was in large part a result of restrictive macroeconomic policies that put inflation control above everything else.”

⁸ As Marais (2011, pp. 180) argues “Indeed, if labour laws were a major underlying cause of unemployment, job growth should be most vigorous in those sectors where the laws have the least impact, such as agriculture, domestic and formal work. The opposite seems to be true.” Further, as Scully (2011) demonstrates, current wage earners in the middle and lower sections of the income distribution do not earn enough to provide for their households’ livelihoods, and depend, in addition to their wages, on broad networks of support, including government grants, top-down subsidies from other households, and the bottom-up subsidies provided by unpaid reproductive work, within their own household and from other households. Expanding low wage work would simply put additional strain on these already burdened livelihood networks, without adding to net well-being.

(Marais, 2011, p.181). The average real wage is propped up by small numbers of high-skilled high-salaried workers, and even then, the median wage in 2009 was R2500 (324USD) per month.

The South African state has rolled out a social welfare system which is the largest in Africa, and considerable by the standards of any developing or indeed middle-income country. This system has done more to provide relief from poverty than any other policy (Marais, 2011). But it consists of grants which are targeted and means-tested. Able-bodied people capable of work are given nothing, although they cannot work, because there are no jobs. The implicit assumption is that they are choosing not to work. A basic income grant, even at extremely low levels, has been rejected as encouraging a state of dependency. As Franco Barchiesi (2011, p.134) argues,

The seeming contradictions of postapartheid social policy ultimately fit the government’s view of the poor as a Janus-faced creature, constantly lured into laziness and sloth, but also in possession of a natural economic ambition that the state has a duty to nurture and guide.

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. Instead, South African policy makers have followed the model of the developed countries which have favoured a ‘market of qualifications’, market-based approach to education and training, with limited labour market regulation, and limited social welfare spending. The weaknesses of this approach are much starker in poorer countries, like South Africa, than they are in the developed world.

The ‘market of qualifications’ approach rests on a notion of ‘choice’ and of ‘employability’ which is at heart about blaming individuals for the lack of jobs. Neoliberalism “represents a new modality of government predicated on interventions to create the organizational and subjective conditions for entrepreneurship—not only in terms of extending the ‘enterprise model’ to schools, hospitals, housing estates, and so forth, but also in inciting individuals to become entrepreneurs themselves” (Marais, 2011, pp.137–138) citing Hart (2006). Skills training, public works, workplacements, and apprenticeships are posited as a ‘bridge’ into a world of formal employment which firstly, does not exist, and secondly, where employment does exist, does not lift people out of poverty. This is despite serious contention about the relationship between education and economic development (e.g., Chang, 2010), and serious debate about the role of education in increasing productivity (e.g. Brown et al., 2011). In a neoliberal policy environment focused on self-help and responsabilization, education, and particularly vocational education and skills, becomes part of how policy makers avoid addressing structural problems in the economy. Ironically, though, this approach makes it less likely that people will attain general or specific skills and knowledge: it is almost impossible to build ‘successful’ vocational education in a context of extreme job insecurity and casualization.

In sum: the dominant view in the media and policy circles are of a ‘skills shortage’ coupled with an inflexible labour market as the leading causes of unemployment. I argue the converse: that the inadequacy of the South African social security system, high levels of job insecurity, and high levels of inequalities, make it almost impossible to develop robust and coherent skills development.

6. A research agenda: skills, knowledge, and education

The two sets of international studies that I have drawn from at length in this paper both differentiate between liberal market economies and coordinated economies. In the former (Brockmann et al., 2011a,b) the emphasis is on labour market regulation. It

shows how the organization of occupations and the labour process on the one hand, and the organization of vocational training on the other, have mutually reinforcing dynamics. The second (Iverson and Stephens, 2008) looks even more broadly at the labour market as well as social policy and political configurations, and how these affect vocational training and skills development. One clear trend emerges: that liberal market economies have inherently weaker vocational training, and lower levels of skills and general education at the lower levels of the workforce, although they may have highly skilled workers at the top levels. Developing countries, particularly in Africa, have usually followed the policy trajectory of these countries, and this model of capitalism has become more dominant in recent years. This may augur badly for the countries with strong traditions of vocational education. Developing better understandings of vocational education, and improving insights into its relationship with the economy (and development) are therefore challenges facing all countries.

