Post-school education: Broadening alternative pathways from school to work

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Post-school education has the potential to help break the intergenerational cycle of poverty by increasing young people's employability and earning potential. Yet few youth access education and training after school and even fewer successfully complete their qualification.

In the 2011 Census, youth aged 25 – 29 with a college qualification[i] are 14% more likely to be employed than those who have only completed matric, and those with a university qualification are 36% more likely to be in employment.[ii] Similarly, a college-qualified youth earns 60% more than someone with a matric and those with a university qualification earn nearly 1.5 times more.[iii] Although these figures may fluctuate with the demand and supply of skills, they illustrate the benefits of studying after school.

The majority of young people in South Africa do not, however, enrol in post-school education. Only 8% of youth aged 15 – 24 are in any type of post-school education (university or college).[1] What are they doing? Figure 9 shows that 77% of 15 – 19-year-olds are in formal schooling (many repeating grades with little chance of completing matric),[2] with only 4% choosing the vocational route. For 20 – 24-year-olds, 16% remain in school, 12% are in post-schooling education, 21% in employment, and 51% are not in employment, education or training (NEET).

This suggests that South Africa's youth are not being equipped with the necessary skills to successfully find employment. While it is widely recognised that improving the schooling system is critical (see essay on p. 34), an effective post-schooling education and training system can provide a range of potential pathways that enable youth to make the transition from mainstream schooling to the work force.

Figure 9: What youth are doing, Census 2011
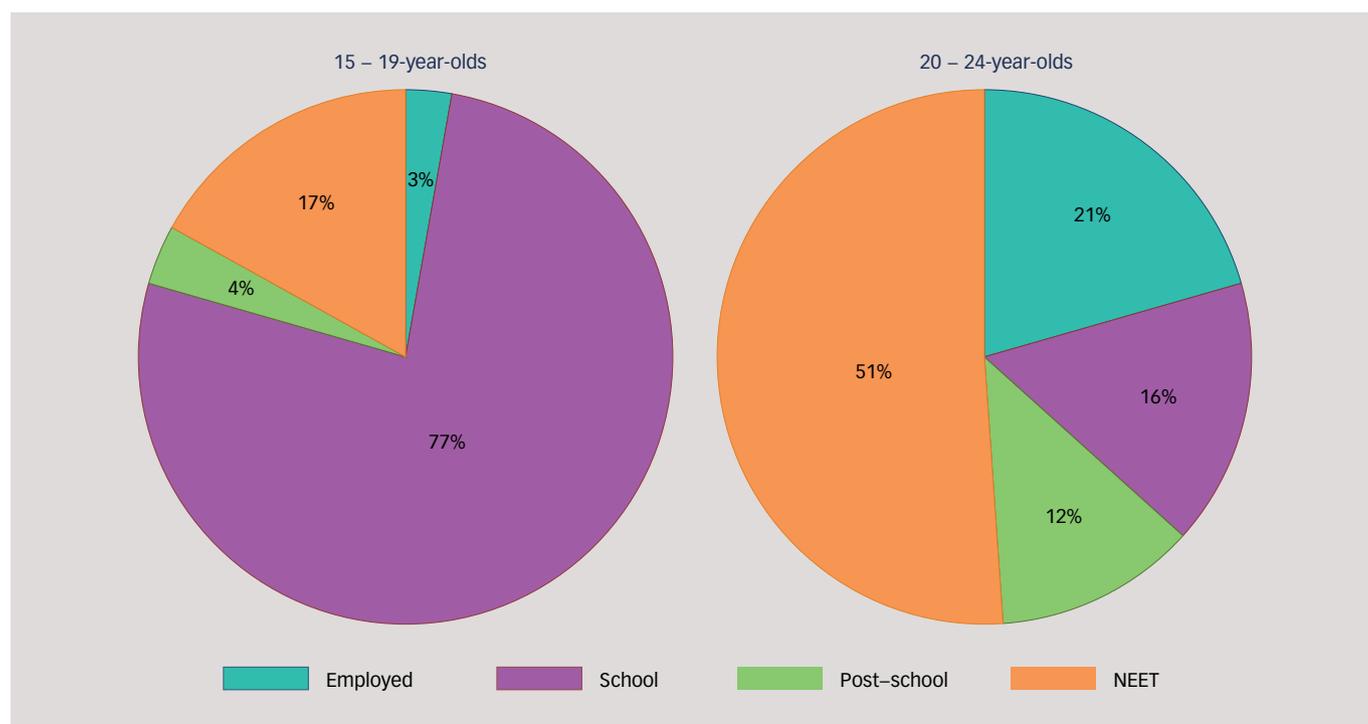
Source: Statistics South Africa (2012) *Census 2011*. Pretoria: Stats SA.

i   Analysis of Census data where college and university qualifications were defined from highest educational attainment. NATED, National Technical Certificate (NTC) and certificates and diplomas without matric classified as college qualified, certificates and diplomas with matric and degrees classified as university qualifications.
ii Statistics South Africa (2013) *Census 2011*. Pretoria: Stats SA. Own calculation. Regressions include a quadratic in age, a male dummy and indicators for Coloured and White (female and African are the reference categories).
iii The Census includes income but does not specify the source of this income. We assume that for our sample of employed 25 – 29-year-olds, this income is solely from earnings. Employment takes on a value of 1 for those answering yes to the "Did the person work for a wage, salary, commission or any payment in kind?" variable. Those not working but wanting to work are assigned 0 in the employment variable.

