OECD Reviews of Vocational Education and Training

A Skills beyond School Review of South Africa

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BETTER POLICIES FOR BETTER LIVES

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Over 3 million young people in South Africa are disengaged from education and work

While economic growth in South Africa has been respectable, it has been weaker than in many other emerging economies. About one third of those aged 15-24, or 3.4 million people, are not formally employed nor in education or training (NEET). Two million of them have not finished Grade 12. While some of these young people will be working in the extensive informal economy, these figures still represent a profound challenge for South Africa.

South Africa's challenge is greater than most other emerging economies

Effective school-to-work transition is critical in both developed and emerging economies. While the NEET challenge is typically greater in emerging economies, in South Africa it is particularly severe. The failure to integrate so many people into the labour market threatens social cohesion and in the context of the post-apartheid transition this is a particular concern because of the over-representation of black South Africans in the NEET population.

Effective vocational education and training (VET) should be part of the response

Clearly the youth employment challenge requires action across a range of fronts, including measures to promote economic development, and active measures to encourage labour market insertion. But a very wide range of evidence shows that effective vocational programmes can be part of the answer, by providing practical training linked to the prospect of a job, smoothing the transition from school to work. This review therefore aims to set out some concrete proposals for South Africa, drawing on the very

extensive series of country studies of vocational education and training systems undertaken by the OECD.

Strengths of the South African system

In the face of major challenges, South Africa displays an open and committed approach

When visiting South Africa and exploring the issues, the OECD team were struck by the scale of the challenges faced, clearly greater than in most OECD countries. At the same time they were impressed by the energy and commitment which South Africans were bringing to their different roles in the vocational system, whether as teachers, college and institution leaders, policy makers, employers, trade unionists, parents and students. They were also impressed by their openness to debate and alternative points of view. These tangible strengths, that many countries can envy, will serve South Africa well.

The creation of DHET in 2009 represents a major step forward in integrating vocational education and training policy

In many countries the governance of vocational education and training involves a complex fabric of agencies, reflecting a division of responsibilities between different ministries, the relative autonomy of institutions and the separate roles of private training providers, employers and trade unions. Such decentralised governance has advantages in terms of diversity and innovation, but it may confuse students and employers, involve some duplication of tasks such as curriculum design, and complicate transitions.

 In South Africa, prior to 2009 responsibility for education and training was divided between the Departments of Education and of Labour and sometimes weakly coordinated. In 2009 the DHET was established, and given responsibility for one of the twelve objectives of the South African government, namely 'to develop the human resources of the workforce in an inclusive way'. The Department brought together responsibility for the university and college sector, adult learning centres, the private institutions, the Sector Education and Training Authorities (SETAs) the National Skills Fund (NSF) and the regulatory bodies responsible for qualifications and quality assurance. Together, these form an integrated "post-school" system. This integration of responsibilities in DHET is a clear strength.

South Africa's well established qualifications framework provides a helpful structure

Many countries are currently implementing qualification frameworks, or have done so recently. Such frameworks can make TVET systems more transparent, so that the value of different qualifications can be more clearly recognised by students, employers and other stakeholders. Strong frameworks should, in principle, facilitate lifelong learning, and improve access to higher level education. Implementing a qualifications framework might therefore be best seen as part of a wider approach to quality and coherence in VET provision.

South Africa is a pioneer in this field, as the South Africa National Qualifications Framework was implemented in 1995. The ten levels of the Framework should make it easier to understand which programmes lead to the same level, and how different programmes relate to each other. International experience shows that if frameworks are underpinned by a strong methodology for allocating qualifications to levels, supported by key stakeholders, and backed by complementary measures to unify the TVET system and improve transitions, they can facilitate lifelong learning, and improve access to higher level education.

There has been a valuable consolidation of the TVET college sector

In pursuit of both higher quality and greater efficiency, many countries have sought to merge training institutions. While there is sometimes resistance from local communities or individual professions to the loss of "their" training institutions, experience has shown that mergers can be managed successfully, particularly when they do not involve closure of campuses. Often countries report benefits from these consolidations in terms of synergies and economies of scale.

In South Africa, much valuable work has gone into the mergers of many different precursor institutions, to establish 50 TVET colleges, granting economies of scale and giving a clearer identity and visibility to the sector. This process is also a key foundation for the development of professional leadership by focusing attention on a limited number of college leaders to drive reform.

In response to the challenge of young people outside the labour market, there are bold plans to expand the college system

In the face of major challenges in the youth labour market, there are ambitious plans to expand the TVET college system to 2.5 million enrolments by 2030. Over the same time period universities are also expected to grow, but at a slower pace. These plans are linked to key objectives, including improvements in management and the quality of

vocational teaching, strengthened responsiveness to labour market needs, and better student support services, as set out in the White Paper. In addition the adult education centres will be reorganised as 'community colleges'. The scale of ambition rightly measures up to that of the challenge.

A 'turnaround strategy' addresses quality in the college sector

There is clearly a serious problem of weak management in some of the 50 colleges. In response DHET has first, taken over direct control of the colleges from provinces, and second, they have placed a number of colleges under administration – where an administrator, directly appointed by the Minister has replaced the existing principal at least temporarily. Currently there are about 9 colleges under administration. A 'turnaround' strategy has been developed to tackle the main challenges. Strong points include measures to improve throughput rates, enhance lecturer qualifications and industry-linked experience, and improve financial management systems. So significant quality challenges have been met with strong action.

South Africa has a strong capacity for analysis

Effective policy development depends on the capacity for policy analysis backed by good data and research. In South Africa this analytic capacity exists in the Department and in well-respected universities and research institutes that work closely with DHET. While data weaknesses remain, South Africa is in a good position to take advantage of improvements in data which are recommended below and which may certainly be anticipated.

Challenges and Recommendations

Simplifying vocational pathways (Chapter 2)

The current architecture of the South African vocational system poses a number of challenges, including a confusing mix of overlapping and competing programmes and qualifications, inadequately developed programmes for adults, and limited post-secondary vocational qualifications.

Recommendation: Building on the proposals set out in the White Paper:

- *Upper secondary vocational programmes should be merged into two main tracks - a school-based track and a work-based track.*

- *To meet the needs of adult learners, develop second chance vocational programmes and ensure flexible forms of provision.*

- *At post-matriculation level the development of diplomas and certificates should be promoted.*

- *Improve pathways from initial vocational to academic programmes.*

In support of these recommendations, first, simplification of the offer would make vocational programmes more comprehensible and therefore more attractive; this would build on the experience of strong vocational systems across countries; second, adult education needs to be developed so as to provide attractive routes to re-engage young adults that are NEET; third, post-secondary vocational programmes need to be enhanced, particularly with an eye on those that have passed matriculation but have not entered universities; fourth, better pathways to academic education would assist the attractiveness of vocational programmes.

Building partnership between vocational training and the economy (Chapter 3)

While South Africa needs more skills, particularly artisan skills, it also needs to ensure the right set of skills for the labour market. Current VET programmes may be insufficiently responsive to labour market needs. Key obstacles to a more effective response include weak work-based learning and limited artisan programmes, an inadequate framework to coordinate provision with labour market actors, a mix of provision insufficiently driven by labour market needs, and poor data on labour market outcomes.

Recommendation: To link vocational provision more closely with the needs of industry:

- *Make workplace learning mandatory for vocational programmes.*

- *Co-ordinate vocational provision through a strategic body that would also involve industry stakeholders.*

- *While maintaining a national curriculum, establish flexibility in a proportion of the curriculum that can be adapted by training providers to meet local needs.*

- *Invest in better data, particularly on labour market outcomes linked to career guidance.*

In support of these recommendations, more systematic use of work-based learning is practicable given the successful experience of other countries; employers and trade unions might be more fully engaged in provision through appropriate advisory bodies; local flexibility in curricula, again following international experience, can be used to build local partnerships with employers; and better data on the labour market outcomes of programmes are vital in linking provision to labour market needs.

Reforming Funding Arrangements 1: the levy grant system (Chapter 4)

The current levy grant system throws up a number of challenges. First, experience with levies in other countries has not always been positive. Second, the current SETA arrangements have multiple difficulties, including high administrative costs. Some other countries are reviewing their support for industry sectoral bodies.

Recommendation: Reform funding flowing from the Skills Levy so as to shift responsibility for discretionary funding to the National Skills Fund and simplify the administration of the mandatory grant.

In support of these recommendations, the current arrangements are no longer tenable, and implementing this recommendation would yield large savings in administrative costs; the discretionary funding should be used to provide an incentive to employers to engage with the vocational system. Reform of the mandatory grant would also remove some unnecessary bureaucracy.

Reforming Funding Arrangements 2: the TVET college funding formula (Chapter 4)

Reforming the funding formula for TVET colleges throws up a number of challenges, in particular the requirement to reflect the needs of rural areas and the additional costs of teaching disadvantaged students. Colleges also currently lack adequate incentives to address dropout.

Recommendation: Reform the funding formula for TVET colleges to reflect *(i)* the extra costs of provision in rural areas *(ii)* the extra costs of provision for disadvantaged students, and *(iii)* incentives for colleges to improve completion rates.

These recommendations support the White Paper proposals to reflect the additional costs of rural colleges and teaching disadvantaged students in the college funding formula. In addition, measures are needed to encourage colleges to give greater attention to completion given the severity of the dropout challenge.

Strengthening professional development for vocational teachers and college leaders (Chapter 5)

There are two main challenges. One is the need to improve the skills and qualifications of lecturers in the TVET system, an issue already being addressed through current proposed reforms. The second challenge is the need to improve the professional preparation of college leaders.

Recommendation: Strengthen the professional preparation of TVET college lecturers with attention to the balance between pedagogical skills

and workplace experience. Promote effective college leadership by ensuring more systematic training for prospective and current college leaders.

In support of these recommendations, vocational teachers can benefit greatly from spending time in industry, while at the same time industry practitioners might be encouraged to take on teaching roles, in both cases drawing industry knowledge and experience into the TVET system. Strengthened preparation of college leaders is also very important, as effective leadership is a powerful means of driving improvements in the overall quality of the system.

Supporting completion and transition (Chapter 6)

Despite worryingly high levels of dropout, TVET colleges currently offer limited support for students in academic difficulties, and this reflects insufficient incentives on colleges to encourage completion. Career guidance provision remains patchy. It may be very difficult to realise expansion of the TVET system unless it is seen that students are likely to complete their studies.

Recommendation: Implement a sequence of measures to tackle low completion rates:

- *Provide targeted support to ensure adequate levels of literacy and numeracy among those pursuing vocational programmes.*

- *Ensure adequate incentives for completion for both institutions and students,*

- *Underpin pathways of progression with high-quality career guidance and information before and during vocational programmes.*

In support of these recommendations: expansion of the vocational system can only be justified if it is accompanied by higher completion rates; financial incentives for both institutions and students have been shown to be effective in encouraging completion; targeted support for students with weak foundation skills is essential; career guidance can help students to plan and understand their career paths, reducing the risk that bad choices will cause students to drop out.

Chapter 1

Prospects for youth - the challenge for South Africa

A disturbing number of young people are outside education and formal work in South Africa. Evidence from different countries shows that, as part of a wider package of youth employment measures, effective vocational programmes can smooth the passage from school to work. This review, one of a series of OECD reviews of vocational education and training systems, offers suggestions for the development of the South African vocational education system with these objectives in mind. This chapter sets the scene for this review by describing the South African system of vocational education and training, and identifying its main strengths and challenges.

Introduction

Why vocational education and training matters

Over 3 million young people in South Africa are disengaged from education and work

While economic growth in South Africa has been respectable, it has been weaker than in many other emerging economies. About one third of those aged 15-24, or 3.4 million people, are not formally employed nor in education or training (NEET). Two million of them have not finished Grade 12 (Kraak, 2013). Around half of young adults under 25 years are unemployed, with unemployment worsening since the global economic crisis (Statistics South Africa, 2014). While some of these young people will be working in South Africa's extensive informal economy (see Leibbrandt M. et. al., 2009), these figures still represent a profound challenge for South Africa.

South Africa's challenge is greater than most other emerging economies

Effective school-to-work transition is critical in both developed and emerging economies. While the NEET challenge is typically greater in emerging economies (Quintini and Martin, 2013), in South Africa it is particularly severe (See Figure 1.1). The failure to integrate so many people into the labour market is a terrible waste of human potential, and cripples the economy. It threatens social cohesion and in the context of the post-apartheid transition it represents a particular concern because of the substantial over-representation of black South Africans in the NEET population. The 3.4 million NEETs may be compared with the 950 000 students in universities (both public and private) and 400 000 students in colleges – a total of 1.35 million.

Figure 1.1 South Africa's NEET challenge is greater than most other countries

Young people neither in employment not in education or training (NEET) 2011
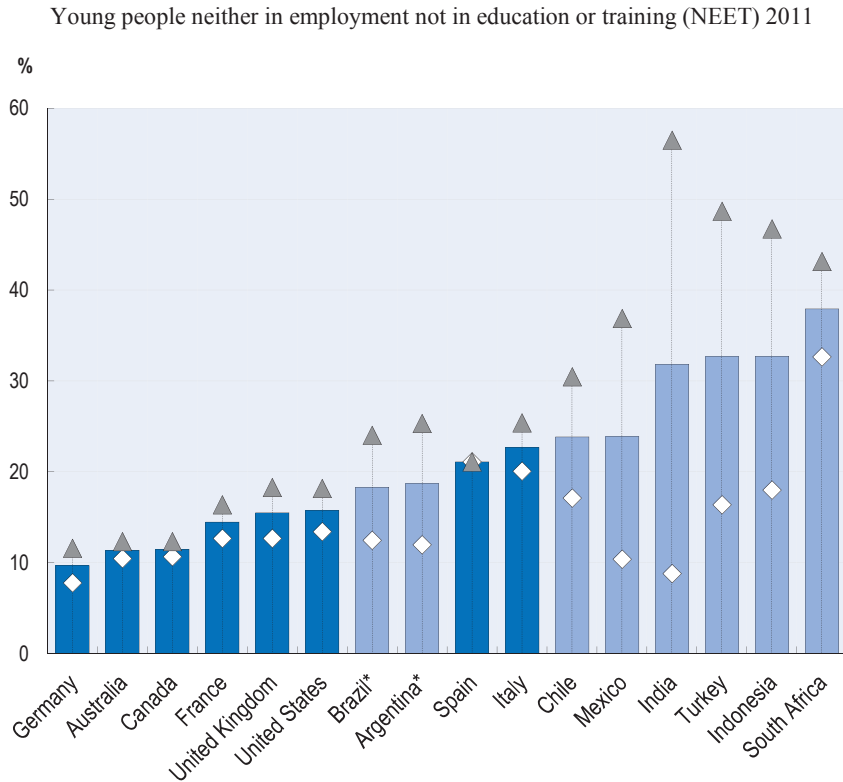
Source: Quintini G. and S. Martin (2013), "Same Same But Different: School-To-Work Transitions in Emerging and Advanced Economies", OECD Social, Employment and Migration Working Papers n° 154.

Effective vocational education and training (VET) should be part of the response

Clearly the youth employment challenge requires action across a range of fronts, including measures to promote economic development, and active measures to encourage labour market insertion. But a very wide range of evidence shows that effective vocational programmes can be part of the answer, by providing practical training linked to the prospect of a job, smoothing the transition from school to work. This review therefore aims to set out some concrete proposals for South Africa.

The policy review of the South Africa and its place in the wider OECD study

This review is one of a series of OECD country reports on vocational education and training (VET) (see Box 1.1).

Box 1.1 Skills beyond School: The OECD study

This study addresses the policy challenges arising from the increasing demand for higher level technical and professional skills. It builds on the success of the OECD's previous study, *Learning for Jobs,* which examined vocational education and training policy, mainly at upper secondary level through 17 country reviews and a comparative report.

Twenty separate country studies, involving country visits, analysis and published reports, were pursued. Full country policy reviews were conducted in Austria, Denmark, Egypt, Germany, Israel, Kazakhstan, Korea, the Netherlands, South Africa, Switzerland, the United Kingdom (England), and the United States (with case studies of Florida, Maryland and Washington State). Shorter exercises leading to a country commentary were undertaken in Belgium (Flanders), Canada, Iceland, Romania, Spain, Sweden and in Northern Ireland and Scotland in the United Kingdom. Background reports describing post-secondary systems were prepared for these countries and, in addition, for France and Hungary. These country studies, alongside a wide range of other evidence, will also provide the foundation for a synthesis report.

Source: OECD (2010a), *Learning for Jobs*, *OECD Reviews of Vocational Education and Training*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264087460-en. See also: www.oecd.org/education/vet

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To undertake this review, an OECD team visited South Africa on 27 January – 6 February 2014 where they discussed the issues arising with a very wide range of stakeholders in different parts of the country.

This first chapter places the review of South Africa in the context of the OECD policy study, describes the main features of VET system in South Africa, compares it with other systems internationally, and examines its strengths and challenges.

The following chapters advance policy recommendations. Each chapter is set out as:

- *The challenge* – the problem that gives rise to the recommendation.

- *The recommendation* – the text of the recommendation.

- *The supporting arguments* – the evidence that supports the recommendation.

The role of vocational education and training

How vocational programmes are relevant to emerging economies

Strong vocational programmes can smooth the transition from school to work

VET provides skills for entry into the labour force and to support a successful professional career (OECD, 2010a; Eichhorst et al., 2012). At upper secondary level high-quality vocational education pathways can help engage young people who have become disillusioned with academic education, improve graduation rates and ensure smooth transitions from school to work (CEDEFOP, 2012). It is also crucial in equipping the labour force with a range of mid-level trade, technical, professional and management skills alongside the high-level skills associated with university education (OECD, 2014a).

Box 1.2. Brazil's National Vocational Education and Employment Programme

To expand vocational education, Brazil set up the PRONATEC programme (*Programa Nacional de Acesso ao Ensino Técnico e Emprego* – National Vocational Education and Employment Programme) in 2011, which is well-recognised by, and receives support from, all major stakeholders in the country. Key elements of the programme are:

- Expansion of the federal network of technical schools, with the objective of 562 units operational by 2014, raising capacity to 600 000 places.

- Strengthen the state network of vocational education (through the programme Brasil Professionalizado). Federal funds are made available to states and municipalities to strengthen the infrastructure, management and teacher training of upper secondary schools that provide integrated vocational education.

- Investment in distance learning courses. In 2012, 134 000 enrolments.

- Increase the provision of free training places for young people from poor backgrounds. In 2011, around 625 000 courses were provided free of charge, 580 000 of which were professional qualification courses (initial and continuous training), and nearly 45 000 upper secondary courses (leading to the qualification of técnico).

- Loans for vocational tertiary courses taken in private institutions.

- The provision of bursaries (Bolsa Formação).

Box 1.2. Brazil's National Vocational Education and Employment Programme *(continued)*

The emphasis on free provision and/or the provision of loans reflects the fact that financial constraints often causes dropout, particularly among those from disadvantaged backgrounds.

Source: OECD (2014b), Investing in Youth: Brazil, OECD Publishing, Paris, .http://dx.doi.org/10.1787/9789264208988-en

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In emerging economies there is renewed interest in VET

South Africa's status as an emerging economy reinforces the arguments for a strong VET system. Progress in expanding basic education in low-income countries has rapidly increased the number of young people completing basic education and seeking opportunities for further education and training, including VET (Tan and Nam, 2012). VET has been perceived as one driver in the industrialisation of successful East Asian countries (Fredriksen and Tan, 2008). Brazil has launched a very ambitious programme to expand and strengthen its vocational education and training system (See Box 1.2). VET programmes in African countries[1] may yield good returns, despite accounting for less than 5% of education and training among young people (AfDB, OECD, UNDP, UNECA, 2012). Given that poor skills and hence low productivity are one cause of low levels of development, investment in vocational education can potentially promote a bottom-up labour market transformation (Eichhorst et al., 2012).

Key features of the South African vocational system

Basic schooling

A basic school system includes 12 grades leading to the matriculation exam.

Starting at grade 8, young people are tracked either into general academic schools or technical schools. The technical schools are not seen well by students and parents, and effectively it is a track to which the weakest students are directed. Two years later at grade 10 there is another fork in the road as students from either general academic (or technical schools) can be diverted into TVET colleges, which provide a vocational curriculum at upper secondary level (see Figure 1.2)

Figure 1.2 Pathways and transitions in South African vocational education and training
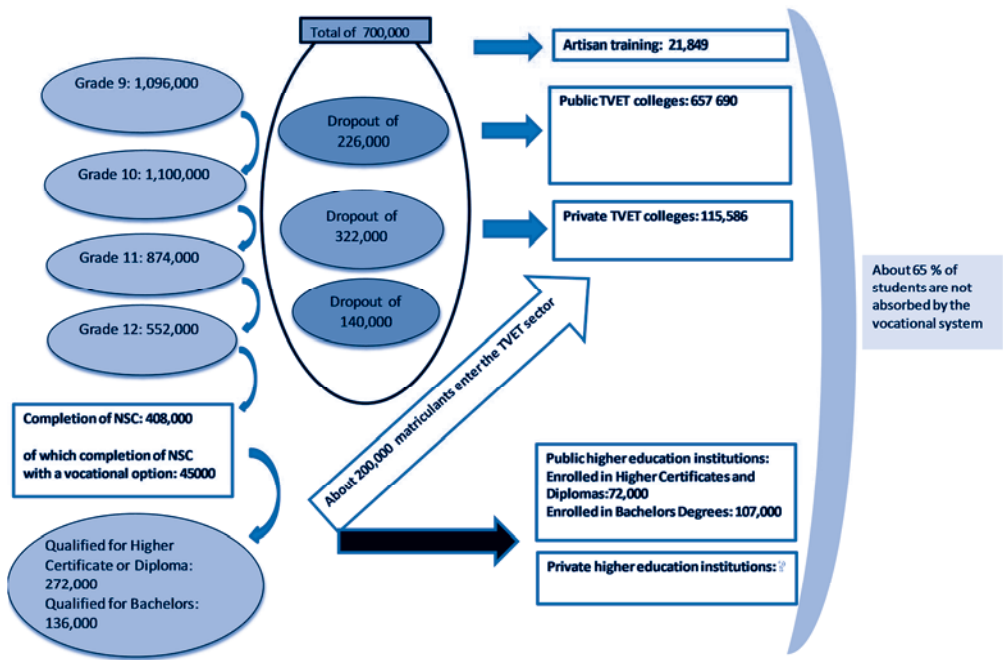
Qualifications, programmes and funding steams

Six different initial vocational programme/qualifications can be identified (in addition to the senior certificate, the standard general academic qualification).

Mainly in TVET colleges

- NC(V) programmes include language, computer and life skills, mathematics and a number of technical subjects grouped into 19 occupationally oriented tracks (engineering, business studies, agriculture, commerce, etc.). Full-time students after one year gain the NC(V) 2 and after three years to the final qualification of NC(V) 4. In theory students can exit with an NC(V) 2 or 3 with some labour market value (although data on labour market outcomes are not available to confirm this).