How can vocational education strengthen knowledge production and innovation, at the same time as providing students with knowledge that increases their power and fulfillment in the workplace and in society? I suggest that there are two key areas that need focus from researchers, activists, and policy developers. The first is making linkages with social policy, specifically pushing for an expanded vision of citizenship, greater levels of social welfare and greater regulation of the labour market. These factors are not 'nice-to-haves', on top of a well-functioning vocational education system. They are part of making a vocational education system work. The alternative has been for education policy to be used as part of employability programmes which "divert attention from the hard work needed to create jobs and have the added disadvantage of making the unemployed appear solely responsible for their plight" (Unwin, 2004, p.245). This is inevitable if educationalists do not challenge power relations in society, but instead focus only on reforming education systems. I suggest a key question for research is: how can education policy support, and be supported by, improved social policy?

Clearly, we are not going to have regulated occupational labour markets, and social welfare overnight in most developing countries. What else can we do to improve vocational education? Gamble (2004b, 2011) points out that improving vocational education needs a focus on *education*, instead of putative employer needs: building strong institutions, curricula, and lecturers. These are just the features that the 'market of qualification' model neglects—and the South African case shows how this has led to their neglect as a focus of government. The collapse of the original model of the South African NQF will not, on its own, lead to a shift away from a 'market of qualifications'. It does, though, open the space for more coherent policy on qualifications and curriculum. I have discussed the problems with the assumption that bringing vocational education closer to employers will improve its relevance and quality. Protecting vocational education from the *immediate short-term* needs of employers and from a *narrow* labour market focus may be the best way of improving it, in the absence of strong social policy and well-regulated occupations. Having a strong sense of curriculum, developed through a clear knowledge base, is key to strengthening educational institutions, as it is the only way they can have a distinctive identity, instead of being service providers whose 'product' is redefined for each 'client'. But insight into the knowledge base of vocational qualifications is weak. Many learnerships in South Africa were created in areas without an established knowledge base. Will the inclusion of Maths and language courses ensure a broader and more empowering orientation? These are important, but do not seem to be sufficient. Should we include lots of theoretical and background information about technical areas being studied? For example, a current qualification in the construction industry in

South Africa includes information on the geohistory of soil formation. This does not seem to provide an answer.

Contemporary debates around the 'knowledge society' have "brought to the forefront questions of what knowledge is for, and have re-opened the debate about the relative merits of 'relevant' knowledge on the one hand, and knowledge for its own sake on the other" (Muller, 2008, p.1). Some argue that modern society is increasingly postindustrial, organized around theoretical knowledge (Bills, 2004). Others argue that mechanization and de-industrialization may have made knowledge less, not more important—because of the growth in low skills services (Chang, 2010).

Charlot (2009) argues that education must treat the world as an *object* and not as an *environment* or *place of experience*. It is about introducing students to intellectual worlds made up of objects whose meaning does *not* derive primarily from a relationship with the world *as it is experienced*. Objects must be seen in the relation to other concepts, and not by a direct connection with a referent, as is experienced in the world of experience. This, Charlot suggests, leads to the acquisition of systematized ways of thinking. Gamble (2011), drawing on Bernstein (2000), Beck and Young (2005), and Sohn-Rethel (1978) suggests that the trend in contemporary curriculum, in both vocational and general education, is to drive curricula ever closer to the "concreteness of 'the world', or what refers to as a 'context of human action' where meanings derive from concrete events or experiences that have actually happened in a specific time and place". By definition, she argues, "curricula may also tend to be driven farther away from a 'context of thought' where meanings exist only in abstract or symbolic form, independent of the time-space context of their production." Key to Gamble's position is that we must stop separating 'theory' (or knowledge) from practice (or skill) and understand that practices are always knowledge-based. The implication of her argument is that there is no such thing as 'skills', only different relations between a knowledge base and a practice.

I suggest, then, that researchers should be asking: what is the knowledge which is the basis of vocational qualifications and occupations? How it is produced, understood, and valued? What are its relationships with different occupational divisions of labour? What are the relationships between the regulatory framework of vocational qualifications, the structure and content of provision, understandings of knowledge and fields of knowledge, the labour process and deployment of labour in the labour market, and the currency of qualifications in the labour market? Answers to these questions need to be located in the broader debates about knowledge, power, and the curriculum. This will help us understand how to improve vocational and occupational education. It will also contribute to understanding what education is for, and what its intrinsic value is in the 21st century.

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