Levels	Band	Qualification type	School	ABET	NCV	NATED	OC	Providers	Q-type
10	HET	Doctoral degree (professional)						University	Degrees
9	HET	Masters degree (professional)						University	Degrees
8	HET	Bachelor honours degree					OC 8	University	Degrees
8	HET	Postgraduate diploma					OC 8	University	Diplomas
7	HET	Bachelor's degree					OC 7	University	Degrees
7	HET	Advanced diploma					OC 7	University	Diplomas
6	HET	Diploma advanced certificate					OC 6	University	Diplomas
5	HET	Higher certificate				N4-N6	OC 5	University / TVET	Certificates
4	FET	National certificate	Grade 12 / NSC		NCV 4	N3	OC 4	TVET	Certificates
3	FET		Grade 11		NCV 3	N2	OC 2	TVET	Certificates
2	FET		Grade 10		NCV 2	N1	OC 1	TVET	Certificates
1	GET	General certificate	Grade 9	Level 4				ABET centres	Certificates
1	GET		Grade 7	Level 3				ABET centres	Certificates
1	GET		Grade 5	Level 2				ABET centres	Certificates
1	GET		Grade 3	Level 1				ABET centres	Certificates

Notes:

GET – General Educational and Training
ABET – Adult Basic Education and Training
NCV – National Certificate Vocational

FET – Further Educational and Training
TVET – Technical and Vocational Education and Training
NATED – Nationally Accredited Technical Education Diploma

HET – Higher Education and Training
NSC – National Senior Certificate
OC – Occupational Certificate

Given this context, this essay addresses the following questions:

- What is the shape and structure of the post-school education sector?
- What obstacles do youth face in accessing and completing post-school education?
- What interventions seek to improve young people's chance of success in post-school education?
- What are the key recommendations?

What is the shape and structure of the post-school education sector?

Post-school education and training includes public and private higher education institutions (universities), technical and vocational education and training (TVET) colleges, adult education and training centres, and workplace-based education and training.[3] Figure 10 illustrates how the National Qualification Framework (NQF) creates "an integrated national framework for learning achievements"[4] across institutions. While this essay focuses on public university and college education, training is dealt with more extensively in the essay on p. 51.

Post 1994, both the college and university sector were restructured and consolidated to deal with the fragmented and racialised systems inherited from apartheid. Prior to 2004 there were 36 higher education institutions countrywide: 21 universities and 15 technikons. Universities focused on the delivery of theoretical programmes while technikons focused primarily on technical and vocational programmes. These 36 institutions merged into 23 institutions: 11 traditional universities, six universities of technology and six comprehensive universities. The comprehensive universities were formed through mergers

Box 2: Technical and vocational education and training

TVET colleges provide both NATED programmes and National Certificate Vocational (NCV) qualifications. The NCV was introduced in 2007 and there are a wide range of qualifications to choose from. These qualifications aim to respond directly to the priority skills that will help the South African economy grow. They include a theoretical and practical component in a particular vocational field. The practical experience may be offered in the workplace or in a simulated workplace environment. This has the advantage of giving students the opportunity to gain experience in the workplace during their studies. Public TVET colleges also offer NATED or "N" programmes which, when combined with practical work in a company and passing a trade test, lead to a qualification as an artisan in a wide variety of desperately-needed skills. Artisan qualifications include plumbing, welding, carpentry, boiler-making and many others.

TVET courses are aligned to the National Qualifications Framework. NCV 2 – 4 are equivalent to grades 10 – 12 respectively and correspond to NQF level 2 – 4. N1 – N3 NATED programmes have never been directly aligned with the NQF, but N3 broadly equates to grade 12/matric. N4 – N6 programmes correspond to the first year of study post grade 12 and are ranked at NQF level 5, while the National N Diploma corresponds to three years study post grade 12 at NQF level 6.

Source: Department of Higher Education and South African Qualifications Authority (2014) KHETHA Post School Guide. Pretoria: DHE & SAQA.

between universities and technikons and provide both theoretical and technical or vocational programmes. The traditional universities retained their theoretical focus and the universities of technology remain providers of primarily technical and vocational studies. Fifty public TVET colleges were created in 2002 by amalgamating former technical colleges, training centres and colleges of education.[5]