- N or 'Nated' programmes include a sequence of 'part' qualifications N1 to N6. In principle each level takes one semester (trimester in some cases), so that the whole programme can be completed in three years. But in addition to obtaining these part qualifications, a student must demonstrate 2000 hours of work experience to obtain the Nated diploma which grants a license to practice in artisan jobs. At one stage it looked as if these programmes were being phased out but this is no longer the case.

- (Both NC(V) and N programmes are assessed through final examinations and assessments, along academic lines, with levels of performance and distinctions awarded).

In schools under the Department of Basic Education

- Technical schools, providing vocational-type programmes from grade 8 in four engineering fields. These programmes lead to a national senior certificate (matriculation) with a vocational element.

Mainly funded through the Skills Levy through SETAs (Skills Education Training Authorities)

- *Learnerships* involve periods of on-the-job learning, alongside some off-the-job learning in a training provider, and lead to a qualification. It takes the shape of a contractual arrangement between an employer, a learner and a SETA.

- *Apprenticeships* differ from learnerships in that they are mainly directed to existing employees but they also involve periods of on-the-job and off-the-job learning.

- *Occupational qualifications* involve assessments of different 'unit standards' of competences. Some of the 2000 qualifications can be highly specific and indeed firm-specific – they are also funded by SETAs. They involve an assessment by a registered assessor of specific skills, lending themselves to the recognition of prior learning.

At post-secondary level there are higher certificates and diplomas.

Higher certificates are typically one year programmes. In South Africa, as in so many other countries, a process of academic drift has tended to deplete short cycle post-secondary programmes. The former 'Technikons' provided a wide range of one year full-time vocational 'higher certificates'. But in 2004 they were redesignated as 'universities of technology'. The

outcome was that these institutions tended to drop their higher certificates in favour of a new-found interest in higher level qualifications and research. Diploma programmes - three years with a final year in industry – are running into problems because of difficulties in obtaining the final year as a work placement.

Table 1.1 More than one million students enrolled in vocational programmes

Numbers of people registered, by programme type, in 2012

Programmes	Number of students	
Higher certificates and diplomas in HE	281280	
Public TVET colleges	657690	
NC(V)		140575
N1-N3		125096
N4-N6		234528
Occupational qualifications		62359
Other		95132
Private TVET colleges	115586	
NC(V)		4181
N1-N3		3790
N4-N6		12337
Occupational qualifications		47156
Other		48122
Students enrolled in technical schools	44814	
SETA-supported learning programmes	131599	
Learnerships		50885
Internships		6127
Skills development programmes		74587

Source: DHET (2014), "Statistics on Post-School Education and Training in South Africa: 2012", Department of Higher Education and Training, Republic of South Africa.

There are six main funding streams

Government (and collective) funding and associated programmes for the South African vocational system involves six main elements:

- the student support system also provides bursaries to students in the college sector as it does in higher education. Bursaries to TVET college students increased from ZAR 100m in 2007 to ZAR 1.7 billion in 2012. These bursaries cover the fees and help with some other costs;

- direct funding for TVET colleges (approaching ZAR 5 billion annually – see table 4.3);

- collective funding of vocational programmes, via employers, through the levy grant system (a total of ZAR 10.2 billion disbursed annually – see Chapter 4 and table 4.2 below);

- funding of students in technical high schools;

- a tax break is available to companies that provide learnerships, with a larger break available for learnerships to persons previously unemployed;

- support for post-secondary programmes such as certificates and diplomas through higher education funding.

The TVET colleges

A mix of public and private colleges serves South Africa

The Department of Higher Education and Training is responsible for the Technical Vocational Education and Training (TVET) colleges (formerly the Further Education and Training Colleges). A sequence of mergers has created 50 colleges enrolling around 400 000 (full and part-time) students. Over half (220 000) of the students are in 'Nated' programmes, 125 000 in NC(V) programmes and around 21 000 in occupational qualifications (see Table 1.1). But the bulk of full-time students, and therefore the bulk of college activity, lies in NC(V) programmes. Looked at in terms of full time equivalence, the college sector had just over 180 000 students in 2011, of which nearly 120 000, or two thirds, were in NC(V) programmes. By this measure, the college sector is roughly the same size as the higher education sector, which had just under 200 000 FTE students enrolled in 2011.

In addition, 521 registered private providers enrol 150 000 students. No public funding goes directly to these colleges, or to their students through the student support system. The private providers tend to work much more

closely with the labour market than the colleges, mainly concentrating on occupational qualifications – typically supported through SETA funding.

The issues: strengths and challenges of the South African system

Strengths of the South African system

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The creation of DHET in 2009 represents a major step forward in integrating vocational education and training policy

In many countries the governance of vocational education and training involves a complex fabric of agencies, reflecting a division of responsibilities between different ministries, the relative autonomy of institutions and the separate roles of private training providers, employers and trade unions. Such decentralised governance has advantages in terms of diversity and innovation, but it may confuse students and employers, involve some duplication of tasks such as curriculum design, and complicate transitions.

In South Africa, prior to 2009, responsibility for education and training was divided between the Departments of Education and of Labour and sometimes weakly coordinated. In 2009 the DHET was established, and given responsibility for one of the twelve objectives of the South African government, namely 'to develop the human resources of the workforce in an inclusive way'. The Department brought together responsibility for the university and college sector, adult learning centres, the private institutions, the Sector Education and Training Authorities (SETAs) the National Skills Fund (NSF) and the regulatory bodies responsible for qualifications and quality assurance. Together, these form an integrated "post-school" system. This integration of responsibilities in DHET is a clear strength.

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South Africa is a pioneer in this field, as the South Africa National Qualifications Framework was implemented in 1995. The ten levels of the Framework should make it easier to understand which programmes lead to the same level, and how different programmes relate to each other. International experience shows that if frameworks are underpinned by a strong methodology for allocating qualifications to levels, supported by key stakeholders, and backed by complementary measures to unify the TVET system and improve transitions, they can facilitate lifelong learning, and improve access to higher level education (Allais, 2009).

There has been a valuable consolidation of the TVET college sector

In pursuit of both higher quality and greater efficiency, many countries have sought to merge training institutions. While there is sometimes resistance from local communities or individual professions to the loss of "their" training institutions, experience has shown that mergers can be managed successfully, particularly when they do not involve closure of campuses. Often countries report benefits from these consolidations in terms of synergies and economies of scale. Examples (see OECD, 2014a) include in Northern Ireland, 16 colleges merged to establish six regional further education colleges each serving a regional community; in Egypt, 45 middle technical institutes regrouped as eight technical colleges that, together, provide most professional training in Egypt; in Denmark mergers of smaller institutions yielded seven university colleges primarily serving public sector professions, such as nursing and teaching, through professional bachelor qualifications, and nine academies of professional higher education offering short-cycle programmes in technical and mercantile fields

In South Africa, much valuable work has gone into the mergers of many different precursor institutions, to establish 50 TVET colleges, granting economies of scale and giving a clearer identity and visibility to the sector. This process is also a key foundation for the development of professional

leadership by focusing attention on a limited number of college leaders to drive reform.

In response to the challenge of young people outside the labour market, there are bold plans to expand the college system

In the face of major challenges in the youth labour market, there are ambitious plans to expand the TVET college system to 2.5 million enrolments by 2030. Over the same time period universities are expected to grow but at a slower pace. These plans are linked to key objectives, including improvements in management and the quality of teaching, strengthened responsiveness to labour market needs, and better student support services, as set out in the White Paper (see Box 1.3). In addition the adult education centres will be reorganised as 'community colleges'. The scale of ambition rightly measures up to that of the challenge.

A 'turnaround strategy' addresses quality in the college sector

There is clearly a serious problem of weak management in some of the 50 colleges. In response DHET has first, taken over direct control of the colleges from provinces, and second, they have placed a number of colleges under administration – where an administrator, directly appointed by the Minister has replaced the existing principal at least temporarily. Currently there are about 9 colleges under administration. A 'turnaround' strategy has been developed to tackle the main challenges. Strong points include measures to improve throughput rates, enhance lecturer qualifications and industry-linked experience, and improve financial management systems. So significant quality challenges have been met with strong action.

Box 1.3. The White Paper

In November 2013, the Department of Higher Education and Training of South Africa released the *White Paper for Post-School Education and Training* whose aim is "to outline a framework that defines the Department's focus and priorities, and that enables it to shape its strategies and plans for the future". The White Paper sets out strategies to improve the capacity of the post-school education and training system and outlines policy directions to guide the DHET and the institutions for which it is responsible in this endeavour. Its main policy objectives are:

- A post-school system that can assist in building a fair, equitable, non-racial, non-sexist and democratic South Africa.

- A single, coordinated post-school education and training system.

- Expanded access, improved quality and increased diversity of provision.

- A stronger and more cooperative relationship between education and training institutions and the workplace.

- A post-school education and training system that is responsive to the needs of individual citizens in both public and private sectors, as well as broader societal and developmental objectives.

Source: Department of Higher Education and Training-Republic of South Africa (DHET) (2013), "White Paper for Post-School Education and Training", Pretoria.

South Africa has a strong capacity for analysis

Effective policy development depends on the capacity for policy analysis backed by good data and research. In South Africa this analytic capacity exists in the Department and in well-respected universities and research institutes that work closely with DHET. While data weaknesses remain, South Africa is in a good position to take advantage of improvements in data which are recommended below and which may certainly be anticipated.

Previous OECD analysis and recommendations on South Africa

The 2008 *Review of South Africa's National Policies for Education* (OECD, 2008) argued that a mismatch between available training and the needs of the economy has led to a serious skills shortage. The review recommended partnerships between education and the world of work by involving companies in college councils and curricular design and by

making on-the-job training obligatory to better align training provision with labour market needs. A monitoring process was proposed to assess the labour market impact of vocational offers and ensure adjustment in case of mismatch. The review notes that training managed through SETAs and the National Skills Fund (NSF) involve complex procedures and fragmented responsibilities which should be simplified to make the offer more transparent. It also suggests that TVET colleges should do more to address the needs of adults through suitable programmes and modes of study.

The South Africa chapter of *Tackling Inequalities in Brazil, China, India and South Africa: The Role of Labour Market and Social Policies* (OECD, 2010b) argues that creating jobs and reducing unemployment remain key economic and social challenges. While education policy and public investment have improved access to education, quality remains highly variable. The chapter argues that the skills deficit revolves around the graduates' lack of work experience and a need for senior level professionals and managers. It recommends internships, mentoring and career building programmes within industry to tackle the lack of work experience.

The 2010 *Economic Survey* (OECD, 2010c) looks at learnership programmes, which are intended to improve the employment prospects of new labour market entrants through formal training linked to work experience. It argues that the programme has design flaws, especially excessive administrative costs. It argues for strengthened VET through the creation of a dual VET system where students alternate between school-based training and apprenticeships. While vocational apprenticeships already exist in South Africa, they were in decline since firms have financial incentives to convert apprenticeships into learnerships programmes for new labour market entrants. Against this background, the survey recommends a combination of education and work early on through an improved apprenticeship system.

The 2012 *Higher Education in Regional and City Development* on the Free State province found that, as in the rest of the country, higher education and training has primarily become a "university" sector without a significant intermediate college sector, limiting further education opportunities for youth; there is also a lack of systematic data about excluded youth; and a TVET college sector that remains underdeveloped, facing low enrolments and high dropout rates.

The 2013 *Economic Survey on South Africa* (OECD, 2012) finds that South Africa, despite economic growth, still faces extremely high rates of unemployment, poor educational outcomes and high income inequality. Skill mismatches are one aspect of the persistently high unemployment rates. Returns on a high-school certificate are mediocre, both in terms of

employment and earnings premium, while the shortage of skilled workers is reflected in a high premium for university graduates. The survey recommends better quality in basic and vocational education, tax credits to foster on-the-job training, a widening of the scope for apprenticeship programmes organised by public-private partnerships, and simplified administrative procedures for hiring trainees from TVET colleges.

The challenges: the OECD assessment

The majority of the challenges faced by South Africa in developing its vocational system are shared by many other countries, and the required reforms therefore resonate with the approaches pursued elsewhere, and may therefore draw on their experience both of success and of failure (see OECD, 2010a, 2014a). Three major themes have guided the development of the analysis – the need for vocational systems, in South Africa, as in other countries, to show qualities of coherence of the system, partnership with labour market actors, and quality in the programmes:

- On coherence, many vocational systems globally suffer from fragmentation, reflecting a multiplicity of stakeholders, including different government departments, employers and unions, competing programmes, qualifications and training providers. The end result of such fragmentation tends to cause disengagement by students and employers in the face of confusion. A perennial theme of the OECD's country reviews has therefore been the need to simplify systems and coordinate them better, without losing the dynamism and innovation yielded by decentralised systems. In the case of South Africa we argue in Chapter 2 for a simplification of the main programmes, and in Chapter 3 for a more effective measures of coordination.

- Globally, nearly all vocational systems suffer, to varying degrees, from inadequate partnership with labour market actors – employers and unions. This leaves vocational systems less equipped to respond to the requirements of employers and less able to transition young people into good jobs by equipping them with relevant skills. Again, building these partnerships has been a constant emphasis of the OECD's reviews of VET. For South Africa, Chapter 3 of this report describes a number of tools that may be employed in South Africa to enhance the partnership.

- All vocational systems struggle with quality issues. Programme quality is often invisible, given the privacy of the classroom or workshop, the difficulty and subjectivity of assessments of practical skills, and in many cases weak data on what happens to graduates.

Chapter 5 of this review encourages attention to the preparation of college teachers and leaders, while Chapter 6 emphasizes the measures necessary to tackle dropout. One simple but very telling way of testing quality is through destination surveys, in which recent college leavers are asked not only about their employment status, but also their views on the teaching they experienced while at college (see Chapter 3 and Box 3.5).

Note

[1] An analysis of labour force surveys and household surveys reported higher marginal returns for vocational training than general secondary education in five out of eight African countries. Kuépié, Nordman and Roubaud (2009) show that returns to vocational education are higher than those to general secondary education in urban West Africa.

References

AfDB, OECD, UNDP, UNECA (2012), *Education and Skills Mismatch – African Economic Outlook*, www.africaneconomicoutlook.org/en/theme/youth_employment/education-skills-mismatch/, website consulted on 2 June 2014.

Allais, S. (2009), "Learning from the first qualifications frameworks", *ILO Employment Working Paper,* No. 45, www.ilo.org/wcmsp5/groups/public/@ed_emp/@ifp_skills/documents/publication/wcm_041902.pdf.

Alvarez-Galván, J-L (Forthcoming) *A Skills beyond School Review of Egypt*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris.

Álvarez-Galván, J-L (2014), *A Skills beyond School Commentary on Northern Ireland*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, www.oecd.org/edu/skills-beyond-school/ASkillsBeyondSchoolCommentaryOnNorthernIreland.pdf.

Carnevale, A., N. Smith and J. Strohl (2010), *Help Wanted: Projections of Jobs and Education Requirements through 2018.* Georgetown University Center on Education and the Workforce. http://cew.georgetown.edu/jobs2018/.

CEDEFOP (2012a), *From Education to Working Life.* Publications Office of the European Union, Luxembourg. http://www.cedefop.europa.eu/EN/Files/3063_en.pdf.

CEDEFOP (2012), "Future Skills Supply and Demand in Europe: Forecast 2012", *Research Paper No 26*, Publications Office of the European Union, Luxembourg.

Department of Higher Education and Training-Republic of South Africa (DHET) (2013), *White Paper for Post-School Education and Training*, Pretoria.

Eichhorst, W. et al. (2012), "A Roadmap to Vocational Education and Training Systems Around the World" *IZA Discussion Papers 7110*, Institute for the Study of Labor (IZA).

ETDP SETA (2012), *Public Further Education and Training Sector Skills Plan 2013/2014 Update*, http://www.etdpseta.org.za/live/index.php/component/docman/doc_download/150-etdp-seta-ssp-private-heis-final-20122013?Itemid.

Field, S., et al. (2012)*, A Skills beyond School Review of Denmark,* OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264173668-en.

Fredriksen, B. and J.-P. Tan (2008), "East Asia Education Study Tour: An Overview of Key Insights", in B. Fredirksen and J.-P. Tan, eds., *An Africa Exploration of the East Asian Education Experience*, Washington, DC: World Bank.

Gewer, A. (2014) "Opportunities and Challenges of Further Education and Training in South Africa", *PowerPoint Presentation presented to the OECD team*, JET Education, February 2014.

IMD, (2010), "IMD World Competitiveness Yearbook 2010 Results", *International Institute for Management,* IMD World Competitiveness Center, Lausanne, Switzerland.

Kraak, A. (2013), "State Failure in dealing with the NEET problem in South Africa: which way forward?" *Research in Post-Compulsory Education*, Vol.18:Issue 1-2, Routledge, London.

Kuépié M., C.J. Nordman and F. Roubaud (2009), "Education and Earnings in Urban West Africa", *Journal of Comparative Economics*, Vol. 37, No. 3, Elsevier,Amsterdam.

Leibbrandt M., et al (2009), *Employment and inequality outcomes in South Africa: What role for labour market and social policies*? Unpublished report for the OECD, Paris,www.oecd.org/els/emp/45282868.pdf.

OECD (Forthcoming), Improving Employability in Youth in Tunisia, OECD Publishing, Paris.

OECD (2014a), *Skills beyond School: Synthesis Report*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris.

OECD (2014b), *Investing in Youth: Brazil, OECD Publishing,* Paris, http://dx.doi.org/10.1787/9789264208988-en.

OECD (2013), *OECD Economic Surveys: South Africa 2013,* OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_surveys-zaf-2013-en.

OCDE (2012), *Higher Education in Regional and City Development: The Free State, South Africa 2012*, OECD.Publishing, Paris, http://dx.doi.org/ 10.1787/9789264169142-en.

OECD (2010a), *Learning for Jobs*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264087460-en.

OECD (2010b), *Tackling Inequalities in Brazil, China, India and South Africa: The Role of Labour Market and Social Policies*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264088368-en.

OECD (2010c), *OECD Economic Surveys: South Africa 2010*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_surveys-zaf-2010-en.

OECD (2008), *Reviews of National Policies for Education: South Africa*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264053526-en.

Quintini G. and T. Manfredi (2013), "Going Separate Ways? School-To-Work Transition in The United States and Europe", *OECD Social, Employment and Migration Working Papers No. 90*, OECD Publishing, Paris, http://dx.doi.org/10.1787/221717700447.

Sheppard C. and L. Ntenga (2013), "Funding of the South African Further Education and Training. Sector for an Equitable Sharing of National Revenue", *2014/15 Submission for the Division of Revenue (4.4Mb)*, Financial and Fiscal Commission.

Statistics South Africa (2014), "National and provincial labour market: Youth", Statistical release P0211.4.2, Q1: 2008–Q1: 2014

Tan, J.-P. and Y.-J. J. Nam (2012), "Pre-Employment Technical and Vocational Education and Training: Fostering Relevance, Effectiveness, and Efficiency", in Almeida et al., eds., *The Right Skills for the Job?: Rethinking Training Policies for Workers,* Washington, DC: World Bank.

Chapter 2

Simplifying vocational pathways

Currently the vocational system involves a fragmented range of tracks and programmes at upper secondary level, and limited 'second chance' provision for adults. This is unappealing for students and makes little impact on the large NEET population. This chapter argues that existing programmes should be merged under two main headings – a school-based track leading to the matriculation and a work-based track. At the same time adult education needs to be revamped to offer second chances that may reintegrate young people into the labour market. Post-secondary vocational options also need to be strengthened.

The challenge: The architecture of the system

The current architecture of the South African vocational system poses a number of challenges, including a confusing mix of overlapping and competing programmes and qualifications, inadequately developed programmes for adults, and limited post-secondary vocational qualifications.

Overlapping and competing programmes and qualifications

There are several vocational routes at upper secondary level

As described in more detail in Chapter 1, these include:

1. *NC(V)* programmes.

2. *N or 'Nated'* programmes.

3. *Technical schools*, providing vocational-type programmes from grade 8, leading to a national senior certificate with a vocational element.

4. *Learnerships* and *apprenticeships*.

5. *Occupational qualifications* involving assessments of different 'unit standards' of competences.

NC(V) is unclear in its target client group

While the less successful students in academic high schools are encouraged to enrol in NC(V) programmes, they are quite demanding academically (SAQA, 2013). Since their introduction in 2007, colleges have therefore allowed, and even to encourage, learners who had finished schooling levels up to the National Senior Certificate (NSC) to enter these programmes (see Table 2.1). This has made life difficult both for lecturers, (who must deal with more heterogeneous student groups), and for students (as they often have to repeat material covered in school). Indeed, students with a National Senior Certificate wishing to transfer to a NC(V) programme in a college are expected to start at NC(V)2 and receive no credit for their school education. So instead of acting as an alternative to the NSC, many students are using the NC(V) as a 'marking time' exercise while they wait to get into university or the workplace, which is a very inefficient use of college resources (Taylor, 2011).

Table 2.1 Highest school qualification of NC(V) students

Percentages (sample survey, 2010)

Grade level	% of students
Under grade 9	0.5
Grade 9	7
Grade 10	14
Grade 11	24
Grade 12	53
Missing	1

Source: Gewer, A. (2014) "Opportunities and Challenges of Further Education and Training in South Africa", PowerPoint Presentation presented to the OECD team, JET Education, February 2014.

There are overlaps between NC(V) and N qualifications

The NC(V) was also conceived as a replacement for the N programmes, where enrolment was curtailed between 2007 and 2010 (negating the traditional path to becoming an artisan). The NC(V) is supposed to provide opportunities for workplace experience but this aspect has been unsuccessful (Wedekind, 2013). The phase-out of the N programmes was halted in 2010 (DHET, 2014) because of the decline in the supply of artisans linked to the N programmes and the fact that the NC(V) is not designed to provide theory to apprentice artisans (Taylor, 2011). Colleges have difficulties in managing these different qualifications simultaneously, resulting in high costs, and quality concerns (Allais et al, 2007; Allais, 2012). There are also multiple artisan routes - a commonly repeated example are the three or more different qualification routes to becoming an electrician. DHET has now launched an initiative to address this problem – with the aim being to converge the curricula for the three routes.

There are overlaps between NC(V) and technical high school programmes

Parts of the NC(V) and N 1-3 programmes offered in colleges are similar to elements of the last three years of academic upper secondary school, and the technical programmes offered in over 1000 technical high schools (national senior certificate with a vocational element). These technical programmes (offered in engineering technology subjects) have the

same purpose as the NC(V) engineering programmes, as they both provide a general vocational education aimed at Grade 10, 11 and 12 learners. The number of students in technical school programmes dropped sharply between 2007 and 2011, from 120,000 students to about 50,000 students and these programmes do not provide articulation with further opportunities, or transversal mobility with academic high school. The clustering of many fields of specialization in just three subjects may also have encouraged teachers to move out of the technical schools, reinforcing the dominance of the academic options (Department of Basic Education, 2012). Despite this the Department of Basic Education now has plans to dramatically expand the technical school system to cater for up to 70% of the cohort.

