# Education Sector Landscape Mapping

## South Africa

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# Acronyms and abbreviations

| | |
|---|---|
| ABET | Adult Basic Education and Training |
| AIR | apparent intake rate |
| ANA | annual national assessments |
| BEd | Bachelor of Education |
| CETC | Community Education and Training College |
| CHE | Council for Higher Education |
| CPD | continuing professional development |
| DBE | Department of Basic Education |
| DET | Department of Education and Training |
| DHET | Department of Higher Education and Training |
| DOE | Department of Education |
| DOH | Department of Health |
| DPME | Department of Planning, Monitoring and Evaluation |
| DSD | Department of Social Development |
| ECD | early childhood development |
| EFAL | English first additional language |
| FP | Foundation Phase |
| GEC | General Education Certificate |
| GETC | General Education Training Certificate |
| GHS | General Household Survey |
| HEQC | Higher Education Quality Council |
| HOA | House of Assembly |
| IP | Intermediate Phase |
| ITE | initial teacher education |
| JET | JET Education Services |
| LTSM | learning and teaching support materials |
| NC(V) | National Certificate (Vocational) |
| NASCA | National Senior Certificate for Adults |
| NDP | National Development Plan |
| NEET | not in employment, education or training |
| NGO | non-governmental organisation |
| NPC | National Planning Commission |
| NQF | National Qualifications Framework |
| NSC | National Senior Certificate |
| NSDS | National Skills Development Strategy |
| NSES | National Schools Effectiveness Study |
| NSFAS | National Student Financial Aid Scheme |
| PDE | provincial department of education |
| PGCE | Post Graduate Diploma in Education |
| PICC | Presidential Infrastructure Coordinating Commission |
| PIRLS | Progress in Reading Literacy Study |
| PSNP | primary school nutrition programme |
| QCTO | Quality Council for Trade and Occupations |
| SACMEQ | Southern African Consortium for Monitoring Education Quality |
| SAQA | South African Qualifications Authority |
| SDGs | Sustainable Development Goals |
| SETA | skills education and training authority |
| SOE | state-owned enterprise |
| SP | Senior Phase |
| TIMSS | Trends in International Maths and Science Study |
| TVET | technical and vocational education and training |

*Education and training and innovation are central to South Africa's long-term development. They are core elements in eliminating poverty and reducing inequality, and the foundations of an equal society. Education empowers people to define their identify, take control of their lives, raise healthy families, take part confidently in developing a just society, and play an effective role in the politics and governance of their communities*

NPC (2011: 261)

# Research framework and method

This report is structured around the Sustainable Development Goals (SDGs), which provide a framework of measureable targets agreed across nations, and a set of metrics for tracking how South Africa is doing against this set of generally accepted goals, and against the progress of other developing countries.

Of the 17 SDGs, Goal 4 refers to education, and is stated as:

> Ensure inclusive and quality education for all and promote lifelong learning

Goal 4 has ten targets, as set out in Table 1. The table indicates the education sectors at which each target is mainly directed.

Each of the ten targets has both a **quantitative** (*all* boys and girls) and a **qualitative** (*equitable* and quality primary and secondary education) element; indeed, this dual nature is indicated in the wording of Goal 4: … *quality* for *all*…

Furthermore, while seven of the targets are specifically directed at one or two educational sectors, as indicated in Table 1, three are **cross-cutting**, in that they affect all sectors: Target 5 (gender equity), Target 8 (inclusive education), and Target 7 (education for sustainable development).

The research which culminated in the present report was predominantly a desk top study, with some secondary data analysis. Government websites, particularly those of the Department of Basic Education (DBE) and the Department of Higher Education and Training (DHET), were consulted. Much of the data on access and throughput was obtained from the annual reports and associated literature issued by these

**Table 1: Ten Targets for Sustainable Development Goal 4**

| Sector | Targets (in the order listed in the SDGs) |
|---|---|
| Primary and secondary schooling | 1. By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and Goal-4 effective learning outcomes |
| ECD and pre-primary | 2. By 2030, ensure that all girls and boys have access to quality ECD, care and pre-primary education so that they are ready for primary education |
| University | 3. By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university |
| TVET (pre-tertiary), NEET youth and adults | 4. By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship |
| Cross cutting: Gender equality | 5. By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situation |
| Adult literacy and numeracy | 6. By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy |
| Cross cutting: Knowledge for sustainable development | 7. By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development |
| Cross cutting: Catering for disabilities | 8. Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, nonviolent, inclusive and effective learning environments for all |
| Post-school and tertiary: Funding for higher education | 9. By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries |
| Teacher education: Teacher supply | 10. By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states |

departments. Another source of information was the many legislative acts defining the roles and functions of government entities, including schools, districts, provinces and the DBE. Much has also been published on the education system in academic journals, which provided a third source of theoretical and empirical research on recent developments in education, both in South Africa and internationally. Finally, there is a great deal of 'grey literature', such as project reports and evaluations for donors, access to which is varied, depending on a particular donor's policy with respect to the extent and impact of its programmes. Nevertheless, a great deal of such literature has become available in recent years, including project evaluations and meta-studies of evaluations. The reference section of this report contains full details of the literature consulted.