Institutions vary by type of programme offered, entrance requirements and tuition cost. Degrees can only be attained from universities (traditional, comprehensive or university of technology), while diplomas and certificates are attained from universities and colleges (figure 10 on the previous page). Traditional universities have the most stringent entrance requirements, requiring a completed grade 12 with university endorsement (a bachelor's pass), specific subjects depending on programme chosen, and, in most cases, a pass on an internal entrance examination (national benchmark test). TVET colleges, on the other hand, are the most accessible. Learners who have completed grade 9 are eligible for certain courses, while those with grade 12 (with or without endorsement) can access courses without the need to have taken specific subjects or achieved certain marks (see box 2). Universities of technology and comprehensive universities fall somewhere in-between as their entrance requirements for degree qualification

are similar to traditional universities but access to diploma or certificate qualifications is less restrictive.[6]
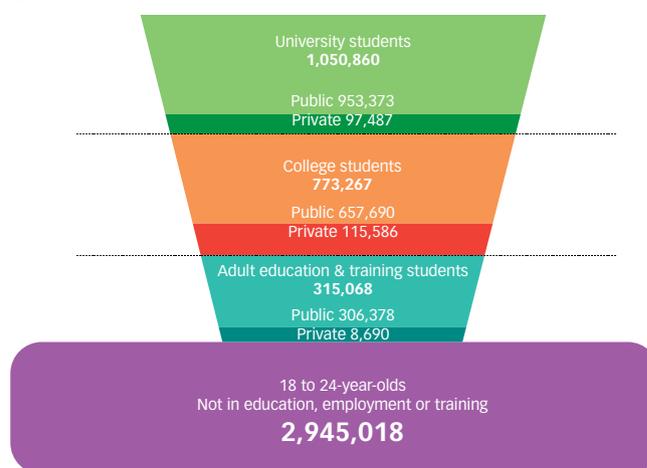
Post-schooling tuition costs are substantial and would be out of reach for many without the National Student Financial Aid Scheme (NSFAS). Student fees for government-subsidised college programmes range from around R5,000 to R16,000 per annum, with unsubsidised programmes around R30,000 per annum.[7] University tuition fees, on the other hand, can be as high as R46,000.[8]

In this context, the mismatch between current enrolment in universities and colleges and the school-leaving population is marked.[9] Even though 64% of school leavers do not pass matric, figure 11 shows that enrolments at universities are above those in college and most youth are not in education, employment or training.

Racial inequalities persist among those youth who are enrolled in post-school education. Figure 12 illustrates how Africans and Coloureds are under-represented in all post-school institutions, and particularly in universities and postgraduate studies.[10] Differences in enrolment between men and women are less marked,[11] yet universities struggle to retain women in postgraduate studies[12] as illustrated in figure 13.[13]

There is a clear policy drive to change both the size and the shape of the sector and to improve the range and quality of qualifications on offer,[14] with a target of 2.5 million students in TVET and 1.6 million students in universities by 2030.[15] The Department of Higher Education and Training (DHET) has commissioned 12 new TVET campuses to increase the capacity of the TVET sector and to enable rural access in particular. In addition, there are plans to improve capacity, quality and the relevance of TVET programmes.[16] High drop-out,[17] low doctoral production rates and the persistent under-representation of Africans and women in postgraduate qualifications[18] are areas for focus in the university sector.

Figure 11: The South African post-school system, 2012

University students
1,050,860
Public 953,373
Private 97,487

College students
773,267
Public 657,690
Private 115,586

Adult education & training students
315,068
Public 306,378
Private 8,690

18 to 24-year-olds
Not in education, employment or training
2,945,018

Source: Van Schalkwyk F & Sheppard C (2014) Shape of the South African Post-school System 2010 versus 2012. Viewed 13 September 2015: http://figshare.com/articles/Shape_of_the_South_African_Post_school_System_2010_versus_2012/1160503.
Data sources: Higher Education Management Information System and Further Education and Training Management Information System. Calculations by Charles Sheppard for the Centre of Higher Education Transformation.
Note: The enrolment numbers in this figure are not restricted to under 25s, only the NEET group is restricted.

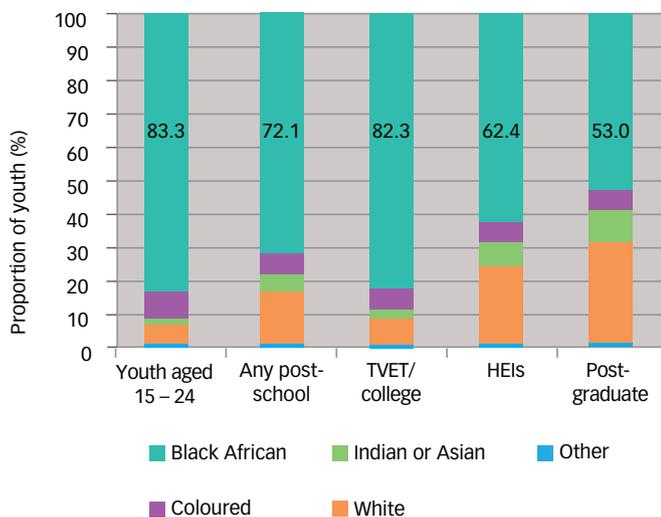# What obstacles do youth face in accessing and completing post-school education?

The potential benefits of post-school education provide strong motivation for youth to continue their studies after leaving school and research shows that many youth have high aspirations to study further.[19] Yet few of South Africa's youth successfully access and complete a post-school qualification. This section examines some of the obstacles they face.