Table 2.2 The different sectors are under different governance bodies

	NQF Level	Qualification types		
Higher Education Qualifications framework under the CHE	10	Doctoral		Occupational Qualifications Sub-framework under the QCTO
	9	Masters		
	8	Bachelor of Honours/Postgraduate Diploma/Bachelor's Degree	Occupational Certificate level 8	
	7	Bachelor's degree/ Advanced Diploma	Occupational Certificate level 7	
	6	Diploma/ Advanced Certificate	Occupational Certificate level 6	
	5	Higher Certificate	Occupational Certificate level 5	
General and Further Education Sub-framework under Umalusi	4	NC(V) Level	National Certificate / Grade 12	Occupational Certificate level 4
	3	NC(V) Level	Intermediate Certificate / Grade 11	Occupational Certificate level 3
	2	NC(V) Level	Elementary Certificate / Grade 10	Occupational Certificate level 2
	1	NC(V) Level	General Certificate / Grade 9	Occupational Certificate level 1

Source: SAQA (2014), "SAQA's role in the vocational system", PowerPoint Presentation by Joe Samuels presented to the OECD team, February 2014.

These overlaps do not help to make vocational programmes attractive

These overlaps and duplications reflect the way in which these different qualifications were designed, under the umbrellas of different departments and agencies (see Table 2.2). Over the past decade, despite ambitious targets for college enrolment, the total number of students has remained flat, or even declined, given a reduction in enrolments for N programmes, and limited compensating growth in NC(V) enrolments (see Figure 2.1). Many have argued that this complex history and fragmentation of competing qualifications has rendered the whole vocational sector confusing and therefore unpopular (ETDP SETA, 2012) It also makes it less likely that employers will engage with the vocational system because it offers multiple targets. The uncertain long term status of N programmes may also discourage students from entry.

Figure 2.1 Evolution of student enrolment numbers in NC(V) and N programmes
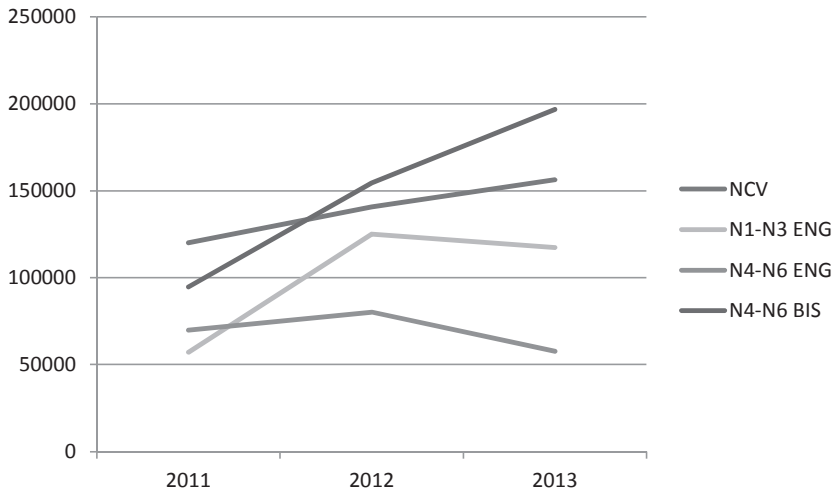
Source: Gewer, A. (2014) "Opportunities and Challenges of Further Education and Training in South Africa", PowerPoint Presentation presented to the OECD team, JET Education, February 2014.

Inadequately developed programmes for adults and at post-secondary level

In some countries dropout is balanced by "second chances"

In some countries second chance arrangements allow adults (particularly young adults) to re-enter education and find a qualification and pathway to a career. For example in the United States the open access community college system provides opportunities for many young adults, even when they have dropped out of high school, to re-enter education (Kuczera and Field, 2013). But in South Africa there are few such opportunities (SAQA, 2013). Of the 3.4 million young NEETs, around half a million had only achieved a primary school education or less, and nearly 1.5 million had less than a Grade 10 education (DHET, 2013). In addition, the NC(V) includes no option for part-time learning, so it is often not suitable for those with work or family responsibilities to return to education.

Adult education in South Africa is extensive but has significant limitations

Since 1994, adult education has mainly taken the form of campaigns to eradicate adult illiteracy, especially through the Department of Basic Education's *KhaRiGude* initiative and through basic education in Adult Education Centres. Adult education has often also been delivered through community-based organisations, trade unions, and social movements. In 2011, there were 3 200 adult learning centres across the country, serving about 265 000 learners. While some have their own premises, most operate from the premises of other institutions such as schools or community centres (DHET, 2013). In terms of provision, such centres mainly offer Adult Basic Education and Training (ABET) qualifications, including the General Education and Training Certificate (GETC), and Senior Certificate programmes (DHET, 2013); (see Table 2.3). Despite these efforts, the educational opportunities for adults and young people have been insufficient, and their quality poor[1] (Taylor, 2011). The annual attrition rate in ABET remains at 50% and the throughput rate (those achieving a full General Education and Training Certificate (GETC)) is extremely low. Most learners collect only a few unit certificates so there is almost no progression to further learning (DHET, forthcoming). As these programmes are not vocational, their capacity to improve people's life chances through a job, or a better job, is limited. This is a challenge underlined in the White Paper (DHET, 2013).

Table 2.3 Number of learners in Adult Education centres

	AET Level 1	AET Level 2	AET Level 3	AET Level 4 (NQF 1)	Grade 10 (NQF 2)	Grade 11 (NQF 3)	Grade 12 (NQF 4)	Other /Skills develop ment
Private AET	1132	1240	1314	2284	53	8	1982	410
Public AET	21488	28176	31101	120451	241	213	70929	6653
Total	22620	29416	32415	122735	294	221	72911	7063

Source: DHET (2014a), "Statistics on Post-School Education and Training in South Africa: 2012", Department of Higher Education and Training, Republic of South Africa.

Post-secondary vocational programmes are too limited

In South African universities, students can pursue higher certificates, some of which are vocational. The NQF level 5 higher certificate is a 120 credit learning programme which in HEQF terms is primarily an industry or vocationally-oriented qualification that usually includes a period of work-integrated learning. These programmes are numerically small, and they seem to remain largely academic in focus. The OECD review of higher education in the Free State province (OECD, 2012) lamented the lack of an intermediate 'college' sector and how that limits further education opportunities.

In principle N4/5 and N6 are all equivalent to Level 5 on the National Qualifications Framework, meaning that they are post-secondary. In 2012, 234 528 students studied at that level in public colleges (DHET, 2014a). But their status as post-secondary or higher education programmes has always been unclear and universities differ greatly in their level of recognition of learning credits in these programmes (Stumpf, Papier, McBride and Needham, 2012).

Recommendation: Simplify the system

Building on the proposals set out in the White Paper:

- Upper secondary vocational programmes should be merged into two main tracks - a school-based track and a work-based track.

- To meet the needs of adult learners, develop second chance vocational programmes and ensure flexible forms of provision.

- At post-matriculation level the development of diplomas and certificates should be promoted.Improve pathways from initial vocational to academic programmes.

Supporting arguments: Simplicity strengthens the system

In support of these recommendations it is here argued first, that simplification of the offer would make vocational programmes more comprehensible and therefore more attractive; this would build on the experience of strong vocational systems internationally; second, that adult education needs to be developed so as to provide attractive routes to re-engage young adults that are NEET; third, that post-secondary vocational programmes need to be enhanced, particularly with an eye on those that have passed matriculation but have not entered universities; fourth, that better pathways to academic education would assist the attractiveness of vocational programmes.

A two track vocational system to build on the experience of the strongest vocational systems

The strongest VET systems are characterised by simplicity

All countries have different needs, so there is no single best practice design for a country VET system. But many of the strongest systems – for example in Switzerland, Austria and Germany – are characterized by some relatively simple clear choices in terms of the vocational tracks at upper secondary level. For example in Austria the main choice is between (a) academic schooling directed towards university entrance (b) vocational colleges which serve a range of service and business requirements, but may also provide a route to university, and (c) the apprenticeship route which is more directed at trade, craft and technical jobs (Musset et al., 2013). These relatively simple choices, linked to the kind of job to which a young person aspires, help to enhance the status of the vocational route.

The two tracks proposed would converge the best in current qualifications

In place of the current competing upper secondary vocational programmes in technical high schools and colleges, and indeed competing proposals for mass expansion of these two different systems, we propose a single school-based track. This track would draw on the strongest characteristics of the technical school and NC(V) models, with a common curriculum to be pursued by both technical high schools and colleges. This will involve a gradual convergence of the currently different programmes and curricula. This arrangement would be supported by much stronger collaboration between the two responsible Departments (the Department for Basic Education, and the DHET). As recommended in Chapter 3, a stakeholder advisory group would help to co-ordinate this development. Detailed work would be necessary to converge the curricula and to determine when the common programmes would start (grade 8 or grade 10 or a compromise).

Strengthened collaboration between the stakeholder Departments is necessary

The Department of Basic Education, in a policy statement paper (2012), argued that vocational options are not developed enough at the upper secondary level, compared to the academic pathways. The policy paper also highlighted the needs for learners to be more familiar with the work place. The paper recommended heightened collaboration between the Department of Basic Education and the DHET, and the mapping of college programmes against those of the technical high schools, to form the basis for the collaboration between the two sectors (Department of Basic Education, 2012). The school-based route would include a mandatory element of work-based learning – on the principle that all vocational programmes should do so – but this would be a much smaller element of the programme than in the case of the work-based track.

The work-based track would build on the existing artisanship route

The work-based track would involve a substantial element of work-based learning, systematically involve employers and by pursued in partnership with the colleges; a task where SETAs could help. It would include the N programmes. The development of this track would seek to build on the Integrated Projects initiatives, which is seeking to converge the different artisanship routes into a common programme.

Clearer vocational tracks would increase attractiveness

These two clearly defined vocational tracks at the upper secondary level would strengthen employer engagement and, linked to measures to improve quality and increase completion rates, (discussed in later chapters of this report) would help to meet the economy's need for mid-level skills. The aim would be to provide a clear and simple vocational preparation (sometimes school-based, sometimes work-based) leading to each job or career. So while there might be options over modes of study (e.g. college or school, full or part-time) the qualification obtained would be the same.

NC(V) examination requirements could be simplified

Currently NC(V)2 and NC(V)3 programmes are linked to national examinations. This is an expensive and demanding requirement, and it is not clear that it serves a purpose, since the labour market value of these intermediate qualifications on the route to NC(V)4 is very unclear. Clearly vocational qualifications need a credible nationally consistent assessment on completion, but the onerous requirement for national examinations at intermediate stages could reasonably be replaced by local assessments.

Developing adult education

More attention to the learning needs of adults is needed

If the South African VET system is to seriously address the challenge of the 3.4 million young people not in education, employment or training, it has to offer meaningful routes to careers for young adults who have left school with poor skills and few qualifications. Adults may be formally in the NEET population but in practice they may work in the informal economy and/or have family responsibilities. Re-engaging them in education may require part-time, modular or distance learning options that would be consistent with other calls on their time. In South Africa, distance learning is well developed in higher education institutions, in which 40% of the students were enrolled in distance mode[2] (DHET, 2014a), but similar options are rare in colleges. For example, although NC(V) programmes could in principle be delivered part-time, that option is rare in practice. A previous review (OECD, 2008) therefore argued that TVET colleges should do more to address the needs of adults through suitable programmes and modes of study.

Making vocational education adult-friendly is not easy

Institutions dominated by daytime weekday classes for full-time students may find change difficult not least because it may require teachers to work less social hours in the evenings and at weekends. Breaking down programmes into discrete modules to allow for course exemptions and different paces of study can also be challenging (OECD, 2014). Umalusi has recommended a move away from the limitations of adult *basic* education to a continuum, offering adult learners the prospect of promotion from basic literacy through to a level 4 qualification, or moving horizontally into vocational programmes (Umalusi, 2009b), an arrangement supported by others (Cloete, 2009). The White Paper argues similarly. Reform may be facilitated by a shift in responsibility for adult learning centres from provincial education departments to the DHET (No. 1 of 2013, DHET, 2013).

Vocational programmes might be delivered by diverse institutions

To meet adult needs, TVET colleges could offer more courses part-time and in modular format. Community colleges could also offer vocational programmes, in addition to more traditional literacy and numeracy remedial programmes. This would echo the approach taken in other countries, in which separate adult learning institutions offer the same qualifications as those delivered to young people. In Denmark for example*,* a separate parallel adult education system allows access to post-secondary qualifications at levels corresponding to those of the ordinary education system. More than 40% of adults participate in formal and/or non-formal education in any given year (Field et al, 2012). In Belgium (Flanders), centres for adult education provide second-chance education and basic skills programmes, and vocational programmes at upper secondary and post-secondary level (Musset, 2014).

Recognition of prior learning (RPL) should be more widely available

RPL, the process of certifying pre-existing skills and knowledge, can reduce the direct and opportunity costs of formal learning through course exemptions and could play a particularly important role given South Africa's large informal economy, in which people may gain all kinds of relevant skills without any formal record. RPL can encourage adults in the informal economy to re-enter education by validating the competences they have already acquired through work (See Box 2.1 for country examples). Occupational qualifications, with a trade test of competences, may lend

themselves to RPL. But other countries have also noted some real obstacles to RPL. Professional educators can be, understandably if not defensibly, reluctant to accept that the competences they teach can also be acquired in different learning contexts, and even informally. Assessment of informally acquired skills is technically demanding since such learning is usually undocumented. Employers may not always want to make the skills of their employees more visible to firms that might poach their best workers.

Box 2.1 Recognition of Prior Learning (RPL) in the United States and Iceland

In the **United States**, RPL has historical roots in the experience of World War II veterans who were granted college credits in recognition of their military training. Half of all colleges and universities in the US are estimated to offer RPL in some form. A recent review of state policies highlighted the role played by state-level initiatives - in Tennessee the funding formula was altered so as to give colleges greater incentives to develop their use of RPL and therefore improve completion rates.

In **Iceland**, recent legislation contains provisions on individual entitlement to RPL at upper secondary level. It is seen as a means of combating dropout. RPL is aimed at people with poor formal education, allowing those who wish to return to upper secondary school to shorten the length of the required programme. The 12 lifelong learning centres around the country and the two centres for certified trades co-operate in pursuing RPL projects. On average a participant going through a validation process within the certified trades ends up with 28 units of credit recognised through RPL (the carpentry programme for example involves 100 units in total). Over the period 2007-2009, 492 individuals had their competences recognised in this way, the majority within the certified trades.

Sources:
Kuczera, M. and S. Field (2013), *A Skills beyond School Review of the United States*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202153-en

Musset P. and R. Castañeda (2013), *A Skills Beyond School Commentary of Iceland*, OECD Reviews of Vocational Education and Training, www.oecd.org/edu/skills-beyond-school/ASkillsBeyondSchoolCommentaryOnIceland.pdf.

Institutions often have few incentives to recognise prior learning

Incentives for institutions to use RPL may be weak or negative particularly if course exemptions trigger reduced fee income or public funding. Compensatory mechanisms can balance this effect. In Denmark the government provides institutions issuing RPL certificates (and therefore shortening the duration of the programme) with one-off funding. Despite

this, the majority of institutions do not see RPL as profitable (Danmarks Evalueringsinstitut, 2010).

Encouraging the development of post-secondary vocational programmes

There is latent demand for post-secondary provision

About one third of young NEETs have already passed the NSC or equivalent, so there is a large pool of young people with relatively strong academic achievement, but colleges in their present form are not always attractive to them. Only 20 % of those with grade 12 continue to post-secondary education (Sheppard and Sheppard, 2012). Currently quite a lot of students with the matriculation but with poor marks enter colleges as a kind of second best to university. This group would be better served by a short post-secondary vocational programme, like a higher certificate. Over the last 3 years, there has been an expansion of N4-N6 enrolment in response to demand from students for post-secondary programmes.

Across OECD and emerging economies demand is growing for higher level professional skills

Many professional and technical jobs require no more than one or two years of career preparation beyond upper secondary level, and in some countries as much as one-quarter of the adult workforce have this type of qualification (OECD, 2014). Nearly two-thirds of overall employment growth in the European Union is forecast to be in the "technicians and associate professionals" category - the category most closely linked to this sector (CEDEFOP, 2012). In the United States, around 12% of the labour force has a post-secondary "certificate" as their highest qualification, and certificate graduation rates are burgeoning – tripling in recent years; a further 10% have associate degrees. In France, in 2010-2011 almost 360 000 students were enrolled in two-year professional programmes (*Brevet de technicien supérieur* and *Diplôme universitaire de technologie*), representing one-third of the students entering post-secondary education (OECD, 2014). In Colombia, in 2010, enrolments in the technological and professional programmes represented one-third of all undergraduate enrolments (OECD/International Bank for Reconstruction and Development/The World Bank, 2013). In Tunisian universities, more than one in two students pursued *licences appliquées* (as opposed to the more academic *licences fondamentales*) (OECD, forthcoming). So across many countries, demand for short post-secondary programmes is increasing.

Better pathways to academic education

Pathways of future progression are important

One of the main features of the most successful vocational systems is the existence of higher level vocational qualifications to which graduates of initial vocational programmes can progress (OECD, 2014b). Entrants to vocational programmes need to have the promise of opportunities for further upskilling beyond their initial qualification, partly because that is what students increasingly want and expect, and partly because that is what the labour market will need and demand from graduates of initial vocational programmes (Dunkel and Le Mouillour, 2009)[3]. Upper secondary vocational programmes therefore need to be designed not only for labour market entry but also to prepare students for further education. More attractive vocational pathways should help minimise dropout.

Better articulation and credit transfer also play a role

As in so many countries, in South Africa the aspiration for higher education is so wide and deep that effective articulation into higher education is an important part of what can make college programmes attractive. It is therefore unfortunate that graduates of the college sector often find difficulty in receiving recognition for their qualifications in higher education. A number of initiatives, both local and national, have sought to address this. Once a student has completed N programmes level 6 (N6) they can progress to a diploma at a university, where they may or may not get recognition for the course credits already earned. At local level bridging programmes are sometimes available. But the OECD visiting team was told that there is limited recognition and articulation of NC(V) and N qualifications with higher education qualifications. The White Paper acknowledges that a coherent and coordinated system needs to have easy articulations between different parts of the system, and that there is a need to facilitate student movements both vertically and horizontally between different streams and levels (DHET, 2013). A Ministerial Committee has been established to review policy in this domain. At national level, SDAQA has developed a draft policy statement on credit accumulation and transfer, and, separately on articulation.

Notes

[1] Criticisms include that the majority of teachers in these programmes are part-time contract workers without tenure. The sector does not have a core of permanent adult educators, and conditions are not uniform from province to province. This severely affects long-term planning, and leaves little room for career and learning path development for either learners or educators. Most learners in the sector study part-time, a relatively slow learning process which requires long-term management and planning. Umalusi quality assures the General Education and Training Certificate (GETC), which is at level 1 of the NQF, and notes with concern the absence of a core curriculum and the absence of a standardised approach to curriculum and assessment across provinces (Umalusi, 2009a).

[2] Graduation rate for all undergraduates degrees and diploma is 15 %, compared to 25 % of students in contact mode.

[3] In some countries, including Germany, Korea and the Netherlands, one-third or more of students transition from vocational programmes to academic ones. Switzerland has opened Fachhochschulen to graduates from the dual apprenticeship system through the creation of a specific vocational matriculation examination (the Berufsmaturität), to be completed in parallel to an apprenticeship programme, and providing access to tertiary education: today, around 12% of all apprentice graduates obtain the Berufsmaturität and they represent half of the students in the universities of applied science. Austria introduced a similar exam (the Lehre mit Matura) in 2008 (OECD, 2014).

References

Allais S. (2012), "Why Solving Ongoing Problems with the NQF Matters" in Perold H., N. Cloete and J. Papier (Eds), Shaping the Future of South Africa's Youth – Rethinking post-school education and skills training, African Minds, Centre for Higher Education Transformation (CHET).

Altbeker A. and E. Storm (2013), "Graduate unemployment in South Africa: A much exaggerated problem", Centre for Development and Entreprise, http://sun025.sun.ac.za/portal/page/portal/Arts/Departments/political_science/docs/Tab/GRADUATE_UNEMPLOYMENT_IN_SOUTH_AFRICA__A_much_exaggerate.pdf.

CEDEFOP (2012), "Future Skills Supply and Demand in Europe: Forecast 2012", *Research Paper No 26*, Publications Office of the European Union, Luxembourg.

Department of Basic Education (2012), "Two Stream Model", Department of Basic Education.

DHET [Department of Higher Education and Training], (2013), White Paper for Post-School Education and Training – Building and expanded, effective and integrated post-school system.

DHET (2014a), "Statistics on Post-School Education and Training in South Africa: 2012", Department of Higher Education and Training, Republic of South Africa.

DHET (forthcoming), "Twenty-year review of post-schooling education and training", Department of Higher Education and Training. Republic of South Africa.

Dunkel, T. and I. Le Mouillour (2009), "Through the looking-glass: diversification and differentiation in vocational education and training and higher education", in CEDEFOP (2009), *Modernising Vocational Education and Training. Fourth Report on Vocational Training Research in Europe: Background Report, Volume 2*, CEDEFOP, Luxembourg,www.cedefop.europa.eu/etv/Upload/Information_resources/Bookshop/544/3050_II_en.pdf.

Eichhorst W. et al (2012), "A Roadmap to Vocational Education and Training Systems Around the World" IZA Discussion Papers 7110, Institute for the Study of Labor (IZA).

Erasmus J. and M. Breier (2009), *Skills Shortages in South Africa: case studies of key professions*, Human Sciences Research Council, http://www.lmip.org.za/sites/default/files/documentfiles/Skills_Shortages _in_South_Africa_-_Entire_eBook_0.pdf

Field, S., et al. (2012)*, A Skills beyond School Review of Denmark,* OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264173668-en

Gewer, A. (2014) "Opportunities and Challenges of Further Education and Training in South Africa", PowerPoint Presentation presented to the OECD team, JET Education, February 2014

Kis, V. and E. Park (2012), *A Skills beyond School Review of Korea*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264179806-en.

Kraak, A. (2013), "State Failure in dealing with the NEET problem in South Africa: which way forward?" Research in Post-Compulsory Education, 18:22.

Kuczera, M. and S. Field (2013), *A Skills beyond School Review of the United States*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202153-en.

Leibbrandt M., et al (2009), "Employment and inequality outcomes in South Africa: What role for labour market and social policies?", Unpublished report for the OECD, http://www.oecd.org/els/emp/45282868.pdf.

Mayer M.J. et al (2011), "Towards a youth employment strategy for South Africa", Working Paper Series No. 28, Development Bank of South Africa.

Mlatsheni C. (2012) "The Challenges Unemployment Imposes on Youth" in Perold H., N. Cloete and J. Papier (Eds), Shaping the Future of South Africa's Youth – Rethinking post-school education and skills training, African Minds, Centre for Higher Education Transformation (CHET).

Musset, P., et al. (2013), *A Skills beyond School Review of Austria*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264200418-en.

Musset, P., M. Kuczera and S. Field (2014), *A Skills beyond School Review of Israel*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264210769-en.

National Treasury (2011), "Confronting Youth Unemployment: policy options for South Africa", Discussion paper.

OECD (2014 forthcoming), *Skills beyond School: Synthesis Report*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris.

OECD (2014b), *Investing in Youth: Brazil,* OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264208988-en.

OECD/International Bank for Reconstruction and Development/The World Bank (2013), *Reviews of National Policies for Education: Tertiary Education in Colombia 2012*, OECD Publishing, Paris, http://dx.doi.org/ 10.1787/9789264180697-en.

OECD (2012), *Higher Education in Regional and City Development: The Free State, South Africa 2012*, OECD Publishing, Paris, http://dx.doi.org /10.1787/9789264169142-en.

OECD (Forthcoming), Improving Employability in Youth in Tunisia, OECD Publishing, Paris.

OECD (2008), *Reviews of National Policies for Education: South Africa 2008*, OECD Publishing, Paris, http://dx.doi.org/ 10.1787/9789264053526-en.

Quintini G. and S. Martin (2013), "Same Same But Different: School-To-Work Transitions in Emerging and Advanced Economies", OECD Social, Employment and Migration Working Papers n° 154, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jzbb2t1rcwc-en.

SAQA (2014), *SAQA's role in the vocational system*, PowerPoint Presentation by Joe Samuels presented to the OECD team, February 2014.

SAQA (2013), *Building articulation and integration*, 2nd National Qualification Framework Research Conference, http://www.saqa.org.za /docs/pres/2013/klinck_k.pdf

Sheppard C. and L. Ntenga (2013), "Funding of the South African Further Education and Training. Sector for an Equitable Sharing of National Revenue", 2014/15 Submission for the Division of Revenue (4.4Mb), Financial and Fiscal Commission.

Stumpf R., J. Papier, T. McBride and S. Needham (2012), "Strengthening the Capacity of FET Colleges to Meet the Needs of Young People", in Perold H., N. Cloete and J. Papier (Eds), *Shaping the Future of South Africa's Youth – Rethinking post-school education and skills training*, African Minds, Centre for Higher Education Transformation (CHET).

Taylor N. (2011), "Priorities for Addressing South Africa's Education and Training Crisis", Review commissioned by the National Planning Commission, JET Education Services.

Umalusi (2009a), *Report on the quality assurance of the examination and assessment of the GETC:ABET Level4*, Umalusi.

Wedekind V. (2013), "Rearranging the furniture? Shifting discourses on skills development and apprenticeship in South Africa" in Akoojee S., P. Gonon, U. Hauschildt and C. Hofman (Eds), *Apprenticeship in a Globalised World – Premises, Promises and Pitfalls*, LIT Verlag, Zurich.

Wildschut, A, S. Akoojee and T. Meyer (2013), "Changes to artisan status and identity: implications for apprenticeship development" in Akoojee S., P. Gonon, U. Hauschildt and C. Hofman (Eds), *Apprenticeship in a Globalised World – Premises, Promises and Pitfalls*, LIT Verlag, Zurich.

Chapter 3

Building partnership between vocational training and the economy

In South Africa, as in other countries, one of the main challenges to vocational systems is the need to respond to the fast-changing requirements of the labour market. To this end, a more effective partnership between vocational training and the world of work is required. This chapter proposes more systematic work-based learning, more strategic coordination of the vocational system to involve employers and trade unions, local curricular adaptation to reflect employer needs, and stronger data, particularly on labour market outcomes, linked to effective career guidance.

The challenge: weak links between the vocational system and the labour market

While South Africa needs more skills, it also needs to ensure the right set of skills for the labour market. Currently TVET programmes may be insufficiently responsive to labour market needs. Key obstacles to a more effective response include weak work-based learning and limited artisan programmes, an inadequate framework to coordinate provision with labour market actors, a mix of provision insufficiently driven by labour market needs, and poor data on labour market outcomes.

Providing the right mix of skills

The South African economy needs more artisans and technical skills.

The Accelerated and Shared Growth Initiative for South Africa has identified skilled artisans and vocational skills as critical for sustained growth, but many studies have reported shortages: Erasmus and Breier (2009), found that all sectors of the economy suffer from shortages of professionals and artisans (attributed to the decline of the apprenticeship[1] system); business organisations and government agree that there are shortages of artisans, technicians and engineers (Statistics South Africa, 2014; Sheppard and Ntenga, 2013); while the International Institute for Management Development (IMD, 2010) ranked South Africa last out of the 58 countries in terms of availability of skilled labour. Despite some recent growth, artisan training, apprenticeships and learnerships numbers remain limited (Kraak, 2013).

But there are also some indications of skills mismatch

Recent reports (OECD, 2013; Statistics South Africa, 2014) attribute youth unemployment partly to a mismatch between skills and available jobs. The limited capacity of TVET colleges to respond effectively to the needs of the labour market has been described by many commentators (McGrath, 2003; Akoojee, Gewer and McGrath, 2005; McGrath and Akoojee, 2009). Colleges have been said to lack formal links with industry and employers are confused with what the college system is meant to produce, and are reluctant to engage with the college sector – especially since they are not familiar with the NC(V) programmes (Gewer, 2014; Mayer et al, 2011; Kraak, 2013). Employers perceive TVET colleges output as not providing the kind of skills that they require in industry and an increasing number of young people who have received some form of artisan training do not find jobs after graduation. Of 280 000 graduates in technical fields in 2000, only 34 % found a job in industry (Patel, 2007 in Erasmus and Breier, 2009). The implication is that South Africa needs the right skills, not just more skills.

Lack of work-based learning in vocational programmes

Work-based learning plays an essential role in high quality vocational programmes

A wide range of international experience suggests that work-based learning plays an essential role in high quality vocational programmes. Quintini and Manfredi (2009) for example, note that in countries with regulated labour markets and strong apprenticeship systems, such as Germany[2], about 80% of school leavers succeed in integrating into the labour market, a marked contrast to countries without strong work-based training such as Italy and Spain. But work-based learning is not only a powerful tool for developing both hard and soft skills and transitioning students into employment, it is also key to engaging employers and linking the mix of provision to employer needs. It is too often neglected, partly because education and training organisations find it easier to work on their own without having to involve employers, and partly because employers do not recognise the potential returns from offering work placements to students (see OECD, 2010).

In South Africa, work-based learning is quite limited

NC(V) and N programmes both lack a clearly defined work experience component (to pass N6 students are required to complete a 18 month work placement but this is not integrated with the rest of the coursework, and many students fail to get the placement). There are no requirements for NC(V) students to have workplace training: as a result more than half of college graduates have no work experience (See Table 3.1).

Table 3.1. How many college students have work experience?

What college students said about how they obtained work experience (percentage of sample)

As part of learnership/apprenticeship	**15**
Through a company with college links	**9**
I found a company that took me in for work experience	**11**
No work experience	**55**
Missing	**12**

Source: Gewer, A. (2014), "Opportunities and Challenges of Further Education and Training in South Africa", PowerPoint Presentation presented to the OECD team, JET Education, February 2014.

Artisan training is now a priority, but remains too small scale

Training for artisans at present involves a rather problematic and long route via college programmes and apprenticeships. The White Paper sets the objective of training 30 000 artisans a year and a budget of ZAR 2.1 billion has been established. A pilot of dual system apprenticeships is going on in three different colleges in three artisan areas, and a recognised list of 125 trades has been established. On average it costs 300 000 rand to train an artisan: companies pays 53% - but of that 17% comes back to the company because of the tax break supporting a learnership. One promising initiative, promoted by MERSETA (the main mechanical and engineering SETA) is for a new dual system apprenticeship which could be completed in four years, involving learning each element of an NC(V) programme alongside work-based learning. MERSETA has a partnership with the University of Bremen to develop this model (PowerPoint presentations DHET, 2014; MERSETA, 2014).

Insufficient co-ordination of the main strategic programmes and their funding

Steering bodies are essential to engage the social partners

One of the main findings of the OECD's *Learning for Jobs* study (OECD, 2010) was that nearly all countries face challenges in ensuring that vocational education and training systems respond effectively to the needs of the labour market. Much of the burden of policy reform therefore falls on

measures to engage industry stakeholders and develop and sustain vocational systems in close partnership with those stakeholders. Sometimes curricula and the mix of provision are determined by students and the limitations of the training system, and not sufficiently driven by fast-changing industry requirements. Sometimes the training workforce is insufficiently abreast of these requirements. Work-based learning is too often weak and unsystematic. Employers and trade unions are sometimes too remote from the development of qualifications, so that these end by having limited currency in the labour market. South Africa shares these challenges with many other countries, and they imply a need for a framework in which employers can guide the mix of provision.

Coordination of programmes and funding streams would yield large benefits

As explained in Chapter 1, six major funding streams support the South African VET system – student support, direct funding of TVET colleges, the skills levy, funding of technical schools, a tax break to support learnerships and funding of certificates and diplomas through the higher education funding stream. At a strategic level these main funding streams all have a common purpose - that of supporting the development of vocational skills in the South African workforce, benefitting learners, employers, and South Africa as a whole. Co-ordination of these different programmes and funding streams would therefore have large potential advantages – to ensure that policy objectives are mutually supportive rather than competing, and that efficiencies can be realised by concentrating resources where they will be most effectively used. But in practice the mechanisms for pursuing such co-ordination are limited because these different funding streams have very different institutional settings and few mechanisms for forging the kind of lateral connections that might help to enhance complementarity.

Better coordination is needed to converge the main qualifications

Chapter 2 of this report argued that the South African vocational system, including the technical vocational school programmes, be re-organised into two: a work-based and school/college based track. Such a reorganisation is deliberately intended to blur the boundaries between the offer of technical high schools and colleges, implying a much fuller co-ordination between college and technical school funding streams. As an example, the learnerships and skills programmes offered at TVET colleges are not taken into account in the funding formulas. The Green Paper (DHET, 2012) therefore argues that many colleges operate a dual system, with some staff being paid via funding formula and the others funded through the SETAs.

The mix of provision

The mix of provision is often driven just by student preferences

The mix of vocational provision in technical schools, TVET colleges and universities is mainly driven by the preferences of students. (SETA-funded programmes are determined quite differently, with a strong employer influence). But the mix should be determined through a balance of student preferences, employer interests moderated by trade union inputs, and under the overall guidance of government (see Box 3.1). The balance of student preference and employer interests is particularly central, as it ensures that programmes allow for an effective transition from school to work.

Skills planning without data will not be effective

Strategic skills planning takes place through the National Development Plan, in which is embedded the National Skills Development Strategy (third version). This provides the foundation of Sector Skills Plans, developed by each of the SETAs. But the degree of real employer involvement is questionable, and the Sector Skills Plans place on SETAs direct responsibilities for learnerships and apprenticeships, rather than the large bulk of college and university activity, where the mix of provision appears mainly driven by student demand.

Box 3.1. Balancing student preference and employer needs: some principles

Given that the benefits of VET are realised both by students and employers, an effective VET system needs to reflect both employer demand and student preference. The relative weight given to these factors varies across countries. The optimal balance depends on factors including:

- Who pays: If students pay most or all of the cost of VET courses – for example at post-secondary level – then the mix should be equivalently dominated by (informed) student preference. At any level, if employers wish to influence the mix of provision, they should be willing to contribute to the training, typically through the provision of workplace training and experience.

- Student age: Younger, school-age students may be less able to make longer-term career decisions, so student preferences for certain vocational programmes should be balanced by attention to labour market outcomes, particularly where provision is free of charge to the student.

Box 3.1. Balancing student preference and employer needs: some principles *(continued)*

- Breadth and orientation of programme: Programmes with a large element of general skills, often designed to prepare students for the next level of education, as well as direct labour market entry, need not be constrained so tightly by employer demand. Conversely, in programmes that are designed for direct labour market entry, that contain much occupation-specific content and that rarely lead to further studies, employability should be a major factor determining provision.

- Predictability: In some sectors, like education and health care, labour force requirements may be more predictable than in some others. In these areas it may be more reasonable to match provision closely to expected requirements (recognising that migration can make a difference).

Source: OECD (2010), *Learning for Jobs*, *OECD Reviews of Vocational Education and Training*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264087460-en.

The SETAs could play a more active role. According to DHET (2013), the information collected through the mandatory grant can be supplemented by workplace surveys, coupled with additional information such as tracking of vacancies. Sector, industry and regional input to the national planning process should ensure the provision of comprehensive information on workplaces in terms of the training that is taking place, the kinds of skills that are present in the workplace, and the nature of skills gaps (DHET 2013:59). But if this information is collected mechanisms are also needed to make use of that information to guide the mix of provision in line with labour market needs. Currently these mechanisms are non-existent or very weak.

Data limitations and career guidance

Lack of data on the outcomes of vocational training is a serious gap

The function of vocational education and training is to prepare people for jobs and careers, so the absence of data on whether given programmes and given institutions have been successful in this task is a fatal weakness. This is recognised in the White Paper (DHET, 2013a). At the moment we know that a large proportion of those entering the college system drop out, and therefore probably (although we do not know this with certainty) they have poor labour market outcomes. But even for the smaller proportion that do succeed in completing their programmes, passing exams and obtaining qualifications, we do not know if they get jobs in which they use the skills they have obtained. So a young person may not unreasonably see these

programmes as hard to complete, and of uncertain value once completed – a less than appealing prospect. In addition, it is also hard to justify large scale expansion of a system without much clearer evidence that it is having a positive impact on the lives of young people. At a more micro level, the absence of labour market outcome data means that it is very hard to advise young people on courses which might assist their career prospects, or evaluate the relative merits of different institutions, different programmes and different approaches to teaching. In short, the whole vocational system is flying blind[3].

Recommendation: Build a responsive vocational system through partnership with industry

To link vocational provision more closely with the needs of industry:

- Make workplace learning mandatory for vocational programmes.

- Co-ordinate vocational provision through a strategic body that would also involve industry stakeholders

- While maintaining a national curriculum, establish flexibility in a proportion of the curriculum that can be adapted by training providers to meet local needs.

Invest in better data, particularly on labour market outcomes linked to career guidance.

Supporting arguments: Tools for building partnership with the world of work

In support of these recommendations, more systematic use of work-based learning is practicable given the successful experience of other countries; employers and trade unions might be more fully engaged in provision through appropriate advisory bodies; local flexibility in curricula, again following international experience, can be used to build local partnerships with employers; and better data on the labour market outcomes of programmes are vital in linking provision to labour market needs.

More systematic use of work-based learning

Both training providers and employers can be reluctant to use work-based learning

Many institutions tend to operate in silos, and education and training institutions are no exception. Implementing work-based learning means

overcoming a natural resistance on the part of classroom teachers to the idea that students can learn much in the workplace that they cannot learn so readily in the classroom. So institutions naturally need strong incentives to establish the necessary partnerships with employers. Employers also need incentives. Sometimes employers believe (often wrongly) that offering work placements is an unnecessary cost, that they can reasonably avoid, while still benefiting by recruiting from the graduates of a vocational programme (OECD, 2014).

Against this background, mandatory work placements may be effective

The principle of mandatory work placements in vocational programmes has already been recommended in a previous OECD review of South Africa (OECD, 2008). It means that programmes will only be funded when training institutions develop and maintain the active partnerships that support work placements. Under these conditions training providers will see employer partnerships as central to their mission, while employers will see that, unless they are willing to offer work placements, the programme from which they draw their recruits may close or contract, and the government funding shift to another sector, or another region. This gives employers a desirable influence over the mix of training provision, allied with the principle that the greatest influence goes to those employers that are prepared to contribute most, by way of the offer of work placements (OECD, 2014).

International experience is that it can be made to work

In South Africa it is commonly argued that employers are reluctant to offer work-based learning. The same point is made in many countries. But what is striking about international experience (see Box 3.2) is that poorer countries with relatively weak infrastructure (Romania), countries with very little history of employer engagement in the vocational system (Sweden) and countries with very high rates of youth unemployment (Spain) have all been successful in implementing mandatory arrangements for work-based learning in some of their vocational programmes (OECD, 2014). Clearly such arrangements cannot be implemented overnight. Experience in Spain the early 1990s is that it takes time for employers to learn how to make use of students on work placement, and to appreciate and realise the benefits to them of offering such placements (Homs, 2007). One option is to develop incentives – OECD (2013) recommended the use of tax credits to foster on-the-job training, as well as simplified administrative procedures that would allow employers to take trainees from TVET colleges.

> ## Box 3.2. International experience with systematic work-based learning
>
> A number of countries, such as Spain, Romania and Denmark, and more recently Sweden, have effectively transitioned their post-secondary VET systems to ones involving mandatory workplace training. In Spain, in both upper secondary and post-secondary programmes, workplace training normally takes place through a compulsory three-month module at the end of the programmes. In Sweden, all two-year higher (post-secondary) vocational programmes have a considerable amount of work-based learning (at least 25% of total programme hours), usually in several blocks. This mandatory work-based component of all programmes allows good co-operation between education providers and employers. The work-based components are designed so that students apply concepts learned in the study programme at the workplace, with specific attention given to the links between theory and practice. The education provider is responsible for quality assurance of the selected workplace programme and many education providers choose to appoint a placement coordinator to facilitate the process. In Denmark, work placement has been mandatory in all programmes since August 2009, to ensure that all programmes are professionally oriented and of relevance for the employers and thus the students. All "academy" post-secondary two-year programmes include three months of workplace training and all "professional bachelors" programmes, include at least six months workplace training.
>
> *Source*: OECD (2014 forthcoming), *Skills beyond School: Synthesis Report*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris.

The N programmes should include work-based learning systematically

In South Africa the NC(V) and technical school programmes have no requirement for WBL while the N (Nated) programmes contain a requirement at N6 level but it is often not realised. Here the proposition is to implement work-based learning systematically. Pursuing the argument of Chapter 2, this is obvious in the proposed work-based track. But even in the school-based track it is proposed that there should be some element of work-based learning. In Chapters 4 and 6 it will be argued that the college funding formula should include incentives for completion, and these might also naturally be linked to the completion of a module of work-based learning, so that colleges, as well as students would have strong incentives to ensure the delivery of work placements.

Engaging the stakeholders and improving coordination through a national steering body

The national skills authority might be used to engage employers and unions

Multiple programmes create a coordination challenge. A national steering body can be of significant help for this task. This is not envisaged as an additional funded institution with a secretariat (there are already enough such bodies in the South African VET system) but rather an advisory group, established by DHET and the Department of Basic Education, given its role in technical schools, and including employers and trade unions, that would advise on the strategic development of the VET system, and aim to co-ordinate the different funding streams and strategic elements of that system. Such arrangements would clearly need to link closely with, or be part of the existing National Skills Authority, which already groups representatives of all relevant governmental sectors (i.e. education, labour, trade and industry), employers, organised labour and other relevant social partners. Such a national umbrella would also provide the frame for local partnerships, including, most particularly, the involvement of social partners in the governance of institutions – colleges, technical schools and universities, as recommended in a previous OECD review (OECD, 2008). Such local governance arrangements would support the delivery of work placements (see above in this chapter), arrangements for college lecturers to spend time in industry (see Chapter 5) and the local adaptation of curricula (see below in this chapter).

Box 3.3. National Strategic Bodies Steering VET Policy

In **Switzerland**, the involvement of professional organisations in VET policy making is required by law. The term "professional organisations" in Switzerland refers to trade associations, employer associations and trade unions, and includes both companies and business people. Professional organisations have the leading role in the content and examination process of both secondary and post-secondary VET programmes (in Switzerland post-secondary VET is referred to as "professional education and training", PET). Professional organisations in post-secondary VET, as in secondary level VET, draft core curricula for PET college degree programmes, which are then approved by the Swiss authorities (Confederation). National examinations leading to a federal diploma are also led by professional organisations. They ensure those federal PET diplomas are relevant to the needs of the profession and the labour market. Professional organisations draft examination rules, which cover admission requirements, occupational profiles, the knowledge and skills to be acquired, qualification procedures and the legally protected title. They also conduct examinations. The role of Swiss authorities (at Confederation level) includes approving examination rules, supervising examinations and issuing federal diplomas.

In the **United Kingdom**, the UK Commission for Employment and Skills (UKCES) was launched in April 2008 with the aim of increasing the employer voice in the United Kingdom's VET system and promoting investment in skills to drive enterprise, jobs and growth. It is led by commissioners from large and small employers, trade unions and the voluntary sector. It also includes representatives of further and higher education institutions and from the Devolved Administrations. Its strategic objectives are: *i)* to provide world-class labour market intelligence which helps businesses and people make the best choices for them; *ii)* to work with sectors and business leaders to develop and deliver the best solutions to generate greater employer investment in skills; *iii)* to maximise the impact of changed employment and skills policies and employer behaviour to help drive jobs, growth and an internationally competitive skills base. The UKCES works with government departments and agencies, as well as with researchers across the UK to develop an evidence base and pool expertise. The UKCES also funds and manages the Sector Skills Councils and oversees their relicensing process. As a UK-wide body, it helps ensure a strategic approach to skills development that covers all four nations (with devolved administrations for education and training policy) of the UK.

Sources:
Fazekas, M. and S. Field (2013), A Skills beyond School Review of Switzerland, OECD Reviews of Vocational Education and Training, OECD Publishing. http://dx.doi.org/10.1787/9789264062665-en

UK Commission for Employment and Skills (UKCES) (2013), OECD Review: Skills beyond School. Background Report for England. Briefing Paper February 2013. http://www.ukces.org.uk/publications/oecd-skills-beyond-school-england

Other countries might offer valuable models.

Box 3.3 provides some examples of institutional arrangements. The frameworks in Denmark and Switzerland build on strong industrial bodies (employer organisations and trade unions) and a long tradition of engagement in VET. The industry-led UKCES in the United Kingdom involves high profile representatives of large and small employers (including CEOs of large companies), as well as other stakeholders (Musset and Field, 2013).

Other measures to guide the mix of vocational provision

A proportion of curricula should be locally negotiated with employers

In South Africa, as in many countries, most vocational qualifications are national. This has the advantage of national consistency and supports labour mobility, but it means that training providers cannot build partnerships with local employers around adapted curricula. Following the practice of other countries (see Box 3.4) a certain proportion of vocational curricula – perhaps around 20% - could usefully be placed in the hands of individual training providers, to be determined in consultation with local employers. This follows the recommendation of a previous review (OECD, 2008) which argued for involving companies more fully in curricular design. This would facilitate local employer engagement, which in its train would support work placements for students and indeed sometimes for vocational teachers.

Box 3.4. Adapting curricula to local needs: German and Romanian Experiences

Fachschule curricula in **Germany** are developed by each *Land* within the framework agreement established by the Standing Conference of Ministers of Education and Cultural Affairs of the Länder (*Kultusministerkonferenz)* allowing 20% of the syllabus to reflect local needs.