Lack of school-to-post-school guidance

Learners face a number of important decision-making moments during their educational career. Yet their choices are often constrained. Matric subjects are chosen in grade 9, when employment and careers are far from a reality, and choices may be compounded by poor guidance around subject choice and future possibilities.[20] School career-guidance programmes are not comprehensive, particularly in socio-economically disadvantaged schools,[21] and many parents have no first-hand knowledge of studying after school[22]. Add to this the weak link between grade progression and actual ability in many schools[23] and the lack of externally marked standardised tests prior to the matric exam, all of which make it difficult for students to form realistic expectations of their ability and to plan for their future.
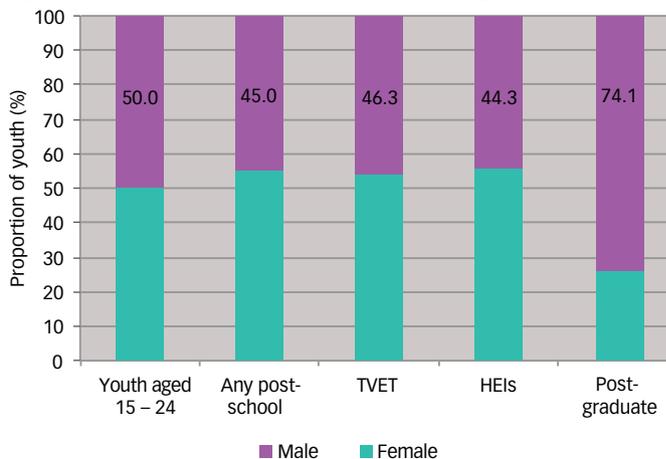
It is also not clear how learners navigate the post-schooling application process. Some studies have shown that learners base their decisions on their perceptions of institutions[24], a desire for white-collar rather than blue-collar jobs[25], and the experiences of respected members in their communities[26]. Colleges are often stereotyped as "second-rate" institutions.[27] In group discussions with grade 12 learners in Cape Town, Johannesburg and Durban, it became clear that TVET colleges were viewed as a low status, easy alternative to finishing secondary school.[28] A history of neglect of technical or vocational education and perceptions that such colleges are for those who do not succeed academically are likely to have contributed to this reputation, as well as the low-status and poor working conditions associated with menial and artisanal work in South Africa.[29]

The post-schooling application process is cumbersome. Currently, each institution has its own application requirements and deadlines. Application forms can be lengthy and complex to fill out and financial aid applications require additional forms and supporting documentation that may not be readily available (such as parents' payslips). Many institutions want applications to be submitted online and charge an application fee, which makes multiple applications costly.[30]

These factors make it hard for young people to access appropriate post-school programmes.

Financial constraints

The cost of attending post-school education is substantial and includes not only tuition fees, but application fees, fees for the national benchmark test, textbooks, transport costs, accommodation and other living expenses. Families go to extraordinary lengths to help finance further education, but often need additional support.[31] The NSFAS is well established and provides low-income learners with loans on favourable terms based on a financial means test and academic promise.

Yet the demand far exceeds the funding available. Although government's contribution increased 10-fold between 1996 and 2011, many learners still do not receive funding and others receive funding that does not sufficiently cover living expenses.[32] University fees have also increased rapidly over the past two decades,[33] leading to an increase in the number of students who fall above the NSFAS threshold but cannot afford fees. While programmes like Eduloan assist in the payment of fees, conditions for repayment are fairly stringent.[34] Academically strong students can apply for university-specific funding, but these funds are often linked to alumni and therefore more limited in historically disadvantaged universities.[35]

Figure 13: Gender composition in the post-schooling sector, 2011

Source: Statistics South Africa (2012) *Census 2011*. Pretoria: Stats SA.

Figure 12: Racial composition in the post-schooling sector, 2011

Source: Statistics South Africa (2012) *Census 2011*. Pretoria: Stats SA.
Note: Postgraduate population restricted to individuals who have completed at minimum a bachelors degree.

Financial constraints in TVET colleges are less binding than those in the university sector.[36] Government presently subsidises 80% of the cost of official college programmes and NSFAS loans and bursaries are available to cover the remaining 20% that students are required to pay. The increased enrolments in TVET appear to be directly related to NSFAS bursary allocations: in 2010, R318 million was allocated to 61,703 students (of a total of around 400,000 students), but by 2014 a staggering R2.107 billion was allocated to 233,958 students (out of a total of around 700,000 students).[37]

Staying the course

Drop-out rates are high. Tracking a 2006 cohort of university entrants, it was found that "only 35% of the total intake, and 48% of contact students, graduate within five years" and that 55% will never graduate.[38] Patterns appear even worse in colleges with an average pass rate for the National Certificate Vocational of 42%.[39] However, close to half who register to write the examination do not write.[40]