In **Romania**, while the qualifications and the content of the curriculum are determined centrally, about 15% of the curriculum can be determined locally by the school. The school inspectorate approves the local component of the curriculum, developed by school representatives with the participation of social partners. This provides a frame for local partnerships with employers, and these arrangements balance the advantages of national consistency in qualifications with responsiveness to local employers' needs.

Sources:
Fazekas, M. and S. Field (2013), A Skills beyond School Review of Germany, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202146-en

Musset, P (2014), A Skills beyond School Commentary on Romania, OECD Reviews of Vocational Education and Training, OECD, www.oecd.org/edu/skills-beyond-school/ASkillsBeyondSchoolCommentaryOnRomania.pdf

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Accreditation of new programmes could be linked to assessments of labour market demand

As argued above, there are currently few mechanisms to link measures of labour market interest in skills, identified by SETAs or through better labour market information, with provision. Effective work-based learning would provide a powerful means of ensuring a match between supply and demand. But in addition, when applying for programme accreditation, training providers would need to offer an analysis of labour market relevance and prove that the proposed programme is needed to meet labour market needs. This would include assessments of labour market demand for the programme, career prospects for graduates and students' demand. For example, when an Austrian university of applied science seeks accreditation for a new programme, the institution must present a demonstration of labour market demand for the programme (Musset et al, 2013).

Better data on labour market outcomes

Destinations surveys of graduate leavers are the simplest tool

Better data are essential to link the mix of provision to labour market needs. They underpin career guidance (discussed in Chapter 6) and allow students to respond to skills shortages by making wise career choices. Well-informed career choices play an important role in determining the mix of provision, even within the frame of a system where the mix is largely driven by student preferences. A 'destinations' survey administered to those leaving vocational programmes around one year after completion, (or after they drop out) establishes whether graduates are working and in what occupation, whether they are pursuing further study, and if they are unemployed or otherwise not in the labour market. It can be undertaken through mobile phone contacts obtained from college students, allowing a follow-up regardless of location. This allows the success or failure of different vocational programmes and sometimes vocational institutions to be assessed. A survey can also ask graduates about what they thought of their vocational programme – whether it was well taught and provided them with relevant skills for example. In this way such surveys also become a tool to monitor quality. There is much international experience of destinations surveys, typically in higher education but also increasingly at secondary school level (see Box 3.5).

Box 3.5. Destination Surveys

In **Australia** the Student Outcomes Survey is conducted annually among students who completed some vocational training. Conducted by the National Centre for Vocational Education and Research since 1997, it is funded by the Australian government and provides information on employment and further study outcomes, the relevance and benefits of training, and student satisfaction. The information collected supports the administration, planning and evaluation of the VET system.

In **Ireland**, the School Leavers Survey is based on a national sample of school leavers, contacted 12 to 18 months after leaving school. Face-to-face interviews, used in this survey since its beginning in 1980, have become more difficult as a result of declining response rates and high costs. Therefore the 2007 School Leavers Survey used a mix of approaches. The selected individuals were asked to complete an online questionnaire and could also ask for a paper copy. Participants were offered an incentive to complete the questionnaire, with their names being entered in a draw for prizes. Those who were particularly difficult to reach (e.g. early school leavers) were followed up by telephone initially and then face-to-face.

Source: OECD (2010), Learning for Jobs, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264087460-en.

There are other sources of data on labour market outcomes

Other types of survey also provide information (see Table 3.2). Full censuses of the national population commonly contain information on qualifications, or highest qualification, as well as other information on employment status. The value of censuses is limited by the fact that they are normally only conducted every ten years or so, and recent trends and developments may therefore not be reflected. Labour force surveys also contain qualification and employment data, but are a sample only. Some countries also run longitudinal or cohort studies, identifying a random sample of young people at a particular age and interviewing them at regular intervals, for example to follow through experiences between school and work. Such longitudinal studies are a powerful source of information on the broad tracks which people follow through educational systems and into the labour market, but sample sizes are commonly quite small, limiting their capacity to examine smaller vocational programmes.

Table 3.2 Types of survey allowing information on labour market outcomes to be collected

Estimated percentage of upper secondary vocational programmes where outcomes are recorded in surveys

	Regular labour force survey	Longitudinal survey	Leaver survey	Census
Australia	■■■■	-	■■■■	■■■■
Austria	■■■■	-	-	■■■■
Belgium (Fl)	■■■	■■■	■	-
Czech Republic	■■■■	■■■■	■■■■	-
Denmark	■■■■	■■■■	■■■■	-
Finland	■■■	-	■■■	■■■
France	-	-	■■■■	-
Germany	-	-	-	■■■
Hungary	-	■	■■	-
Netherlands	■■■■	*	■■■■	-
Norway	■■■■	■■■■	■■■■	-
Sweden	■■	-	■■■	-
Switzerland	■■■■	■■■■	-	■■■■
Turkey	■■■■	-	■■■■	-

Note: Estimated percentage of VET secondary programmes: - 0%; ■ 1-25%; ■■ 26-50%; ■■■ 51-75%; ■■■■ 76-100%. In addition, some countries (as described below), notably the Nordic countries, employ national registers to track students into the labour market, bypassing the need for regular surveys.

* In the Netherlands, a cohort study is following a group of pupils – data on 16-plus in upper secondary education will be available in a few years.

Source: Kuczera, M. (2009*), The OECD International Survey of VET Systems*, OECD, Paris. http://www.oecd.org/education/skills-beyond-school/47334855.pdf

Notes

[1] The decline in apprenticeship training has been exacerbated by the fact that a large number of the learnerships that were initiated from 2001 were at the lower (NQF level 1) rather than intermediate skill level. This level did not address scare or critical skills needs at the intermediate level (Erasmus and Breier (2009).

[2] The German transition rate is impressive, especially the transition rate of graduates from vocational upper secondary who have the same employment rate as tertiary graduates at the beginning of their career. But their employment outcomes are less strong in the longer term in comparison with holders of tertiary degrees (OECD, 2010).

[3] The White Paper (2013) listed other useful indicators including *i)* data about qualifications; *ii)* the financial status of colleges; *iii)* student assessment and registration, *iv)* data on infrastructure and equipment, and *v)* employer demand for the programmes offered. DHET has proposed that a single information management system with a single information standard for all TVET colleges and campuses should be established (DHET, 2012a). Data on private colleges should be collected and analysed in the same system (DHET, 2012a:27).

References

Akoojee, S., Gewer, A and McGrath, S (Eds) (2005) ,*Vocational Education and training in Southern Africa: A Comparative Study*, HSRC Press, Cape Town.

Danish Agency for Higher Education and Educational Support (2012), Skills beyond School: OECD Review of Post-Secondary Vocational Education and Training – National Background Report for Denmark, http://en.fivu.dk/publications/2012/oecd-review-skills-beyond-school/oecdreview- skills-beyond-school-denmark.pdf.

Department of Higher Education and Training-Republic of South Africa (DHET) (2012) *Green Paper for Post-School Education and Training*, Pretoria.

DHET [Department of Higher Education and Training], (2013), White Paper for Post-School Education and Training – Building and expanded, effective and integrated post-school system.

Erasmus J. and M. Breier (2009), *Skills Shortages in South Africa: case studies of key professions*, Human Sciences Research Council, http://www.lmip.org.za/sites/default/files/documentfiles/Skills_Shortages_in_South_Africa_-_Entire_eBook_0.pdf.

Homs, O. (2007), "La Formación Profesional en España, Hacia la Sociedad del Conocimiento", *Colección Estudios Sociales*, No. 25, Obra Social, Fundación Caixa.

IMD, (2010), "IMD World Competitiveness Yearbook 2010 Results", *International Institute for Management.*

Kraak A. (2013), "State Failure in dealing with the NEET problem in South Africa: which way forward?", Research in Post-Compulsory Education, 18:22.

Kuczera, M. (2009), *The OECD International Survey of VET Systems*, OECD, Paris, http://www.oecd.org/education/skills-beyond-school/47334855.pdf.

Fazekas, M. and S. Field (2013), *A Skills beyond School Review of Switzerland*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264062665-en.

Fazekas, M. and S. Field (2013), *A Skills beyond School Review of Germany*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202146-en.

Gewer, A. (2014), "Opportunities and Challenges of Further Education and Training in South Africa", PowerPoint Presentation presented to the OECD team, JET Education, February 2014.

Kuruvilla, S. and R. Chua (2000) "How Do Nations Increase Workforce Skills? Factors Influencing the Success of the Singapore Skills Development System" *Global Business Review,* Vol. 1 No. 11.

Mayer M.J. et al (2011), "Towards a youth employment strategy for South Africa", Working Paper Series No. 28, Development Bank of South Africa.

McGrath S. and S. Akoojee (2009), "Vocational education and training for sustainability in South Africa: The role of public and private provision", International Journal of Educational Development, 01/2009?

McGrath, S. (2003) "Researching responsiveness", in Cosser, M., McGrath, S., Badroodien, A. and Maja, B. (eds) Technical College Responsiveness: Learner destinations and labour market environments in South Africa. Cape Town: HSRC Press, pp.13-26.

Musset, P (2014), *A Skills beyond School Commentary on Romania*, OECD Reviews of Vocational Education and Training, OECD, www.oecd.org/edu/skills-beyondschool/ASkillsBeyondSchool CommentaryOnRomania.pdf

Kuczera, M. (2009), The OECD International Survey of VET Systems, OECD, Paris,http://www.oecd.org/education/skills-beyond-school/47334855.pdf

Musset, P., et al. (2013), *A Skills beyond School Review of Austria*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264200418-en.

OECD (2014 forthcoming), *Skills beyond School: Synthesis Report*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris.

OECD (2013), *OECD Economic Surveys: South Africa 2013,* OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_surveys-zaf-2013-en.

OECD (2010), Learning for Jobs, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264087460-en.

OECD (2008), *Reviews of National Policies for Education: South Africa 2008*, OECD Publishing, http://dx.doi.org/10.1787/9789264053526-en.

Quintini G. and T. Manfredi (2009), "Going Separate Ways? School-To-Work Transition in The United States and Europe", OECD Social, Employment and Migration Working Papers No. 90, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jzbb2t1rcwc-en.

Sheppard C. and L. Ntenga (2013), "Funding of the South African Further Education and Training. Sector for an Equitable Sharing of National Revenue", *2014/15 Submission for the Division of Revenue (4.4Mb)*, Financial and Fiscal Commission.

Statistics South Africa (2014), "National and provincial labour market: Youth", Statistical release P0211.4.2, Q1: 2008–Q1: 2014.

UK Commission for Employment and Skills (UKCES) (2013), OECD Review: Skills beyond School. Background Report for England. Briefing Paper February 2013, www.ukces.org.uk/publications/oecd-skills-beyond-school-England.

Chapter 4

Reforming funding arrangements

This chapter looks at two key features of funding arrangements in South Africa. It argues that the levy system requires reform to simplify the system, shifting responsibility for discretionary funding to the National Skills Fund and simplifying the allocation of the mandatory grant. It also argues that reform of the TVET funding formula should pursue the White Paper proposals to reflect some additional factors, including recognition of the extra costs of provision in rural areas, and the extra costs of serving disadvantaged populations. In addition it should build in incentives to encourage completion.

Challenge: weaknesses in the levy-grant scheme

The current levy grant system throws up a number of challenges. First, experience with levies in other countries has not always been positive. Second, the current SETA arrangements have multiple difficulties, including high administrative costs. Some other countries are reviewing their support for industry sectoral bodies.

How the levy-grant system works

The levy grant is mainly distributed through sectoral SETAs

In South Africa, all employers whose gross wage bill exceeds ZAR 500 000 (about 47 thousand USD) per annum are required to pay 1% to a skill development levy (OECD, 2008). Levy income has risen sharply: from 1 258 million ZAR in 2000 to 11 378 million ZAR in 2013 (see Table 4.1). 21 sectoral SETAs (Skills Education Training Authorities) administer most (80%) of the levy. Each SETA has an independent chairperson, 6 representatives of employers, 6 of labour and two from interested professional bodies, all appointed by the Minister on advice from the sector.

Table 4.1. How money collected through the skills levy is distributed

Transferred to the SETAs	**Of which:**	80%
	Discretionary grant	*49.5%*
	Mandatory grant	*20%*
	Administration costs	*10%*
National Skills Fund		**18%**
South African Revenue Service (the collection agent)		**2%**
Total (11 378 million ZAR in 2013)		**100%**

Source: National Treasury South Africa, 2014

The SETAs currently distribute both the discretionary and mandatory grant

The discretionary grant is spent on projects that address sectoral needs identified in their sector skills plans (OECD, 2008). 20% of the discretionary grant budget is dedicated to the implementation of the skills priorities as defined by the National Skills Development Strategy and the remaining 80% to what is called the PIVOTAL[1] grants (DHET, PPT Number 1). For some years, SETAs were also the implementing agent for the National Skills Fund's funded strategic objectives (OECD, 2008:251). The mandatory grant money is transferred to employers on receipt of workplace skills plans and annual training reports.

The pros and cons of skills levies

Levy systems to support training are typically designed to correct market failures

Systems that fund training through a levy on all employers, or all employers in a given sector are commonly intended to correct a widely recognised market failure whereby employers are reluctant to invest in cost-effective training because they fear that too many of the benefits of training will fall to the employees or to other firms that may poach their skilled workers. The levy is therefore intended to correct a systemic tendency to underinvest in training. Different types of levy are described in Box 4.1.

Box 4.1 Types of Training Levy Schemes

Levy-Grant (as in South Africa)

Levy-grant schemes focus on company in-service training. They create incentives for a firm to invest more in the skills development of its own workforce, be it in the sphere of training on-the-job (setting up or extending and improving existing company training) or by sending workers to train externally. Government intervention, via the introduction of levy-grant arrangements, is justified because of shortcomings in the amount and/or quality of enterprise training. These schemes are in place worldwide. They can be found in industrial countries (such as France and New Zealand), transitional economies (Hungary) and in developing countries in Africa (Zimbabwe and South Africa) and Asia (Malaysia and Singapore). While there are numerous variants, Gasskov's three-fold classification has been widely adopted: cost-reimbursement, cost redistribution and levy-exemption.

Box 4.1 Types of Training Levy Schemes *(continued)*

- Cost-reimbursement. The training fund pays grants to firms on a cost-incurred basis for designated forms of training (both on and off the job). Firms that train to acceptable standards will receive back part of the levy paid as grants; non-training firms are penalized by loss of the levy. In practice, reimbursement is set below the value of the levy paid in order to cover administration costs. A country example: Nigeria.

- Cost-redistribution. It aims at redistributing the burden of training expenditures among enterprises. The mechanism redistributes levy funds away from companies that do not train, toward those that do. Since the emphasis is on the redistribution of cost burdens, training companies may receive grants far in excess of the amount of levy paid, thus providing strong incentives for firms to train. A country example: Mauritius.

- Levy-exemption. This mechanism is usually part of a broader cost-reimbursement scheme, whereby firms adequately meeting their training needs are allowed to withdraw from the levy-grant system or at least to benefit from reduced levy assessments in proportion to their recognized training investments. A major advantage is that firms are freed from bureaucratic fatigues of levy payment, and grant claim and potential cash-flow problems are avoided. A country example: Cote d'Ivoire.

Revenue-Generating

This type is used mainly to support training provided by the public sector, either by the State or a national training authority; the emphasis is on initial training at formal public training institutions. Such schemes are found typically in Latin America and Caribbean countries with some variations.

Source:s
Ziderman, A. (2009). Financing training through payroll levies. In *International Handbook of Education for the Changing World of Work,* ed. R. Maclean and D. Wilson, Vol. 1, 1075–89. The Netherlands: Springer.

Gasskov, V. ed. (1994). *Alternative Schemes of Financing Training*. Geneva: International Labour Office.

In the case of universal levies in other countries, like France, it is often argued that most of the training benefits fall to large firms and highly skilled employees (Gospel and Casey, 2012; Abdel-Wahab et al, 2010; Ziderman, 2009; Smith and Billet, 2006). Levy-grant schemes can operate at sectoral levels, for example the levy managed by the Construction Council in the UK (Abdel-Wahab et al, 2010). The UK established training levies in the early 1960s but, in the 1980s, most levies were abolished with the exception of

those in construction and engineering, where some net positive effects on training have been reported (Gospel and Casey, 2012).

While levy-grant schemes are supposed to encourage the involvement of companies in training, there has been a long debate about their effectiveness. The Singaporean Skills Development Fund is frequently cited as a successful example (Box 4.2).

Box 4.2 The Singapore Skills Development Scheme

Employers in Singapore are supposed to contribute to the Skills Development Levy for all employees (including full-time, part-time, temporary and foreign workers rendering services in the country) at a levy rate of 0.25%. The levy is channelled into the Skill Development Fund and firms may apply for grants which may reimburse a large portion of the costs of their training programmes (Singapore Government, Ministry of Manpower, 2014). Under this scheme, it is argued that firms have two incentives to train their least skilled workers: 1) they receive funding from the Skill Development Fund; and 2) they reduce the tax based upon contributors to that fund are made (Tzannatos and Johnes, 1997). Also, it is argued that by the mid-1980s, some 21% of the workforce had received training on a course provided in this way and that almost all large firms, most medium-sized and a large minority of large firms have benefit from the scheme (Tzannatos and Johnes, 1997). Kuruvilla and Chua (2000) argue that the factors behind the success of the Singapore scheme include:

- A link between economic development and skills formation: there is an Economic Development Board (EDB) in the country with responsibilities in both areas.

- A model for technology transfer: the EDB model was able to link together three crucial aspects: foreign direct investment; skills development plans; and public-private partnerships for training. This amalgamation made it possible for Singapore to meet its short and medium term skills development needs.

- Educational reform: oriented to long-term skills development.

- A levy-grant scheme: that induces private sector firms to invest in up-skilling.

- Strong inter-institutional co-ordination: that ensures the effectiveness and relevance of up-skilling programmes.

Source: Kuruvilla, S. and R. Chua (2000), "How Do Nations Increase Workforce Skills? Factors Influencing the Success of the Singapore Skills Development System" Global Business Review, Vol. 1 No. 11.

Weaknesses in the current SETA arrangements

International experience of sectoral bodies has been mixed.

In the Netherlands, current reforms will radically reduce funding of government-supported sectoral bodies (Fazekas and Litjens, 2014). In the UK sector skills councils no longer receive automatic government funding, but will have to justify their existence given weaknesses in some of the councils (Musset and Field, 2013).

Table 4.2. Distribution of the Skills Levy Fund

Millions of Rand

Year	Total disbursed by the skills levy fund	Distribution of Levy Funds				
		NSF (R'000)	SETAs			
			Administration Costs (R'000)	Mandatory Grant (R'000)	Discretionary Grant (R'000)	Amount Disbursed to SETAs (R'000)
2010/11	**8 542**	1 681	946	3 198	2 717	6 861
2011/12	**8 690**	2 013	964	3 565	2 148	6 677
2012/13	**10 240**	2 271	1 182	4 460	2 327	7 969

Source: Taken from Department of Higher Education and Training-Republic of South Africa (DHET) (2014) Statistics on Post-School Education and Training in South Africa: 2012. P. 53.

SETAs have been criticised as inefficient and unrepresentative of industry

SETAs were created in South Africa in 1998, to bring together employers and organised labour in specific sectors of the economy to identify labour market needs and facilitate skills development. Currently over one trillion Rand is absorbed in the administration of SETAs (see Table 4.2). This is a huge sum, and it is not clear that it delivers value for money, given the difficulties reported. The performance of SETAs is highly variable, and there are some problems of mismanagement, and a number of SETAs have been taken over by DHET and directly managed because of these problems. One difficulty is that SETAs appear to have multiple roles (see Box 4.3). Many SETAs are not perceived as effective representative bodies of employers and organised labour at sectoral level.

Box 4.3. SETA responsibilities

SETAs were created through the Skill Development Act of 1998. Their responsibilities include:

- Develop Sector Skills Plans within the framework of the National Skills Development Skills Strategies;

    - Implement Sector Skills Plans by establishing learning programmes, approving workplace skills plans and annual reports, allocating grants in accordance with regulation and monitoring education and skills development provision in the sector.

    - Promote learning programmes by identifying workplaces for practical work experience, supporting the development of learning programmes, improving the facilitation of learning, and assisting in the conclusion of agreements for learning programmes.

- Register learning programmes agreements;

- Perform any functions delegated by QCTO;

- Submit budgets, financial statements reports, strategic plans and reports on the implementation of Service Level Agreement to the Director General of DHET;

    - Liaise with relevant educational institutions/bodies established under any law regulating education in South Africa to improve information about placement opportunities and the relation between education and skills development providers and the labour market.

- Support TVET Colleges and Higher Educational Institutions;

- Implement Government and Sector strategies.

Source: Department of Higher Education and Training-Republic of South Africa (DHET) (2014a) PPT Number 1: SETA System in South Africa.

SETAs mainly appear to support short periods of training

It has been argued that many of the grants given by SETAs are offered for short courses, often in private colleges, that are not always recognised as seriously improving workforce skills or oriented to adequate qualifications (DHET, 2013). Skills programmes, which have the highest enrolment, are

mostly short courses that can be completed and certificated within a year, while learnerships, bursaries and internships are linked to qualification-based programmes that take a year or more to be completed and certificated (DHET, 2013b). In 2011/12, of the approximately 82 000 workers who were certified through SETAs, over 90% (more than 70 000) were certified for skills programmes. Relatively small numbers were certified through learnership, bursary or internship programmes (DHET, 2013b). Few resources from the levy have been used to pay for education in public universities and colleges (DHET, 2012).

The performance of the 21 SETAs varies greatly.

One SETA offered only four places in skills programmes while another offered more than 22 thousand places during the period 2011/2012. In 2011/2012, only four SETAs had workers enrolled in internships programmes; provision of learnerships and bursaries is also highly variable - only three SETAs concentrated almost 40% of the total of unemployed people enrolled in learnership programmes[2] (DHET, 2013b). Conversations with stakeholders suggest large variations in the capacity of different SETAs to engage both employers and workers in meaningful training.

Bureaucracy may reduce take-up of the mandatory grant

For a company to receive the 'mandatory' grant (20% of the total levy) they need to provide a workplace skills plan and an annual training report. The workplace skills plan is a comprehensive document that should indicate how companies are addressing their training needs, and should be prepared in consultation with employees. SETAs advise that a facilitator should be hired for this task or alternatively the SETAs might assist directly. The annual training report must meet standards dictated by each SETA. As the procedures are burdensome, about two thirds of eligible companies do not take up the offer. Only 16% of employers were claiming grants[3] out of the 51% of all employers that are eligible (OECD, 2008). Substantial resources have therefore accumulated because funds are not spent. These factors lay behind the recommendation of a previous OECD review for simplification of the complex and fragmented responsibilities of the SETAs and the National Skills Fund (OECD, 2008).

Recommendation: reform the levy-grant scheme

Reform funding flowing from the Skills Levy so as to shift responsibility for discretionary funding to the National Skills Fund and simplify the administration of the mandatory grant

Supporting arguments: simpler and more efficient administration

In support of these recommendations, their implementation would yield large savings in administrative costs; the discretionary funding should be used to provide an incentive to employers to engage with the vocational system. Reform of the mandatory grant would also remove some wasteful bureaucracy.