Academic preparedness, curriculum structure and content

Academic preparedness is an issue at both universities and colleges. Increases in the matric pass rate in recent years have resulted in more people applying to university.[41] Universities have introduced supplementary screening measures such as the National Benchmark Tests to address concerns over grade inflation. Yet drop-out in first year remains substantial[42] and studies show that many students are overwhelmed by the quantity and level of material covered.[43] Academic development programmes are in place in universities to extend the learning time and provide additional support to ease the transition, but are not enough to improve graduation rates.[44] A recent Council of Higher Education discussion document calls for the "extended programme" to be incorporated as mainstream, given that the majority of learners entering the system are underprepared.[45]

There is also concern that university curricula are outdated and not flexible enough "to deal constructively with diversity in students' educational, linguistic and socio-economic background".[46] Finally, although few students continue beyond undergraduate studies, universities are still primarily seen as producers of knowledge and research[47] and curricula are designed to further this aim. While the distinction between the three types of universities – traditional, comprehensive and university of technology – has tried to address this through differentiated programmes,[48] many problems remain, which can lead to students feeling disillusioned with their choice of study.

In the college sector, the introduction of the National Certificate Vocational (NCV) syllabus proved to be more academically challenging than the National Accredited Technical Education Diploma (NATED) courses and resulted in high subject failure rates and low certification rates (around 10% nationally in 2007[49]). Evaluations have shown that the NCV curriculum for fundamentals such as mathematics and English might be tougher than the equivalent grades 10 – 12 material in mainstream schools.[50] Given that it was initially targeted at grade 9 learners, many of whom were performing poorly in the formal schooling system, this led to calls for revision of the qualification. Students were found to lack academic reading and writing skills, mathematical skills and have difficulties with the language of instruction. Many colleges therefore established stricter entrance requirements, for instance selecting grade 11 or 12 applicants. Yet this undermines one of the primary purposes of the NCV: to provide an alternative pathway for youth to complete school. The NATED programmes' outdated course material and requirement to complete work placements, which are in short supply, have been major barriers to the programmes' success.[51]

Institutional environment

Students' feeling of involvement, integration and community in their institution is important for staying the course.[52] Since 2007, TVET colleges have invested, at considerable expense, in student support systems such as selection and recruitment mechanisms, academic support programmes and libraries. Resource centres that students can access after hours are needed to help students who do not have computer and internet facilities at home. Classroom challenges include student discipline and motivation, large age ranges and large classes.[53]

A committee set up by higher education bodies noted an "institutional culture that remains white and the pervasive racism that it engenders", as well as the "disjuncture between institutional policies and the real-life experiences of staff and students" that created "immense unhappiness and frustration amongst black staff across institutions".[54] Staff reported feeling "disenchantment, alienation and anger" as "they did not feel at home in the institution". Students experience similar frustration and disillusionment and are known to underperform in a learning environment that is not culturally responsive.[55] Initiatives such as the "Rhodes Must Fall" movement at the University of Cape Town provide clear evidence of this frustration.

Articulation between college and university sectors

The NQF aims to promote articulation between different qualifications, yet this has not materialised. It remains difficult for students to navigate between different educational levels, programmes and qualification types. For example, universities of technology have struggled to obtain recognition for their qualifications by traditional universities.[56] In addition, post-schooling qualifications fall under three separate frameworks namely: the Occupational Qualifications Sub-Framework under the Quality Council for Trades and Occupations; the General and Further Education Qualifications Sub-Framework under Umalusi; and the Higher Education Qualifications Sub-Framework, each with different entrance and access requirements.[57]

In 2009, a government gazette was issued which allows college students with NCV qualifications to enter into universities, albeit with higher pass marks than matric students.[58] More recently, comprehensive universities such as the Nelson Mandela Metropolitan University and the University of Johannesburg have developed detailed entrance criteria for NCV graduates, which should enable access to their respective universities.[59]

What interventions seek to improve young people's chance of success in post-school education?

The previous section highlighted how students struggle to find, fund and complete post-school education. Here we highlight some of the current interventions that seek to overcome the obstacles they face.

Finding the appropriate post-school option

There are numerous websites[60] that provide information on post-school education and employment options for school-leavers. The National Career Development Services has recently established a campaign, "KHETHA – Make the right choice. Decide on your future." The information provided is comprehensive, clearly presented and addresses aspects from subject choice to funding procedures.[61] Provision is however primarily via their website[iv] and through booklets distributed to a subset of schools.

Establishing a central applications service is seen as a crucial part of government's plans for the post-school education and training sector.[62] A central application clearing house began operating in 2014 and redirects students who are not accepted at one university to other universities.[63] Once more firmly established in the university sector, it will be expanded to TVET colleges. Commitment to the start of the central application service is yet to be made.

Government has also been vocal about the need to get employers involved in the training of a future workforce by offering placements to TVET college students.[64] Some colleges have set up student support units and already have strong links with employers, but these initiatives need to be taken to scale, especially in rural areas. Professional, Vocational, Technical and Academic Learning (Pivotal) grants have been set up to assist in this process.[65]

Financing a chosen programme

A recent study on the impact of the NSFAS loans[66] found that students who received NSFAS funding were less likely to drop out and more likely to qualify than those who did not. This indicates that relieving the financial costs of studying can improve students' ability to remain at university and graduate. Difficulties in the allocation of NSFAS funds further highlight the importance of credit constraints in youth's ability to continue post-school education. When the NSFAS programme was initiated, institutions – confronted with limited funds and a huge pool of eligible NSFAS applicants – simply divided funding equally among applicants with no regard to the full cost of study.[67] This resulted in many learners dropping out as they struggled to afford to continue.[68]

Relieving the financial burden of post-school education is viewed by the government as a key mechanism to deracialise further education (and thereby also the top end of the labour market). For this reason allocations to the NSFAS were increased over 10-fold in the past 20 years. The NSFAS has also recognised the importance of covering the full cost of study.[69] In the college sector, the NSFAS covers travel expenses and most colleges have residences. In addition, the various Skills Education Training Authorities (SETAs) now provide stipends for students to complete the workplace requirements for their qualifications. However, shortages of funds and gaps between funding and the full cost of study remain and are particularly problematic in historically disadvantaged universities where more students need funding and where internal resources to top up funds are limited.[70] In addition to the general NSFAS loans and bursaries, there are other sources of public funding directed towards specific programmes such as the Funza Lushaka bursary for those studying to become teachers.

Finally, the NSFAS has plans to make it easier for prospective students to apply. For example, those coming from disadvantaged schools will have automatic eligibility for NSFAS funding, and prospective students will be able to apply directly to NSFAS rather than going through individual institutions.[71] A pilot is being conducted in 2015, with applications being submitted directly to NSFAS for a subset of universities.

Graduation

A wide range of programmes exist to support students in the transition from schooling to post-school education, and on to graduation. These programmes take many different forms, offering some combination of information, mentoring, a chance to rewrite matric and academic support. There is no clear evidence yet around which type of intervention is most effective but there appears to be a move towards more comprehensive programmes (see box 3 on p. 48 for a small selection of examples).

Recognising that both the NCV and NATED programmes provide valuable qualification alternatives, the NATED programmes have been retained. As part of the DHET's implementation of a turnaround strategy for the TVET college sector, both the NCV and NATED programmes have been reviewed, and administrative weaknesses are being addressed by instituting minimum attendance criteria and reviewing funding norms.

In 2014, the DHET commissioned the Ministerial Committee on Articulation Policy, and the South African Qualifications Authority (SAQA) released its Policy on Credit Accumulation and Transfer. Both seek to address the current lack of articulation between qualifications and to develop cohesive and integrated education and training, learning and career pathways.

What are the key recommendations?

The analysis has highlighted that government is on track in terms of policy in many spheres, but implementation is slow and needs to be improved. Based on the analysis in this essay, we recommend the following:

Improve career guidance in schools

Life orientation is a compulsory matric subject, which, amongst other things, aims to prepare learners to "make informed decisions about subject choices, careers, and additional and higher education

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iv   Only 44.6% of youth have access to an internet connection in their household, library, community hall, Thusong Centre, at school/university/college, place of work or via their mobile phone (GHS 2013, own calculations). This varies across the provinces; 63% of Gauteng youth have internet access but only 26% of Limpopo youth.

opportunities".[72] There is much room for improvement including the provision of consistent and comprehensive information, the creation of realistic expectations and a more positive perception of TVET colleges. Material from campaigns such as KHETHA should be incorporated into the school syllabus.

Assess the impact of a central application system

Limited understanding or certainty regarding final grade 12 marks suggests that the optimal application strategy for a grade 12 learner would be to apply to multiple institutions with differing entrance requirements. Yet the application costs preclude this. Implementing the envisaged centralised application system could assist in the allocation of learners to appropriate institutions yet there are potentially negative consequences. Rigorous evaluation of the benefits, unintended costs (such as bureaucratic inefficiencies) and minimum functioning requirements (such as assistance with filling out forms) of such a system, prior to implementation, would be beneficial.

Improve the functioning of the NSFAS

Late payments to students and fraudulent claims for accommodation and travel allowances still plague the NSFAS.[73] The scheme is in the process of simplifying the application process and preventing the misallocation of funds. These efforts must be continued, implemented and sustained.

Different options within the college sector

The NCV syllabus appears poorly matched to learners leaving school in grade 9 or 10 due to academic difficulties. While the retention of the NATED courses provides some scope for this group, broadening the range of qualifications available in the college sector to provide a viable option for those failing the mainstream is important. The community college concept would appear to fill a much-needed gap and relieve some of the pressure on TVET colleges.

Support for programmes that are academically less challenging but generate self-employment needs to be investigated. For example, programmes such as hairdressing provide a useful and decent self-employment opportunity but are currently expensive and receive no subsidisation from the state.

Improve articulation between college and university sectors

Poor articulation between the NCV and university curricula limits the ability of TVET students to progress to higher education. Even if only a few desire this route, improving articulation and creating stronger links between universities and colleges would encourage learners to use college as a stepping-stone to higher education rather than giving up on the possibility of further studies.

Provide comprehensive student support

Universities need to be encouraged to develop comprehensive support systems for individual programmes of study – from initial application and enrolment through to job placement – and should include recipients in this process to give them a sense of ownership of their educational success (see box 3 for examples).