Distributing the discretionary grant through the National Skills Fund

Reform is clearly needed

Given the large administrative costs of SETAs, mismanagement of some of the SETAs, and unclear outcomes in terms of skills development, reform is clearly needed. Clearly it is important that the employers who contribute to the levy have a concrete sense of ownership over the expenditure – otherwise the legitimacy of the scheme would be called into question. But it is far from clear that the current system delivers that ownership. Currently, the National Skills Fund manages only 18% of the resources obtained through the skills development levy and it is mainly aimed at financing training for those people seeking a job (DHET, 2013:56). The National Skills Fund is operated as a programme within the Skills Development Branch of the Department of Higher Education and Training.

This proposal would centralise the administration of the discretionary grant

Against that background, the proposal here is to centralise the administration of the discretionary grant in the National Skills Fund, leaving the SETAs with the mandatory grant and a scaled-back role. The immediate impact would be substantial savings in administrative costs that could be recycled into training provision. The aim is that the discretionary grant should then be administered on the advice of the SETAs and more broadly of employers, but leaving SETAs and employers with the task of providing convincing arguments for the value of the training programmes they propose, and indeed that the proposals are in the interests of the entire industrial sector, not just those more closely connected with the SETA. This would, in effect, reward both effective SETAs, and employers that engage more fully, and are prepared to work in close partnership with South Africa's vocational training system – for example through offering work-based learning opportunities. This partnership model would retain the principle that employers should actively guide the allocation of training funds and in that sense the funds would 'belong' to employers, but on the basis that

employers should be actively engaged and work in partnership with the vocational training system to confirm their ownership. Funding would therefore provide incentives for employers to engage with vocational training rather than just offer money to employers on the assumption that they are engaged.

This approach would follow some international best practice

This partnership principle, whereby the allocation of funding for training is linked to employers that work in partnership with the training system, (and vice-versa) is an increasing feature of funding models used for vocational training systems in a number of different countries. For two very different examples, see the Swedish system of higher vocational education (Kuczera, 2013), and new 'blueprint' proposals in the United States for reform of federal funding (Kuczera and Field, 2013). It would also resonate with reforms in the Netherlands and England of government funding for sectoral bodies, removing automatic funding for sectoral bodies in favour of support for employer groups that actively engage with the vocational system.

Simplification of the mandatory grant

To engage employers, a simpler process for companies is needed in South Africa.

The fact that a facilitator is recommended to manage the preparatory work required for a company to receive the mandatory grant speaks for itself about the burdens. As proposed in the White Paper, the mandatory grant could be simplified by linking it simply to the collection of reliable data on workforce skills from employers[4] (DHET 2013a). Employers would have to submit only one relatively simple document annually, which would include information about all workplace training in the company, current skills levels, experience and qualifications of employees and priority skills needs. Submission of this document would entitle the employer to the mandatory grant. These data, collected through SETAs would inform planning of the mix of vocational provision.

Challenge: reforming the TVET college funding formula

Reforming the funding formula for TVET colleges throws up a number of challenges, in particular the requirement to reflect the needs of rural areas and the additional costs of teaching disadvantaged students. Colleges also currently lack adequate incentives to address dropout.

The current funding arrangements for TVET colleges

80% of the funding for the TVET college system flows from a national budget[5]

Colleges obtain the remaining 20% from student fees, often covered by bursaries (FFC, 2013). Administrative responsibility for TVET colleges (and adult learning centres) was shifted from the provincial to the national department (DHET) in 2012 (FFC, 2013; Sheppard and Ntenga, 2013). College funding throughout South Africa (from the central government) is now based on enrolments with the cost of each vocational programme being assessed by DHET though a funding weight (Sheppard and Ntenga, 2013:260). Reflecting increased enrolment,[6] this budget grew 27% from R3.8 billion in 2010/11 to R4.8 billion in 2012/2013 (see table 4.3).

Table 4.3 Transfers to Key Post-School Education and Training Institutions, from 2010/11 to 2012/13.

Financial Year	Public HEIs (R'000)/a.	Public TVET Colleges (R'000)/b.	Public Adult Education Training Centres (R'000)/c.	Total (R'000)
2010/11	17 516 740	3 803 958	1 222 855	22 543 553
2011/12	19 354 159	4 375 311	1 413 194	25 142 664
2012/13	20 902 779	4 844 607	1 464 756	27 212 142
Share of total expenditure in 2012/13	77%	18%	5%	100%

Notes*: /a. Amount for public HEIs reflects funds transferred by the DHET to HEIs. /b. Amount for TVET Colleges reflects funds transferred by DHET to provincial education departments for the College sector. /c. Amount for AET Centres reflects funds transferred from provincial education departments to AET Centres.

Source: Taken from Department of Higher Education and Training-Republic of South Africa (DHET) (2014) Statistics on Post-School Education and Training in South Africa: 2012. P. 50.

Reforming the funding formula

Funding arrangements for education and training institutions raise many questions

The transfer of responsibility for TVET colleges to central government has opened up the question of how exactly the pot of money available for colleges should be used. How should the real costs of teaching different students in different programmes and in different contexts be reflected in funding arrangements? How can these costs be identified? How can funding, as well as covering costs, encourage quality and performance? How can funding formulas be kept sufficiently simple so that key stakeholders can understand them. Many countries have wrestled with similar challenges when constructing funding formulas for education institutions.

Funding formulas can be assembled following a wide range of criteria.

Fazekas (2012) groups the factors used to construct funding formulas for schools and colleges as follows

- Student number and grade level reflect enrolments often adjusted according to grade or age level.

- Curriculum and education programme rules reflect the varying costs of different programmes arising from teaching equipment, specialist teachers or other factors. Such rules are commonly used to reflect the different costs of vocational programmes, often linked to the costs of different workshops or other equipment.

- Needs-based rules reflect the additional resources required to teach pupils with *(i)* diagnosed learning difficulties or *(ii)* who come from disadvantaged socio-economic backgrounds. Disadvantaged pupil background is measured for example through free school meal eligibility in the US or the UK, and census data on home language, aboriginality and family background in Victoria, Australia.

- School characteristics to reflect costs associated with, for example, the size of the school, the relative isolation of the school's community, physical aspects of the school premises, and local price levels.

- Outputs and outcomes rules link funding to completions or courses delivered.

Recommendation: fund TVET colleges to reflect real costs, and encourage completion

Reform the funding formula for TVET colleges to reflect *(i)* the extra costs of provision in rural areas *(ii)* the extra costs of provision for disadvantaged students, and *(iii)* incentives for colleges to improve completion rates.

Supporting arguments: building an effective formula

These recommendations support the White Paper proposals to reflect the additional costs of rural colleges and teaching disadvantaged students in the college funding formula. In addition, measures are needed to encourage colleges to give greater attention to completion given the severity of the dropout challenge.

Rural colleges and disadvantaged students

The White Paper proposes reform to address rural colleges and tackle disadvantage

For the funding formula, two key issues are the additional costs of provision in rural areas (for example because of travel costs, or because of the need to provide student accommodation); and the additional costs of teaching students from disadvantaged backgrounds (as they may need extra help for example to address gaps in basic skills resulting from weak schooling). Funding should so far as possible reflect the variable costs of provision in different settings and with different student populations, since otherwise colleges facing higher costs will have to compromise on quality. As mentioned by the Concept Note (DHET, 2012), it would be desirable for all TVET colleges (but especially rural colleges) to have access to more SETA and NSF resources. To reform the funding formula DHET (2012b) has suggested:

- Maintaining programme-based funding while reviewing funding weights with an adjustment for rural TVET colleges.

- Including funding provision for report 191 N1-N3 Engineering programmes and Report 191 N4-N6 programmes.

- Standardising the mechanisms through which colleges may access funding from the National Skills Fund and SETAs.

Incentives for completion

Dropout is a serious problem,

Dropout, addressed more fully in Chapter 6, raises two main challenges for colleges. First, measures to address dropout often require extra resources. Second, there are natural incentives at classroom level that actually encourage dropout, since it is usually the most disengaged and therefore hard-to-teach students who drop out, making the lives of teachers easier when they do so. To combat such perverse effects, powerful counter-incentives need to be built into institutions, through funding regimes and in other ways, to underpin efforts to tackle dropout. Colleges should therefore have a proportion of their funding attached to student completions rather than just enrolments. (One further option might be to offer higher rewards to completions in scarcity fields of study). This will provide the incentives for colleges to provide active support for students at risk of dropout, and encourage an institutional focus on final outcomes. Two examples of such approaches that appear effective are given in Box 4.4.

Completion incentives should be balanced with extra funding for disadvantaged students

Where colleges have discretion over the selection of student entrants, completion incentives should not be implemented in isolation. Otherwise there will be a strong temptation for colleges to give preference to students who easier to teach and more likely to complete, avoiding disadvantaged students where the costs and risks are greater. A proper balance between these two elements in the funding formula is therefore very important.

Box 4.4. Funding systems that encourage completion

In **Denmark**, the "taximeter" system was introduced gradually throughout the education system in the early 1990s (OECD, 2010b) and today, 92% of government support to educational institutions is allocated as taximeter grants according to the number of students who successfully pass their exams. Taximeter rates per student are determined through the annual Appropriations Acts, independent of the expenses of individual institutions. A system of grants complements the taximeter, to meet other needs (e.g. to ensure provision across the country, or to support research).Taximeter funding gives institutions an incentive to adjust capacity to fit demand and to pursue efficiencies. These incentives have also triggered changes in behaviour and the quality of the education services have been improved. This system therefore strongly encourages successful and timely completion. The Danish Evaluation Institute found that the system resulted in more focus on student needs and a more open minded attitude towards students.

In Washington State in the **United States**, the Student Achievement Initiative (SAI) is a new performance funding system for all community and technical colleges. Institutions are rewarded with additional funds if they record a significant improvement in the number of students moving from remedial to credit courses, completing credits, and successfully completing a degree. Colleges are evaluated relative to prior performance, and institutions are encouraged to measure the impact of their efforts and adjust practices in response. Evaluation of the SAI shows that since its introduction, students have acquired stronger foundation skills.

Sources:
Field et al. (2012). Field, S., et al. (2012)*, A Skills beyond School Review of Denmark,* OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264173668-en

Kuczera, M. and S. Field (2013), *A Skills beyond School Review of the United States*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202153-en.

Notes

[1] PIVOTAL is an acronym for Professional, Vocational, Technical and Academic Learning. PIVOTAL learning programmes include: bursaries, apprenticeships, internships, graduate placements, learnerships and other selected skills programmes.

[2] SETAs and colleges were, until recently, constrained from working with each other by the 80/20 rule which required colleges to use 80% of their state funding on the NC(V) or N programmes. The new *National Skills Development Strategy III*, as well as new regulations and pending legislation affecting the SETAs and the National Skills Fund are now attempting to reverse this trend (DHET, 2012:14).

[3] The reason given for not claiming grants against levy payments were mainly related to "lack of awareness of the process, not worth the efforts financially and too complex applications" (OECD, 2008:253).

[4] In doing so, SETAs redesigned role should be consistent with a co-ordinated education and training system that should be articulated and mutually beneficial for its various components (DHET, 2013a).

[5] In universities, a significant component of existing funding is allocated on the basis of student numbers, with a two-year lag. This costing model for students works on the basis of a funding grid which allocates a weighting to specific fields. The government indicates that this model for universities needs to be revised as well as it bears very little relation to the actual costs of teaching for a specific qualification (DHET, 2012:47).

[6] The Northern Cape recorded the highest average annual increase in allocations (19.1%), followed by the Western Cape (14.7%) and KwaZule-Natal (14.3%). At the other extreme, Mpumalanga had the lowest average annual increases (10.7%), followed by Limpopo (11.6%) (Sheppard and Ntenga, 2013:269).

References

Abdel‐Wahab, M., A. Dainty, A. and S. Ison (2010) "A review of the case of a Levy‐Grant Scheme (LGS) in the UK construction industry", *Journal of Vocational Education & Training*, 62:3, 273-283, http://www.tandfonline.com/doi/abs/10.1080/13636820.2010.495412

Coase, R. H. (1937). *The Nature of the Firm.* Economica, New Series **4**(16): 386-405.

Danish Agency for Higher Education and Educational Support (2012), *Skills beyond School: OECD Review of Post-Secondary Vocational Education and Training – National Background Report for Denmark*, http://en.fivu .dk/publications/2012/oecd-review-skills-beyond-school/oecdreview-skills-beyond-school-denmark.pdf.

Department of Higher Education and Training-Republic of South Africa (DHET) (2012) *Green Paper for Post-School Education and Training*, Pretoria.

Department of Higher Education and Training-Republic of South Africa (DHET) (2012a) *Green Paper for Post-School Education and Training*, Pretoria.

Department of Higher Education and Training-Republic of South Africa (DHET) (2012b) Concept Note for the Proposed Review of the National Norms and Standards for Funding Further Education and Training Colleges (NSF-FET Colleges), Draft Version, Pretoria.

Department of Higher Education and Training-Republic of South Africa (DHET) (2013),*White Paper for Post-School Education and Training*, Pretoria.

Department of Higher Education and Training-Republic of South Africa (DHET) (2013b) *Statistics on Post-School Education and Training in South Africa: 2011*.

Department of Higher Education and Training-Republic of South Africa (DHET) (2013a) *White Paper for Post-School Education and Training*, Pretoria.

Department of Higher Education and Training-Republic of South Africa (DHET) (2014a) PPT Number 1: SETA System in South Africa.

Department of Higher Education and Training-Republic of South Africa (DHET) (2014b) PPT Number 2: National Skills Fund in South Africa.

Department of Higher Education and Training-Republic of South Africa (DHET) (2014) *Statistics on Post-School Education and Training in South Africa: 2012.*

Fazekas, M. and S. Field (2013), *A Skills beyond School Review of Switzerland,* OECD Reviews of Vocational Education and Training, OECD Publishing, Paris http://dx.doi.org/10.1787/9789264062665-en.

Fazekas, M. (2012), "School Funding Formulas: Review of Main Characteristics and Impacts", OECD Education Working Papers, No. 74, OECD Publishing, Paris, http://dx.doi.org/10.1787/5k993xw27cd3-en.

Fazekas and Litjens (forthcoming), "A Skills beyond School review of the Netherlands", Reviews of Vocational Education and Training, OECD Publishing Paris

Field, S., et al. (2012), *A Skills beyond School Review of Denmark*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264173668-en.

Financial and Fiscal Commission (2013) Submission for the Division of Revenue 2014/2015. South Africa.

Gasskov, V. ed. (1994). Alternative Schemes of Financing Training. Geneva: International Labour Office.

Gospel, H. and P. Casey, 2012. Evidence Report 47: Understanding Training Levis. UK Commission for Employment and Skills.

Kuczera M. (2013), A Skills beyond School Commentary on Scotland, http://www.oecd.org/edu/skills-beyond-school/ASkillsBeyondSchool CommentaryOnScotland.pdf.

Kuczera, M. and S. Field (2013), *A Skills beyond School Review of the United States*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202153-en.

Kuruvilla, S. and R. Chua (2000) "How Do Nations Increase Workforce Skills? Factors Influencing the Success of the Singapore Skills Development System" Global Business Review, Vol. 1 No. 11.

Musset P. et al. (2013) *A Skills beyond School Review of Austria*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264200418-en.

National Treasury, Republic of South Africa (2014) Budget Review 2014.

OECD (2008), *Reviews of National Policies for Education: South Africa*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264053526-en.

OECD, (2010a), *Learning for Jobs*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264087460-en.

OECD (2010b), *Off to a Good Start?*, Jobs for Youth, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264096127-en.

Sheppard, C. and Ntenga L. (2013), Funding of the South African Further Education and Training Sector for an Equitable Sharing of National Revenue. Technical Report. Financial and Fiscal Commission. Submission for the 2014/2015 Division of Revenue. South Africa.

Singapore Government, Ministry of Manpower (2014) website: http://www.mom.gov.sg/skills-training-and-development/adult-and-continuing-education/Pages/sdl.aspx, consulted on 15 May 2014.

Smith, A., and S. Billett. 2006. Mechanisms for enhancing employer investment in training: A comparative perspective. Research in Post-Compulsory Education 11, no. 1: 1–18.

Strehl, F., S. Reisinger and M. Kalatschan (2007), "Funding Systems and their Effects on Higher Education Systems", OECD Education Working Papers, No. 6, OECD Publishing, Paris,http://dx.doi.org/10.1787/220244 801417.

Williamson, O. (1981). "The Economics of Organization: The Transaction Cost Approach", *The American Journal of Sociology*, 87(3): 548-577.

The Ministry of Children and Education (2012b), "The Taximeter System", www.eng.uvm.dk/Education/General/The-Taximeter-System, accessed April 2012.

Tzannatos, Z. and Johnes, G. (1997) "Training and skills development in the east asian newly industrialised countries: a comparison and lessons for developing countries", Journal of Vocational Education &Training, 49:3, 431-453, www.tandfonline.com/doi/abs/10.1080/13636829700200025#.VCvPU_n oRLE

UK Commission for Employment and Skills (UKCES) (2013), OECD Review: Skills beyond School Background Report for England. Briefing Paper February 2013, www.ukces.org.uk/publications/oecd-skills-beyond-school-england.

Ziderman, A. (2003), *Financing Vocational Training in Sub-Saharan Africa*, World Bank Publications.

Ziderman, A. (2009), "Financing training through payroll levies", in *International Handbook of Education for the Changing World of Work*, ed. R. Maclean and D. Wilson, Vol. 1, 1075–89, Springer, The Netherlands,.

Chapter 5

Strengthening professional development for vocational teachers and college leaders

Effective and professional teachers and college leaders are the key to quality in vocational education and training. In South Africa, although many teachers and college leaders are of high calibre, some teachers lack the right mix of skills and there is little structured preparation for college leaders. New measures are already in preparation to address these issues. This chapter argues that these measures need to ensure the right balance of both industry experience and pedagogical skills in teachers, and include strengthened professional preparation for college leaders.

Challenge: quality in teaching and college leadership

There are two main challenges. One is the need to improve the skills and qualifications of lecturers in the TVET system, an issue already being addressed through current proposed reforms. The second challenge is the need to improve the professional preparation of college leaders.

Teaching staff and their skills: the key asset of any VET system

Many countries find it hard to prepare vocational teachers.

Vocational teachers and lecturers have jobs that in many ways are more demanding than those of academic teachers. They not only need to have knowledge and experience of the diverse package of skills required in particular professions, they also need to know how to convey those skills to others. On top of this, they need to continuously update their knowledge in response to changes in technology and working practices. In many countries, teacher training qualifications are very general, without any differentiation between the teaching of academic and vocational subjects. (See the criticisms of the system in England in Lingfield, (2012)). Programmes designed to teach how to go about conveying practical and vocational skills are less common, and the scope to update skills by spending time in industry is often limited. In some countries rigid qualification requirements make it hard for people with valuable industry experience to contribute to vocational training (OECD, 2014). Many OECD countries therefore struggle with the gap between the aspiration for highly qualified vocational teachers and a reality which falls far short.

In South Africa, some lecturers lack relevant skills and qualifications

Some 9 000 teaching staff[1] represent the key asset of South African TVET[2] college system, but it is hard to attract and retain able people (Nxesi, 2014). At least 25% of lecturers currently lack teaching qualifications and more than half have no industry experience; occupational lecturers with artisan qualifications are few (mostly in the electrical and automotive trades); 40% of the teaching staff have short-term contracts giving them little incentive to make longer term investments in skills and qualifications (Papier, 2014).

Few have both industry experience and pedagogical qualifications

College lecturers in technical fields have often been recruited from industry with technical qualifications and workplace experience and knowledge, but little pedagogical training. Another group of lecturers are

college graduates who have completed their N6 courses, or are graduates from universities of technology with a National Diploma. Many of this group has limited subject content knowledge and little workplace experience (DHET, 2012:24).

New policies will address the challenge

Under new proposals,[3] the qualifications currently offered to TVET college lecturers will be replaced. (These current qualifications include the Postgraduate Certificate in Education, National Professional Diploma, National Professional Diploma in Education, and Advanced Certificates in Education) (DHET, 2012b). Clearer progression routes from the new qualifications are proposed, alongside a reinforced workplace training component in teachers' qualifications (see Box 5.1). While these proposals are welcome, setting ideal qualifications is easier than ensuring that a teaching workforce actually possesses these qualifications.

Box 5.1. A new Policy on Professional Qualifications for TVET Teachers in South Africa

It is proposed *(i)* that vocational lecturers need to be competent in both the theoretical and practical aspects of the courses; *(ii)* that a strong workplace component must be built into lecturer qualification programmes; and *(iii)* that curricula and qualifications need to adapt and respond to economic and technical change. Two levels are proposed for these new qualifications:

Initial qualifications:

- The Diploma in Vocational Education is intended for lecturers with Level 4 and 5 of vocational qualifications, with the aim of developing lecturers who can demonstrate focused knowledge and skills in lecturing a particular subject.

- The Advanced Diploma in Vocational Teaching enables the holder of a general undergraduate bachelor degree or diploma to become professionally qualified as a college lecturer. It offers entry-level initial professional preparation.

Post-professional qualifications:

- **The Advanced Certificate in Vocational Teaching** provides TVET college lecturers with a sound knowledge base for teaching a particular vocational subject, as well as the ability to apply their knowledge and skills to lecturing, while equipping them to undertake more specialized and intensive training.

- **The Advanced Diploma in Vocational Education**, a continuing professional development qualification for TVET college lecturers to strengthen an existing specialisation in a subject, or develop a new role to support teaching and learning in a TVET college.

- **The Post Graduate Diploma in Vocational Education** aims to position graduates to take on a leadership role in the vocational education environment.

Source: Department of Higher Education and Training-Republic of South Africa (DHET) (2012b) *Policy on Professional Qualifications for Further Education and Training College Lecturers*. Draft Version.

The key role of TVET college leaders

Across countries, vocational college leaders play a key role in the development of teachers and teaching quality.

In academic teaching, but to a lesser extent in the vocational realm, there has been increasing recognition that effective school and college leadership is vital in developing the skills of classroom teachers, and attention to leadership can therefore represent an important means of driving up the quality of teaching and learning. Leadership may be even more important in vocational institutions, where a diverse teaching workforce, including different occupational skills, and different mixes of industry experience and pedagogical qualifications and skills, mean that institution leaders can contribute hugely by encouraging a sharing of experience, and building a cohesive workforce.

Some weaknesses in college leadership need to be rectified

Historically in South Africa, limited efforts were made to support and prepare TVET college directors to carry out their duties. While the new proposed postgraduate diploma in vocational education may start to fill the gap in formal qualifications, previous initiatives were ad-hoc – for example the education sector SETA has delivered management and leadership programmes to 221 college staff (Nxesi, 2014). At the same time there have been major leadership challenges, and issues of mismanagement, and a number of VET colleges in South Africa have been taken temporarily under the authority of central administration, with special leaders appointed for limited periods in place of current college leaders, in order to address mismanagement.