Address the gaps in current knowledge

There are a number of areas in the post-schooling sector where there is a need for additional research and data, including:
- There are very few systematic and rigorous evaluations of education policies and programmes currently in place. Without

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Box 3: Examples of student support interventions

Provision of information: There are numerous websites that provide information on post-school education and employment options for school-leavers including the National Career Development Services (KHETHA), Career Planet, The Skills Portal and MaxMatric. While useful, information in this format will only reach youth with access to the internet.

Rewriting matric: Since 2011, the National Youth Development Agency has offered recently-failed matriculants a chance to re-write their exams. The programme is free and provides tuition, study guides, career guidance and three assessments per subject, as well as registration for the National Senior Certificate. While the programme has achieved good pass rates, its reach remains very limited, with a target of 4,500 learners in 2015.

Access for promising youth from disadvantaged areas: A number of institutions have programmes that identify and mentor promising learners from disadvantaged secondary schools in order to provide access to their courses, such as Go to University to Succeed at the University of the Witwatersrand and 100UP at the University of Cape Town. Stand-alone organisations also operate in this area, such as the Rural Education Access Programme. Yet the success of these programmes depends in large part on the subsequent support once the student has enrolled.

Academic support programmes: Most universities offer at least one academic support programme per faculty although this is not standardised within or across institutions. These programmes typically extend the qualification by a year and provide additional academic support in the first year of study. There is limited analysis of the efficacy of these programmes. A programme in the commerce faculty at the University of Cape Town was found to improve first-year pass rates, but had no impact on final graduation rates.[74]

Mentoring: The introduction of programmes such as MOT (from the Danish for "show courage") in some TVET colleges has made a difference in student attitudes to learning, confidence and self-esteem,[75] and has complemented individual college academic support initiatives.

this information it is impossible to determine reliably which are the most effective at improving post-schooling outcomes and accordingly where to direct resources.

- There is a severe lack of publicly available administrative data on the TVET system. Data collected by individual colleges are not collated and made available to researchers. Disaggregation of the data in meaningful ways would help shed light on even the most basic statistics, such as ascertaining the number of TVET students with a matric.

References

1 Statistics South Africa (2012) *Census 2011*. Pretoria: Stats SA. Own calculation.
2 Branson N, Hofmeyr C & Lam D (2014) Progress through school and the determinants of school dropout in South Africa. *Development Southern Africa*, 31(1): 106-126.
3 Department of Higher Education and Training (2014) *Statistics on Post-school Education and Training in South Africa: 2012.* Pretoria: DHET.
4 South African Qualifications Authority Act 58 of 1995.
5 Sheppard C & Sheppard R (2012) A statistical overview of further education and training colleges. In: *Shaping the Future of South Africa's Youth.* Pretoria: Centre for Higher Education Transformation.
6 Department of Higher Education and Training & South Africa Qualifications Authority (2014) *Post-School Career Guide.* Pretoria: DHET & SAQA.
7 False Bay College (2015) *Programme Fees 2015.* Viewed 15 September 2015: www.falsebaycollege.co.za/images/file-downloads/FBC_Full_Time_Programme_Fees_2015_Low_Res.pdf
8 University of Cape Town (2015) *Student Fees 2015*.Viewed 15 July 2015: www.uct.ac.za/usr/finance/fees/fees2015.pdf.
9 Cloete N (2009) *Responding to the Educational Needs of Post-School Youth. Determining the Scope of the Problem and Developing a Capacity-Building Model.* South Africa: CHET/African Minds.
10 See no. 1 above. Post-graduate includes those studying a bachelor and post-graduate degree, honours degree or higher degree (masters, doctorate) as per the Census 2011.
11 See no. 1 above.
12 Badsha N & Wickham S (2013) *Review of Initiatives in Equity and Transformation in Three Universities in South Africa.* Cape Town: Cape Higher Education Consortium.
13 See no. 1 above.
14 See no. 5 above.
15 Department of Higher Education and Training (2013) *White Paper for Post-School Education and Training: Building an Expanded, Effective and Integrated Post-School System.* Pretoria: DHET.
16 See no. 15 above.
17 Council on Higher Education (2013) *Vital Stats Public Higher Education 2011.* Pretoria: Council on Higher Education.
18 See no. 12 above.
19 De Lannoy A (2011) The stuff that dreams are made of: Narratives on educational decision-making among young adults in Cape Town. *Journal of Education*, 51: 53-72;
Cosser M & du Toit J (2002) *From School to Higher Education? Factors affecting the Choices of Grade 12 Learners.* Cape Town: HSRC.
20 Gustafsson M (2011) The *When and How of Leaving School: The Policy Implications of New Evidence on Secondary Schooling in South Africa.* Working Paper No. 09/11. Stellenbosch: Department of Economics, Stellenbosch University.
21 Mudhovozi P & Chireshe C (2012) Socio-demographic factors influencing career decision-making among undergraduate psychology students in South Africa. *Journal of Social Sciences*, 31(2): 167-176.
22 Piraino P (2014) *Intergenerational Earnings Mobility and Equality of Opportunity in South Africa.* Working Paper No. 131. Cape Town: SALDRU, UCT.
23 Lam D, Ardington C & Leibbrandt M (2011) Schooling as a lottery: Racial differences in school advancement in urban South Africa. *Journal of Development Economics*, 95(2): 121-136.
24 See no. 19 (Cosser et al, 2002) above.
25 Ramphele M (2002) *Steering by the Stars: Being Young in South Africa.* Cape Town: Tafelberg Publishers.
26 City & Guilds Centre for Skills Development (2011) *Practical Matters: What Young People Think about Vocational Education in England, the Netherlands and South Africa.* London: City & Guilds Centre for Skills Development.
27 Papier J (2009) *"Getting the Right Learners into the Right Programmes": An Investigation into Factors that Contributed to the Poor Performance of FET College Learners in NCV 2 and NCV 3 Programmes in 2007 and 2008 – Reasons and Recommendations.* Cape Town: FETI, University of Western Cape.
28 Based on discussion groups that were part of an exploratory project "The extent of mis-information on costs and returns to tertiary education among matric learners in South Africa" funded by CALIE.
29 See no. 19 (De Lannoy, 2011) above.
30 See no. 27 above.
31 See no. 19 (De Lannoy, 2011) above.
32 De Villiers P, van Wyk C & van der Berg S (2013) *The First Five Years Project – a Cohort Study of Students awarded NSFAS Loans in the First Five years 2000 – 2004.* Working Paper No. 11/13. Stellenbosch: Department of Economics, Stellenbosch University.
33 Letseka M, Coser M, Breier M & Visser M (2009) *Student Retention and Graduate Destination: Higher Education and Labour Market Access and Success.* South Africa: HSRC.
34 Gurgand M, Lorenceau A & Mélonio T (2011) *Student Loans: Liquidity Constraint and Higher Education in South Africa.* Working Paper No. 117. Paris: Agence Française de Développement.
35 Department of Higher Education and Training (2009) *Report of the Ministerial Committee on the Review of the National Student Financial Aid Scheme.* Pretoria: DHET.
36 See no. 27 above.
37 Department of Higher Education and Training (2014) *Minister Nzimande's Speech: TVET Conference 18 – 19 November.* Pretoria: DHET.
38 Council on Higher Education (2013) *A Proposal for Undergraduate Curriculum Reform in South Africa: The Case for a Flexible Curriculum Structure. Report of the Task Team on Undergraduate Curriculum Structure.* Pretoria: CHE.
39 Department of Higher Education and Training (2014) *Statistics on Post-school Education and Training in South Africa: 2012*. Pretoria: DHET.
40 See no. 39 above.
41 Nel C & Kistner L (2009) The National Senior Certificate: Implications for access to higher education. *South African Journal of Higher Education*, 23(5): 953-973.
42 See no. 17 above.
43 See no. 38 above.
44 Smith LC, Case JM & van Walbeek CP (2014) Assessing the effectiveness of academic development programmes: A statistical analysis of graduation rates across three programmes. *South African Journal for Higher Education*, 28(2): 624-638.
45 See no. 38 above.
46 See no. 38 above. P.19.
47 See no. 15 above.
48 See no. 15 above.
49 Parker B (2008) Lifelong learning and post-NQF review: Reshaping education and training in South Africa. Division for Lifelong Learning seminar, University of Western Cape, February 2008.
50 Housten J, Booyse C & Burroughs E (2010) *The 'F' in NC(V): Benchmarking Common Subjects in the NSC and the NC(V).* Pretoria: Umalusi.
51 See no. 37 above.
52 Tinto V (1993) *Leaving College: Rethinking the Causes and Cures of Student Attrition.* Chicago: University of Chicago Press.
53 See no. 27 above.
54 See no. 12 above.
55 Council on Higher Education (2010) Access and Throughput in South African Higher Education: Three Case Studies. *Higher Education Monitor*, No. 9. Pretoria: CHEC.
56 Muller J (2008) In search of coherence: A conceptual guide to curriculum planning for comprehensive universities. Report prepared for the SANTED project, Centre for Education Policy Development. In: Muller J (2009) Forms of knowledge and curriculum coherence, *Journal of Education and Work*, 22(3): 203-224.
57 See no. 15 above.
58 Minimum admission requirements for higher certificate, diploma and degree programmes requiring a national certificate (vocational) at level 4 of the National Qualifications Framework. *Government Gazette* 32743, Notice 1114, 26 September 2009.
59 See no. 56 above.
60 For example, National Career Development Services (KHETHA), Career Planet, The Skills Portal and MaxMatric.
61 DHET & SAQA (2014) Post-School Career Guide, Khetha Make the Right Choice. Viewed 15 July 2015: www.careerhelp.org.za/download_files/bursary-pack/New_PSP_2014.pdf.
62 See no. 15 above.
63 Viewed 16 July 2015: http://cach.dhet.gov.za/.
64 See no. 37 above.
65 See no. 15 above.
66 See no. 32 above.
67 See no. 35 above.
68 See no. 33 above.
69 See no. 35 above.