Recommendation: strengthen the teaching workforce and its leadership

Strengthen the professional preparation of TVET college lecturers with attention to the balance between pedagogical skills and workplace experience. Promote effective college leadership by ensuring more systematic training for prospective and current college leaders

Supporting Arguments: defining the key skills of the college workforce

In support of these recommendations, it is here argued that teachers can benefit greatly from spending time in industry, while at the same time industry practitioners might be encouraged to take on teaching roles. Strengthened preparation of college leaders is also very important, as

leadership is a powerful tool to drive improvements in the quality of the system.

More workplace experience for teaching staff

For existing teachers, encourage internships in industry

In line with South Africa's proposed reforms, international experience suggests that vocational lecturers and teachers should be encouraged to spend time at the workplace. One option is for existing teachers to spend short periods in industry. For example, in Finland, the *Telkkä* programme allowed teachers to spend two months on-the-job and brought a wide range of benefits to teachers (Box 5.2). One benefit of teacher-internships is that teachers become more familiar with current workplace requirements, particularly those of the hosting employer, and teach these in their course. For the employer, this may ease the recruitment and training process for new workers.

Box 5.2. Teacher-worker pairing: co-operation between VET and employers

The Telkkä programme in Finland was based on close co-operation between teachers and workplace trainers. It aims to improve the ability of VET to respond to the needs of working life. The programme included a two-month on-the-job period for teachers, during which teacher-worker pairs were formed. This offered an opportunity for teachers to update their professional skills and for workers who also work as workplace trainers to improve their pedagogical skills. The training period was preceded by a seminar and planning (to clarify goals and expectations) and followed by feedback from teachers and workers and dissemination to the broader community.

Teachers reported a wide range of benefits, such as increased familiarity with recent work practices and requirements and the equipment used, easy access to firms for study visits, the contacts necessary to invite people from industry to give lectures at their VET institutions, increased confidence, respect from students and motivation. The training period also allowed teachers and workers to discuss issues related to workplace training for students and improve training plans and assessment methods. Participants improve their skills and self-esteem, and disseminate knowledge to other colleagues. This exercise has been evaluated by the Economic Information Office in Finland as one of the best ways of developing teachers' professionalism.

Source: Cort, P., A. Härkönen and K. Volmari (2004), *PROFF – Professionalization of VET Teachers for the Future*, CEDEFOP, Thessaloniki.

The entry of teachers from industry can be encouraged

Part-time teaching staff that maintain their role in industry bring up-to-date practical experience into the teaching environment, benefitting not only students, but also fellow teachers (OECD, 2010). Professionals should be able to move into teaching, either full or part-time, without having to overcome too many regulatory obstacles. Allowing skilled workers to acquire their pedagogical competences in a flexible way (e.g. through distance learning or through recognition of prior learning) helps to encourage them to practice as vocational teachers/trainers. Typically part-time teachers require pedagogical training, but it is unrealistic and undesirable to impose the same demands on them as full-time teaching staff, as they will often compensate by bringing up-to-date industry experience into their teaching and to share with their colleagues. In England, a new programme has been launched to encourage industry experts to teach part-time in vocational programmes (see Box 5.3).

Box 5.3. "Teach Too": A programme in England to encourage industry experts to teach in vocational programmes

Teach Too aims to encourage occupational experts from industry to spend some time teaching their occupational expertise to others and contribute to curriculum development, while continuing to work, so keeping off-the-job vocational education and training as up-to-date as possible. The programme implements a recommendation by the Commission on Adult Vocational Teaching and Learning on the need for "vocational teachers and trainers to combine their occupational and pedagogical expertise, [and] build strong partnerships with employers."

The programme will be developed by: learning from existing good practice and disseminating these lessons, funding a range of developmental activity to encourage innovation; challenging employers; and training providers to propose solutions that work for their learners and businesses. Drawing on this knowledge and activity the intention is to develop a national Teach Too framework which all stakeholders will be keen to embrace.

Source: The Education and Training Foundation (2014), Teach Too, http://et-foundation.co.uk/teach-too.html

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Training for school leaders

50 strong college leaders can make a difference

Given the consolidation of the South African TVET college system into just 50 colleges, an opportunity exists to build quality through a relatively

small number of highly effective college leaders. Such leaders need to be able to support the professional development of individual teachers, promote teamwork, adapt programmes to local needs, build partnerships with employers and other learning institutions, plan ahead, manage budgets and make wise recruitment decisions. These are substantial demands, requiring systematic professional development.

Attention to the quality of (academic) school leadership is now a commonplace.

In academic schools, since the mid-1990s, training and development for basic and academic school leaders have been introduced in many OECD countries, either as a preparation for entry to the post or to further develop the skills of active school leaders. Training arrangements include i) pre-service or preparatory training to take up the position; ii) induction training for those who have recently taken up the position; and iii) in-service training provided to practising school leaders. England, Finland, Northern Ireland, Israel and Slovenia offer leadership development training at all steps in a school leader's career. Chile, Ireland, the Netherlands and Norway have in-service education programmes. The courses offered to actual or prospective college leaders may vary from short certificate courses to post-graduate or PhD Programmes. Training may also vary depending on the responsibilities of school leaders, partly depending on the extent of school or college control over matters like staffing and budgets. Often where training is required to apply for a post, some funding support for that training is available (Pont et al. 2008). An example of the approach in Scotland is offered in Box 5.4. As argued above, if leadership matters in academic schools, it matters doubly in vocational colleges, where a diverse workforce needs strong leadership to realise synergies and deliver common goals.

Box 5.4. Scottish Education Leadership Development

Scotland has recently been shaping its leadership development agenda to match new requirements. Since 2000 it has had a mandatory training qualification for service and induction programmes for most new school leaders and since 2003 a new framework for leadership development. It provides learning opportunities for those involved in leadership teams as well as more senior staff. *Continuing Professional Development for Educational Leaders*, intended to provide a means of promoting professional development rather than a structure for managing schools, is based on the notion of professional progression in educational leadership through four levels:

- **Project Leadership**, for teachers who have, or may take on, responsibility for leading a small-scale project. This refers to teachers possibly quite early in their careers, who wish to develop their leadership skills, for instance in an area related to curriculum development.

- **Team Leadership**, for teachers who have regular responsibility for leading either permanent teams of staff or task groups/working parties. This might be particularly relevant to aspiring and established principal teachers, whether their responsibilities are primarily in the areas of curriculum or of guidance.

- **School Leadership**, for staff who lead projects and teams and who have, or are seeking, overall responsibility for an aspect of leadership across an establishment. This might include teachers or principal teachers who aspire to membership of a senior leadership team.

- **Strategic Leadership**, for staff who, in addition to project, team and school leadership responsibilities, have overall responsibility for the leadership of an establishment or are leading strategic initiatives at local or national level. This is particularly relevant to head teachers and to those working in the education service who have a strategic role in improving Scottish education.

Source: Pont, B., D. Nusche and H. Moorman (2008), Improving School Leadership. Vol. 1. OECD Publishing, http://dx.doi.org/10.1787/9789264039551-en

Notes

[1] More than a half of the total staff in TVET colleges employed in 2011 (15 744 people) were employed as lecturers, that is a total of 8 686 people. Only 4% were management staff (465 people) and 42% were support staff (6 593 people). The average lecturer:student ratio at public TVET colleges was 1:47 (DHET, 2013b).

[2] Some very valuable surveys on TVET lecturers exist at state level in South Africa. For example, the one conducted in the Free State as a collaborative effort undertaken by the South African Council for Educators (SACE), the University of the Free State (UFS) and the Flemish Association for Development Cooperation and Technical Assistance (VVOB). This survey found that most lecturers working in the Free State think: i) that they need additional skills; ii) that they need more exposure to industry; and iii) that they need more support to improve both their subject knowledge and pedagogical competences (Leroy and Huysamer, 2012).

[3] The Education, Training and Development Practices Sector Education and Training Authority (the SETA for the education sector) is also pursuing: 1. Continuous Professional Development for TVET personnel, including the use of PIVOTAL programmes to train lecturers (480 individuals); and the support of lecturers to gain industry experience and exposure through work-integrated learning (173 individuals); 2. Supporting TVET colleges in quality assurance and accreditation of the delivery of skills development programmes, including the training of lecturers as coaches, assessors and moderators (Nxesi, 2014).

References

Akkerman, Y., et al. (2011), *Overcoming School Failure: Policies that Work, Background Report for the Netherlands*, Ministry of Education, Culture and Science, Den Haag, www.oecd.org/edu/equity.

Álvarez-Galván, J-L. (2014) *A Skills beyond School Commentary on Northern Ireland*, OECD Reviews of Vocational Education and Training, Paris.

Cort, P., A. Härkönen and K. Volmari (2004), *PROFF – Professionalization of VET Teachers for the Future*, CEDEFOP, Thessaloniki.

Danish Agency for Higher Education and Educational Support (2012), *Skills beyond School: OECD Review of Post-Secondary Vocational Education and Training – National Background Report for Denmark*, http://fivu.dk/en/publications/2012/oecd-review-skills-beyond-school-2013-national-background-report-for-denmark.

Day, C., J. Moller, D. Nusche and B. Pont (2008), ''The Flemish (Belgian) Approach to System Leadership'', a case study report for the OECD *Improving School Leadership* activity, available at http://www.oecd.org/edu/schoolleadership and in Pont, B., D. Nusche and D. Hopkins (eds.), *Improving School Leadership, Volume 2: Case Studies on System Leadership*, OECD, Paris.

DEEWR (Department of Education, Employment and Workplace Relations) (2010), *OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes: Country Background Report for Australia*, Canberra, www.oecd.org/edu/evaluationpolicy.

Department for Employment and Learning (2009) *Qualifications Required to Teach in Institutions of Further and Higher Education.* 11pp. Circular. Draft Version. Northern Ireland.

Department of Higher Education and Training-Republic of South Africa (DHET) (2012a) *Green Paper for Post-School Education and Training*, Pretoria.

Department of Higher Education and Training-Republic of South Africa (DHET) (2012b) *Policy on Professional Qualifications for Further Education and Training College Lecturers.* Draft Version.

Department of Higher Education and Training-Republic of South Africa (DHET) (2013a) *White Paper for Post-School Education and Training*, Pretoria.

Department of Higher Education and Training-Republic of South Africa (DHET) (2013b) *Statistics on Post-School Education and Training in South Africa: 2011.*

The Education and Training Foundation (2014), Teach Too, http://et-foundation.co.uk/teach-too.html.

Fazekas, M. and S. Field (2013), *A Skills beyond School Review of Switzerland*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264062665-en.

FH Council (2010), Guidelines of the Fachhochschule Council for the Accreditation of Bachelor's, Master's and Diploma Degree Programmes, http://www.fhr.ac.at/fhr_inhalt_en/00_documents/AR_08102010_Version1.1.-en.pdf.

Field, S., et al. (2012)*, A Skills beyond School Review of Denmark,* OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264173668-en

Grint, K. (2005) *The Sociology of Work*, Polity Press. 3rd Edition.

Hippach-Schneider, U., et al. (2012) (eds.), *Getting Ahead though Advanced Vocational Training. German Background Report on the OECD study "Skills beyond School"*, BMBF, Bonn, www.bmbf.de/pub/getting_ahead_through_advanced_vocational_training.pdf.

Kuczera, M. (2009), *The OECD International Survey of VET Systems*, OECD, Paris, http://www.oecd.org/education/skills-beyond-school/47334855.pdf.

Leroy, Lieve and Barry Huysamer (2012) *Profile and Development Needs of Lecturers and Organisational Approaches Towards Professional Development in FS FET Colleges,* Research Report. The South African Council for Educators (SACE); the University of the Free State (UFS) and the Flemish Association for Development Co-operation and Technical Assistance (VVCB).

McCoy, S., E. Kelly and D. Watson (2007), *School Leavers' Survey Report 2006*, ESRI and Department of Education and Science, Dublin.

McGovern, P., S. Hill, C. Mills and M. White (2007) *Market, Class and Employment,* Oxford University Press.

Musset, P. (2013) *A Skills beyond School Commentary on Romania*, OECD Reviews of Vocational Education and Training, OECD, Paris.

Nxesi, Nombulelo (2014), *The Role of the ETDP SETA in Supporting FET Colleges.* PPT Presentation. OECD Seminar, Emperors Palace, South Africa.

OECD (2010), *Learning for Jobs*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/978926 4087460-en.

OECD (2013a), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment,* OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264190658-en.

OECD (2013b), *Education at a Glance 2013: OECD Indicators,* OECD Publishing, Paris http://dx.doi.org/10.1787/eag-2013-en.

OECD (2012) *Education Today 2013: The OECD Perspective,* OECD Publishing, Paris http://dx.doi.org/10.1787/eag-2013-en.

OECD (2014 forthcoming), *Skills beyond School: Synthesis Report*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris.

Papier, Joy (2014) *UWC Institute for Post-School Studies: OECD Input Presentation.* PowerPoint Presentation. University of Western Cape. South Africa.

Pont, B., D. Nusche and H. Moorman (2008), *Improving School Leadership. Vol. 1: Policy and Practice,* OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264044715-en.

Scottish Executive Education Department (2007), "Improving School Leadership, OECD Background Report: Scotland", available at: http://www.oecd.org/edu/schoolleadership.

Sheppard, C. and Ntenga L. (2013) Funding of the South African Further Education and Training Sector for an Equitable Sharing of National Revenue. Technical Report. Financial and Fiscal Commission. Submission for the 2014/2015 Division of Revenue. South Africa.

Spanish Ministry of Education and Science (2007), *Real Decreto 1538/2006, Boletín Oficial del Estado*; Spanish Ministry of Education, Culture and Sport (2011), *El portal de la formación profesional,* www.todofp.es, accessed December 2011.

Swedish Ministry of Education (2013), *Background Report Prepared for Skills beyond School*, Swedish Ministry of Education.

Swedish Ministry of Education and Research (2010), OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes: Country Background Report for Sweden, Ministry of Education and Research, Stockholm, www.oecd.org/edu/evaluationpolicy.

Chapter 6

Supporting completion and transition

Dropout is a pervasive challenge in South Africa and a major reason why so many young South Africans end up not in education, employment or training. Many students enter vocational programmes with weak numeracy and literacy skills, and have difficulties with academic requirements of programmes. Often they do not receive sufficient targeted help.

This chapter proposes a number of measures to address the challenge. Colleges need to ensure that students at risk receive support to help them improve their foundation skills, sometimes by integrating them with practical teaching. Better career guidance arrangements, based on data, can also contribute.

Challenge: insufficient focus on helping students to complete

Despite worryingly high levels of dropout, TVET colleges currently have few incentives to encourage completion, and offer limited support for students in academic difficulties. Career guidance provision remains patchy. It may be very difficult to realise expansion of the TVET system unless it is seen that students are likely to complete their studies.

High levels of dropout

In the school system as a whole, less than half the youth cohort obtains the matriculation

Roughly one million young people leave the school system annually (see Figure 1.2 in Chapter 1), but only 40% of them leave with the matriculation exam – dropout is concentrated immediately after grade 11, where around half a million students drop out annually, either because they fail the grade 12 matriculation or because they just do not enrol in grade 12. Of the learners who complete Grade 9, just under 90 % reach grade 10; about three quarters reach Grade 11 and only between 55 % and 60 % reach Grade 12.

There are contrasting arguments on how different learning environments affect these dropout rates

The first preference for most South African children and their parents is to get an academic NSC through a conventional academic high school and proceed to university. One reason suggested for dropout is that some of these students would be more suited to a vocational route (Taylor, 2011). One might argue this proposition by pointing to European examples of countries with strong vocational routes and relatively low dropout rates. A contrasting argument is that schools, with their 'school' rather than 'college' environment, appear more conducive to completion. Completion rates for the technical and academic high schools[1] are significantly higher than those in TVET colleges (Department of Basic Education, 2011, Department of Basic Education, 2014).

Table 6.1 Number of students who entered, wrote and passed examinations in TVET colleges (2012)

	Entered	Wrote	Passed	Passed as a percentage of those who entered
NC (V) level	73044	38792	16517	23
NC (V) level	28017	18305	7663	27
NC (V) level	18607	15334	6018	32
N3	14216	9928	3724	26
N4	9189	6524	2705	29
N6	3720	2744	992	27

Note: "Number entered" refers to the number of students who enrolled in a college. "Number wrote" refers to the number of students who sat for the examinations.

Source: DHET (2014a), "Statistics on Post-School Education and Training in South Africa: 2012", Department of Higher Education and Training, Republic of South Africa.

A large majority of entrants to the college system drop out

In 2012 73 000 students entered NC(V) level 2 while only 6 000 students (obviously entrants from previous years) passed the NC(V) level 4 examination (see Table 6.1). The calculation of dropout rates is complicated by students carrying subjects into subsequent years (Taylor, 2011), but whatever the basis, the completion rate is very low. Of the 26 540 students that enrolled for NC(V) Level 1 in 2007, only 1194 passed the Level 4 NC(V) examinations in 2009, a 4 % cohort progression rate (Gewer, 2014). Pass rates are also very low in N programmes (See Table 6.1). Similarly, in artisan programmes (learnerships and apprenticeships), the completion rate is around only 15 % (Kraak, 2013). The rates vary across sectors and fields of study (DHET, 2014a).

Universities also have low completion rates

To put these low vocational completion rates in context, universities also have low completion rates (see Table 6.2) especially for undergraduate diplomas and certificates, and dropout rates appear to be rising (DHET, 2014a).

Table 6.2 Drop-out rates in universities

Percentage of students who left HEIs without graduating, 2000 to 2004 cohort compared with 2005 to 2010

First time students by intake group	200 to 2004 group		2005 to 2010 group	
	Contact institutions	Unisa	Contact institutions	Unisa
All three and four year degrees	38%	59%	46%	68%
Three year diplomas	58%	85%	56%	87%
All three and four year qualifications at all institutions	56%		About 58%	

Source: John V. (2013) 'Drop-out rate points to lack of support', *Mail & Guardian*, 17 May 2013; data source: CHE, DHET

Many school students have weak literacy and numeracy

Weak basic schooling results in inadequate foundation skills of literacy and numeracy. This in turn leads to dropout because the lack of these critical foundation skills undermines learning and therefore performance across most fields of study (CHET, 2012; Taylor, 2011). The performance of South African school pupils is low in comparison to countries with lower income, in PIRLS (2006, testing reading) and in TIMSS (2003, testing mathematics) with South Africa displaying the lowest average test scores among the sample of countries. Recent evidence (TIMSS, 2011) shows a marked improvement in average test scores, but South Africa still ranks at the bottom of the international spectrum.

Figure 6.1 International tests of student achievement in Mathematics and Reading

A. Mathematics Achievement (TIMSS 2003)

Test score, coefficient of variation
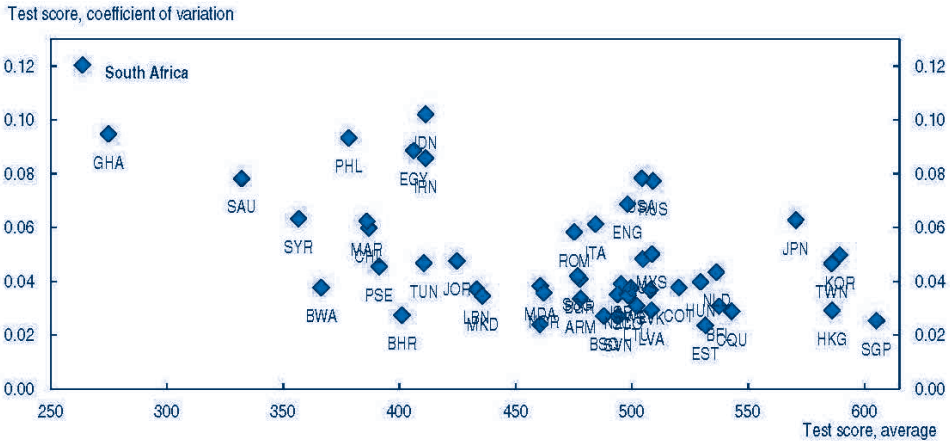
B. Reading Achievement (PIRLS 2006)

Test score, coefficient of variation
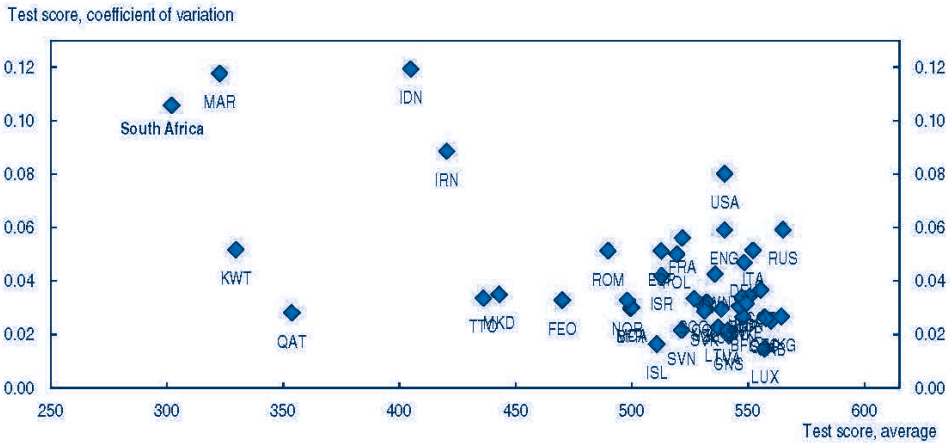
Source: Murtin F. (2013), "Improving Education Quality in South Africa", Economics Department Working Papers, Working Paper n° 1056

South Africa's poor average performance reflects the large fraction of students who do not reach basic qualification standards, while the top quintile of students perform reasonably well (Murtin, 2013). Figure 6.1 shows that South Africa's average scores are poor, but also that there is a greater spread of scores than in most other countries. While this no doubt partly reflects the historical legacy of apartheid and linked inequities, these inequities should now be alleviating

College entrants will therefore often have weak foundation skills

TVET college students include three groups: those who passed the NSC but were unable to enter universities because of low matriculation scores (typically between the 30% pass mark and the (roughly) 50% required for university entrance) those who either failed matric or dropped out in Grades 10 or 11, and those who passed directly from grade 9 to a TVET college. Given weak underlying basic schooling, and the way in which these groups are selected, all of these groups are likely to include many people with weak foundation skills. At the same time these groups of students are a key strategic target for the vocational system, for it is they that are at greatest risk of becoming NEET. This underlines the importance of mechanisms to address weak foundation skills among college entrants.

Insufficient support for students who struggle

The White Paper reports that the TVET colleges do not do enough to support students

The White Paper argues that there is not enough support for struggling students in the TVET colleges (DHET, 2013). A series of well-recognised weaknesses in the college system may contribute to dropout, including chronic shortages of qualified and experienced staff, poorly developed links with industry and inadequate facilities[2] (ETDP SETA, 2012). Many of these wider challenges, concerned with the overall quality of TVET colleges are addressed in previous chapters.

Some colleges already offer various student support services

These include academic and personal support, assistance with financial matters, and help in finding work placements and jobs. Some colleges have demonstrated incremental improvements in the pass rates at each NQF level, which suggests that they have begun to adapt to the demands of the NC(V) (Taylor, 2011). Support programmes are often inadequately resourced, and co-ordination of the responses to the fragmented mix of challenges faced by students may be weak (DHET, 2013). Chapter 3 argued that attention to the completion issue needs to be underpinned by financial incentives to encourage colleges to support completion.

Despite complex career pathways, career guidance has been neglected

Career guidance provision is currently patchy

As argued in Chapter 2, the many different programmes of the post-school system make career choice difficult and many students have little understanding of the options (Kruss et al, 2006 ; DBSA, 2010). This context puts a premium on effective career guidance and information. Apartheid-era career guidance was focused on white communities and dominated by psychologists. While some elements of this system remain as costly services for the privileged few, significant moves have been made towards a more inclusive system: The Education, Training and Development Practices Sector Education and Training Authority (the SETA for the education sector) is pursuing a programme of support for TVET colleges including the placing of trained career development officers in all TVET colleges; and career information to be accessible to local TVET colleges and students (Nxesi, 2014). Careers guidance is part of the Life Orientation school curriculum; the universities generally have well-developed student counselling services; the Department of Labour has some guidance services and SAQA holds an up-to-date database of qualifications (Flederman, 2009). Some private organizations also provide innovative career services.

Effective career guidance also requires better data on labour market outcomes

But in South Africa, as in so many countries, career guidance faces a number of challenges. Labour market data are very sparse, with little or no information on the likely value of qualifications in the labour market. Responsibilities for career guidance are divided across Ministries and agencies. Career guidance is not delivered systematically in high schools, even though students and their parents have to make a decision typically at Grade 7 and at Grade 9 on future orientation. As a consequence, those who most need guidance may fail to obtain it. There may also be issues of lack of objectivity, because guidance personnel are based in education institutions with a pro-academic bias (Walters, Watts and Flederman, 2009).

Recommendation: tackle low completion rates

Implement a sequence of measures to tackle low completion rates.

- Provide targeted support to ensure adequate levels of literacy and numeracy among those pursuing vocational programmes.

- Ensure adequate incentives for completion for both institutions and students.

- Underpin pathways of progression with high-quality career guidance and information before and during vocational programmes.

Supporting arguments: tools to improve completion

In support of these recommendations: expansion of the vocational system can only be justified if it is accompanied by higher completion rates; financial incentives for both institutions and students have been shown to be effective in encouraging completion; targeted support for students with weak foundation skills is essential; career guidance can help students to plan and understand their career paths, and therefore reduce the risk of dropout because of bad choices.

A strategic approach to dropout

Expanding vocational training needs to be accompanied by measures to improve completion

The White Paper argues for a strengthening and expansion of the public TVET colleges so that they become institutions of choice for a large proportion of school leavers. But this depends on reducing dropout, partly because the college system may not be seen as sufficiently attractive if dropout is so pervasive, and partly because it may be difficult to justify the very substantial public expenditure involved if the return, in terms of qualified students, is low (DHET, 2013). Moreover, in its nature, expansion is likely to draw into the system additional students with weaker basic skills who currently would not be able to enter the TVET system. So other things being equal, expansion might actually increase the dropout rate.

Financial incentives for institutions and students may also help

Chapter 4 argued that there is international experience of effective funding incentives for colleges to improve completion rates. Another approach is to give financial incentives to students for completion. There are international examples of success. The Mexican programme Opportunities (*Oportunidades*) and the English Education Maintenance Allowance[3] provide financial incentives for students to stay in education, with success (OECD, 2012). Since 2007, the National Student Financial Aid Scheme (NSFAS) has provided since 2007 bursaries for students in NC(V) programmes in public colleges (and since 2010 for N programmes), based on a means test and on academic performance. Students may also apply for

travel and accommodation awards, if the students meet the minimum requirement of 80% class attendance per month (DHET, 2014b). Given the high cost of the NSFAS bursaries (Slavin, 2010), their impact on retention should be evaluated.

Targeted help within vocational programmes

Interventions to support foundation skills can work

In all countries, individuals with stronger literacy and numeracy have less risk of unemployment, higher earnings and better prospects of further learning (Thorn, 2009; Green and Riddell, 2001; OECD/Statistics Canada, 2000; Smits, 2007). International evidence also shows that interventions at upper secondary level (and earlier) to tackle weak foundation skills can improve learning outcomes in vocational programmes and support completion (Lyche, 2010, Basic Skills Agency, 1997). This is consistent with the 2009 survey of NC(V) learners in colleges that recommends extensive early support, including language support, and counselling for under-prepared learners (Papier, 2009). A 2008 Survey of both staff and learners in Western Cape colleges looked at throughput rates in NC(V) programmes at Levels 2 and 3 and argued that these programmes may be too demanding. It also suggested that there may be an excessive workload due to the long syllabus and assessment requirements (Papier, 2009).

In some countries extensive efforts are devoted to foundation skills

In countries where post-school programmes are relatively open to students, regardless of prior qualifications, extensive efforts are sometimes devoted to the foundation skills of those entering the post-secondary system (see Box 6.1).

Box 6.1 Tackling foundation skills weaknesses in the United States and in Germany

In the **United States,** it is estimated that for two-thirds of community college entrants, weak academic skills threaten course completion. In 2007-2008, 45% of first and second year community college students reported having to take remedial courses. While extensive resources are devoted to remediation of foundation skills, its effectiveness is limited. Colleges allocate scarce resources to remediation activities, while students commonly use federal grants and subsidised loans to cover the cost of remedial education. This leaves them fewer resources for their post-secondary studies and increases the chance of dropout, and financial distress. Many local initiatives have sought to address the challenge. For example The Accelerated Learning Project (ALP) pioneered by the Community College of Baltimore County, Maryland offers students in remediation with relevant college credit courses in parallel (rather than in advance) of their studies so as to speed up their progress. The strategy is based on the principle that skills taught in one course and reinforced in another are more likely to be mastered. ALP participants concurrently enrol in a credit-bearing English course and a developmental writing course taught by the same instructor. The initiative has proved successful in terms of students completing the relevant credit courses. These positive outcomes have led the ALP to be adopted by different colleges throughout the United States.

In **Germany**, the 'Education Chain Initiative' aims to assist those students who currently find difficulties in transiting from school to the vocational education and training system. The objective is to replace isolated transition measures with structured support for students at risk. Following a national screening procedure at 7th grade two strategies are employed: inside schools to support students in acquiring core foundation skills and outside schools where a coach supports young people in their transition to vocational programmes – particularly apprenticeships.

Source: OECD (2014), Skills beyond School: Synthesis Report, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris. Hoeckel, K., and R. Schwartz (2010), Learning for Jobs: OECD Reviews of Vocational Education and Training: Germany, OECD, Paris. Available at: www.oecd.org/dataoecd/9/6/45668296.pdf

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Integrating foundation and vocational skills has many advantages

Often, when students have not pursued academic styles of classroom learning for some years, or where they have a negative past experience of such learning, there is a real difficulty in pursuing traditional mathematics or literacy classes. In South Africa students sometimes resist academic development programmes because they feel stigmatised by association with a 'special' class (DBSA, 2010). One promising approach, although it requires some serious implementation effort, is to integrate foundation skills with vocational training, so that literacy and maths skills are acquired in

meaningful practical contexts. Research evidence shows that this can be effective (e.g. Jenkins, Zeidenberg and Kienzl, 2009; Kamil, 2003; NCTE, 2006); see also Box 6.2. Mirroring the international evidence, one South African study found that programmes that integrate literacy and language development into mainstream teaching with vocational education content knowledge work well (Kruss et al, 2006).

Box 6.2 I-BEST: Integrated instruction in the United States

The Integrated Basic Education and Skills Training (I-BEST) provides a strong example of a programme designed to improve labour market outcomes and entry rates to professional training among adults with low foundation skills. Developed in Washington State, it has proved successful and is now being introduced in other parts of the US.

The programme combines foundation skills teaching with professional training that yields college credits and contributes to a credential. Courses are provided in occupations in high demand. In Washington State combining skills with vocational content is facilitated by the availability of both types of programme at community and technical colleges, and I-BEST programmes are available in every college in the state. Individuals must score below a certain threshold on an adult skill test and qualify for adult basic education to participate. In practice, this translates to around 2% of foundation skills students.

Studies found that I-BEST students earn more credits and were more likely to complete a programme than a comparable group of students not participating in the programme. Evidence on the link between participation in I-BEST and earnings is less conclusive.

Source: Kuczera, M. and S. Field (2013), *A Skills beyond School Review of the United States*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202153-en.

More attractive vocational pathways

Vocational pathways and work-based tracks are attractive when they offer a clear line of sight to a career

Upper secondary programmes often coincide with late adolescence when motivation for learning tends to fall. Although dropping out often has roots in a history of progressive disengagement from school, international evidence shows that attractive and relevant pathways at upper secondary level strongly encourage retention (Lyche, 2010, OECD, 2012). Well-designed vocational tracks, with a line of sight to a job, a wage and the self-esteem that goes with it, can therefore help to reduce dropout rates. Between the mid-1980s and mid-1990s, Nordic countries expanded vocational

options and made them more equivalent to more academic options, as a means of encouraging students to remain in school (Bäckman *et al.*, 2011).

Work-based tracks can appeal to students

As argued in Chapter 2, the development of a clear work-based route for students would allow a better link between the content of the programmes and the needs of the labour market, and increase students' employability. Work-based programmes have also proved to be effective in re-engaging disaffected students, while providing them with occupational skills, motivation and experience for a more efficient transition from education to work (OECD, 2012). A report looking at policy levers to improve completion in South Africa recommended work-placements for students (Kruss et al, 2006) (See Chapter 2 for information about work-based learning and its benefits).

Strengthened career guidance and information

Effective career guidance can reduce dropout

Effective guidance and counselling services help students to make the right educational and career choices and reduce the risk that a wrong pathway leads to disappointment and dropout (OECD, 2010). Career guidance and orientation is particularly relevant both prior to entering a vocational programme and within that programme (Watts, 2013).Weak guidance was identified by the ETDP SETA as one of the main factors behind the high drop-out rate in colleges (ETDP SETA, 2012). The White Paper argues that career counselling should be an integral component of the post-school education and training system (DHET, 2013).

Systematic career guidance therefore needs to start at the lower secondary level.

There are plans to give SAQA more responsibilities, in particular in developing and managing a career advice hotline (SAQA, 2014), but it is not sure how it will relate to other agencies with responsibilities for career guidance. Existing guidance tends to be more focused on academic choices than on occupational ones, and guidance needs to engage more fully with the world of work in order to ensure that advice is accurate and appropriate, and allows students the opportunity to see potential occupations for thermselves. Practical options include visits and meetings with representatives of local industries, community agencies, work simulation and work placements (OECD, 2004).

Many countries have targeted guidance and counselling on those who need it most

For example, in Ireland, enhanced guidance is targeted at junior secondary schools with the highest concentrations of disadvantage (OECD, 2010) (See also Box 6.3 to see how career guidance is organised in Scotland).

Box 6.3 Career guidance and advisors in Scotland

Scotland has a well-developed and comprehensive system of career guidance, offered in various institutions such as schools, colleges, local authorities and JobCentres. Multiple institutions involved in career guidance and different channels of provision allow the system to reach out to different groups, including young people seeking entry to further and higher education, and unemployed persons.

Contrary to other OECD countries where there is no specific profession of career advisors (career guidance being provided by school teachers and psychologists), Scotland recognises that "career guidance is a distinct, defined and specialist profession which demands a unique set of core skills and expects all career guidance practitioners to be professionally qualified". The Scottish approach to career management involves helping individuals to understand their strengths, the objectives that they wish to set for themselves and the networks and resources that will help them reach these objectives. The aim is therefore to help individuals to plan their career independently by equipping them with relevant tools and knowledge. Career services also include support from Career Coaches who engage with young people through talks, group sessions and individual coaching. Young people who need support to make a successful transition into employment receive one-to-one sessions, as does any young person who needs additional advice.

Co-ordination of services can be a challenge in a system involving many providers, but in Scotland Skills Development Scotland acts as the strategic leader, collaborating closely with schools, colleges, local authorities and other bodies and organisations such as employer representatives.

Source: Kuczera M. (2013), *A Skills beyond School Commentary on Scotland*, www.oecd.org/edu/skills-beyond-school/ASkillsBeyondSchoolCommentaryOn Scotland.pdf

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Relevant labour market information needs to be made available

Across countries, information underpins the link between vocational education and training and the labour market. Chapter 3 argued that good data allows policy makers and stakeholders to make better informed decisions about the future of the system, and help students make better

career decisions. For students, career guidance services that are well-informed about labour market returns (in particular wage returns which will be higher in areas of skills shortage) help students make the right decisions. When career guidance services are not available, students rely on informal sources, such as family and friends, and they may lack reliability and impartiality, and reinforce social disadvantage.

Notes

1 In schools under the Department of the Education, the drop-out rate before Grade 9 was extremely low. In 2008 it was around 2% in Grades 1 to 8. From Grade 9 upwards, however, the drop-out rate increases, reaching almost 12% in both Grades 10 and 11. In total 10% of learners who had been enrolled in Grades 9 to 11 dropped out of school between 2007 and 2008 (Department of Basic Education).

2 This same study reported shortage of/out-dated IT equipment e.g. computers for students who do Life Orientation. Some computers were still loaded with out-dated software which differs from that which they use in the final exams (ETDP SETA, 201).

3 This programme was discontinued in 2011.

References

Bäckman, O., *et al.* (2011), "Dropping out in Scandinavia: Social Exclusion and Labour Market Attachment among Upper Secondary School Dropouts in Denmark, Finland, Norway and Sweden", *Institute for Futures Studies*, *Working Paper,* No. 8.

Basic Skills Agency (1997), Staying the Course. The Relationship between Basic Skills Support, Drop Out, Retention and Achievement in Further Education Colleges, Basic Skills Agency, London.

Branson, N., C. Hofmeyr and D. Lam (2013), "Progress through school and the determinants of school dropout in South Africa", A Southern Africa Labour and Development Research Unit Working Paper Number 100. Cape Town: SALDRU, University of Cape Town

Bynner, J. and S. Parsons (2006), *New Light on Literacy and Numeracy, National Research and Development,* Centre for Adult Literacy and Numeracy, London.

Centre for Higher Education Transformation (2012), Shaping the Future of South Africa's Youth: Rethinking post-school education and skills training, http://chet.org.za/books/shaping-future-south-africas-youth, Cape Town.

Cloete, N. (2009). "Synthesis", in Cloete, N. (Ed), Responding to the educational needs of post-school youth, Centre for Higher Education Transformation, Cape Town.

DBSA (2010), " Skills for inclusive growth: Towards a long-term strategy for higher education and training", Commissioned by the Department of Higher Education and Training Document prepared by the Development Planning Division, http://www.dbsa.org/EN/About-Us/Publications /Documents/Skills%20for%20an%20inclusive%20growth%20path%20T owards%20a%20long-term%20strategy%20for%20higher%20education %20and%20training.pdf

Department for Basic Education (2014), "Technical Schools and their Curriculum in South Africa", PowerPoint Presentation presented to the OECD team, February 2014.

Department of Basic Education (2011), "Report on Dropout and Learner Retention Strategy to Portfolio", Committee on Education

Department of Higher Education and Training-Republic of South Africa (DHET) (2013) *White Paper for Post-School Education and Training*, Pretoria.

DHET (2014a), "Statistics on Post-School Education and Training in South Africa: 2012", Department of Higher Education and Training, Republic of South Africa.

DHET (2014b), "Rules and Guidelines for the Administration and Management of the Department of Higher Education and Training (DHET) Further Education and Training (FET) College Bursary Scheme", http://www.cct.edu.za/wp-content/uploads/2012/11/2014-DHET-FET-College-Bursary-Scheme-Rules-and-Guidelines.pdf.

DHET (forthcoming), "Twenty-year review of post-schooling education and training", Department of Higher Education and Training. Republic of South Africa.

Dunkel, T. and I. Le Mouillour (2009), "Through the looking-glass: diversification and differentiation in vocational education and training and higher education", in CEDEFOP (2009), *Modernising Vocational Education and Training. Fourth Report on Vocational Training Research in Europe: Background Report, Volume 2*, CEDEFOP, Luxembourg,www.cedefop.europa.eu/etv/Upload/Information_resources/Bookshop/544/3050_II_en.pdf.

ETDP SETA (2012), "Public Further Education and Training Sector Skills Plan 2013/2014 Update".

Finnie, R. and R. Meng (2005), "Literacy and Labour Market Outcomes: Self-assessment Versus Test Score Measures", *Applied Economics*, Vol. 37, No. 17, pp. 1935-1951.

Flederman, P. (2009). "Navigational tools for learners, really? What is available, what are the challenges and what should be done? An environmental scan of the careers guidance field in South Africa" in South African Qualifications Authority, *Career guidance challenges and opportunities*, Waterkloof.

Gewer, A. (2014) "Opportunities and Challenges of Further Education and Training in South Africa", PowerPoint Presentation presented to the OECD team, JET Education, February 2014.

Green, D. A. and W. C. Riddell (2001), "Literacy, Numeracy and Labour Market. Outcomes in Canada", University of British Columbia Discussion Paper No.: 01-05.

Hoeckel, K., and R. Schwartz (2010), Learning for Jobs: OECD Reviews of Vocational Education and Training: Germany, OECD, Paris. Available at: http://www.oecd.org/dataoecd/9/6/45668296.pdf.

Jenkins, D., M. Zeidenberg and G. Kienzl (2009), Educational Outcomes of I-BEST, Washington State Community and Technical College System's Integrated Basic Education and Skills Training Program: Findings from a Multivariate Analysis, www.eric.ed.gov/PDFS/ED505331.pdf.

John V. (2013) 'Drop-out rate points to lack of support', *Mail & Guardian*, 17 May 2013

Kamil, M.L. (2003), *Adolescents and Literacy. Reading for the 21st Century*, Alliance for Excellence in Education.

Kraak A. (2013), "State Failure in dealing with the NEET problem in South Africa: which way forward?", Research in Post-Compulsory Education, 18:22.

Kruss G. et al (2006), "Towards a framework for organising academic support to improve student success in FET colleges", Education, Science and Skills Development Research Programme, May 2006.

Kuczera M. (2013), *A Skills beyond School Commentary on Scotland*, www.oecd.org/edu/skills-beyond-school/ASkillsBeyondSchool CommentaryOnScotland.pdf.

Kuczera, M. and S. Field (2013), *A Skills beyond School Review of the United States*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202153-en.

Lyche, C. (2010), "Taking on the Completion Challenge: A Literature Review on Policies to Prevent Dropout and Early School Leaving", OECD Education Working Papers, No. 53, OECD Publishing.

Murtin F. (2013), "Improving Education Quality in South Africa", Economics Department Working Papers, Working Paper n° 1056, http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote =ECO/WKP(2013)48&docLanguage=En

NCTE (2006), *NCTE Principles of Adolescent Literacy Reform, A Policy Research Brief, National Council of Teachers of English*, www.ncte.org/library/NCTEFiles/Resources/PolicyResearch/AdolLitPri nciples.pdf.

Needham S. and J. Papier (2011), Practical matters: what young people think about vocational education in South Africa, City & Guilds Centre for Skills Development .

Nxesi, Nombulelo (2014), *The Role of the ETDP SETA in Supporting FET Colleges.* PPT Presentation. OECD Seminar, Emperors Palace, South Africa.

OECD (2014 forthcoming), *Skills beyond School: Synthesis Report*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris.

OECD (2012), *Equity and Quality in Education: Supporting Disadvantaged* Students and *Schools*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264130852-en.

OECD (2010), *Learning for Jobs*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264087460-en.

OECD (2004), Career Guidance and Public Policy: Bridging the Gap, OECD Publishing, Paris, http://dx.doi.org/110.1787/9789264105669-en

OECD/Statistics Canada (2000), *Literacy in the Information Age: Final Report of the International Adult Literacy Survey*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264181762-en.

Papier J. (2009), *Getting the Right Learners into the Right Programmes': an Investigation into Factors that Contributed to the Poor Performance of FET Colleges Learners in NC(V)2 and NC(V) 2 Programmes in 2007 and 2008 – Reasons and Recommendations*, http://www.feti.ac.za/docs/SESD%20WCED%20NCV%20Research%20Report.pdf

PIRLS (2006), International Study Center, available at http://timss.bc.edu/.

SAQA (2013), *Building articulation and integration*, 2nd National Qualification Framework Research Conference, http://www.saqa.org.za/docs/pres/2013/klinck_k.pdf

SAQA (2014), *SAQA's role in the vocational system*, PowerPoint Presentation by Joe Samuels presented to the OECD team, February 2014.

Slavin, R. (2010), "Can Financial Incentives Enhance Educational Outcomes? Evidence from International Experiments", *Educational Research Review*, Vol. 5, No. 1, pp. 68–80.

Smits, W. (2007), "Industry-specific or Generic Skills? Conflicting Interests of Firms and Workers", *Labour Economics*, No. 14, pp. 653-663.

Stone, J.R., et al. (2006), *Building Academic Skills in Context: Testing the Value of Enhanced Math Learning in CTE,* National Research Center for Career and Technical Education, Columbus, Ohio, .www.aypf.org/forum briefs/2007/Resources/MathLearningFinalStudy.pdf

Taylor N. (2011), *Priorities for Addressing South Africa's Education and Training Crisis*, Review commissioned by the National Planning Commission, JET Education Services

Thorn, W. (2009), "International Adult Literacy and Basic Skills Surveys in the OECD Region", *OECD Education Working Papers*, No. 26, OECD Publishing, http://dx.doi.org/10.1787/221351213600.

TIMSS (2003,2011), International Study Center, available at http://timss.bc.edu/.

Umalusi (2009a), *Report on the quality assurance of the examination and assessment of the GETC:ABET Level4*, Umalusi.

Umalusi (2009b), *A vision for post-literacy, post-compulsory schooling and post-school system*, Umalusi.

Walters S., A. Watts and P. Flederman (2009), *Navigating the National Qualifications Framework (NQF): the role of career guidance*, South African Journal of Higher Education, Volume 23 No.3, 2009, pp.561-574

Watts A. (2013), *Career guidance and orientation* in UNESCO, Revisiting global trends in TVET: Reflections on theory and practice, UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training.

Kuczera, M. and S. Field (2013), *A Skills beyond School Review of the United States*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202153-en.

Musset P. and R. Castañeda (2013), *A Skills Beyond School Commentary of Iceland*, OECD Reviews of Vocational Education and Training, www.oecd.org/edu/skills-beyond-school/ASkillsBeyondSchool CommentaryOnIceland.pdf.

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Further reading

OECD (2010), *Learning for Jobs*, OECD Reviews of Vocational Education and Training, OECD Publishing.

See also *www.oecd.org/education/vet*.

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