This report is organised according to the five principal sectors comprising the South African education system: Primary and Secondary Schooling, ECD and Pre-school, University, TVET (pre-tertiary), and Adult Education. Within each of these five sectors, the discussion considers three components which cater, respectively, for the quantitative elements of the relevant sectoral target, the qualitative elements of the target, and how the sector deals with the cross-cutting issues of race and gender equity, inclusion and sustainable development.

But first we turn to a brief overview of the structure, governance and management of the South African education system, as it has evolved since the establishment of the first democratically elected government in 1994.

# Structure, governance and management of the South African education system

According to section 29(1) of the Constitution of the Republic of South Africa, which provides the foundation for the post-apartheid dispensation, 'Everyone has the right – (a) to a basic education, including adult basic education; and (b) to further education, which the state, through reasonable measures, must make progressively available and accessible' (Republic of South Africa, 1996a: 1256). Furthermore, section 29(2) states that 'Everyone has the right to receive education in the official language or languages of their choice in public educational institutions where that education is reasonably practicable' (Republic of SA 1996a: 1256).

The South African education system is governed by two national state departments. The Department of Basic Education (DBE), responsible for policy with respect to schools, including a reception year prior to Grade 1 (Grade R). Within the policy frameworks, curricula, conditions of employment for educators, and norms and standards established by the DBE, schools are administered by nine provincial departments of education (PDEs). Early childhood development (ECD) is the joint responsibility of the Departments of Health, Social Development and Basic Education, making this a complex space.

The Department of Higher Education and Training (DHET) governs post-school education and training, which encompasses universities and private higher education institutions, technical and vocational education and training (TVET) colleges (public and private), community education and training (CET) colleges, and adult education centres. The DHET was formed in 2009, taking over a number of responsibilities formerly assumed by the DBE and the Department of Labour. Universities are independent statutory bodies, each established by an act of parliament. To further complicate governance and management arrangements in the post-school arena, 21 sector education and training authorities (SETAs) are tasked with ensuring that intermediate and high-level skills are developed among both workers and unemployed persons. SETAs are required to facilitate the delivery of improved sector-specific skills in order to contribute to the achievement of the goals of the National Skills Development Strategy (NSDS) III (Snyman, 2013: 527).

All sectors under the jurisdiction of the DHET remain in a state of flux, characterised by the reorganisation of universities in the early 2000s, the establishment of the Quality Council for Trade and Occupations (QCTO) (see next paragraph), the publication of a white paper on post-secondary education and training, the transfer of governance of the public TVET colleges from PEDs to the DHET, reorganisation of the SETA landscape, major amendments to legislation governing the powers of the minister with respect to universities in the pipeline, and the establishment of a new set of institutions – community education and training colleges (CETCs) – to name just the most obvious features currently under review and development (DHET, 2015). Many of these developments are under construction, which makes for policy uncertainty but also opens space for innovation.

Education and training qualifications are issued by three statutory bodies: the Council for Higher Education (universities), the Quality Council for Trade and Occupations (trade and occupational qualifications, excluding those at tertiary level), and Umalusi (schools and adult education). Each of these regulatory bodies is governed by an act of parliament and their respective sets of qualifications frameworks are coordinated by means of the National Qualifications Framework (NQF) (summarised in Figure 1), the institutional guardian of which is the South African Qualifications Authority (SAQA). Qualifications are awarded at ten levels of the NQF, and each of the quality councils has jurisdiction over certain levels within their respective fields.

Further details regarding governance and management issues are discussed in the relevant sections below. We turn now to a scan of the five sectors comprising the South African education system.

Figure 1: National Qualifications Framework

<table>
<tr><th rowspan="3">NQF level ↓</th><th>Authority →</th><th colspan="2">Ministry of Higher Education and Training</th><th colspan="2">Ministry of Basic Education</th></tr>
<tr><th>Field →</th><th>Higher Education</th><th>Post-school</th><th colspan="2">Schools</th></tr>
<tr><th>Regulatory body →</th><th>Council for Higher Education</th><th>Quality Council for Trades and Occupations</th><th colspan="2">Umalusi</th></tr>
<tr><td>1</td><td></td><td rowspan="4">National Occupational<br>Awards<br>National Occupational Certificates<br>(Level determined per SAQA level descriptors)</td><td rowspan="2">General Education and Training: Grades R-9 (proposed GEC); GETC for adults</td><td rowspan="4">BASIC</td></tr>
<tr><td>2</td><td></td></tr>
<tr><td>3</td><td></td></tr>
<tr><td>4</td><td></td><td>Further Education and Training: NSC, NC(V), NASCA</td></tr>
<tr><td>5</td><td>Higher Certificate</td><td colspan="2">Post-school qualifications</td></tr>
<tr><td>6</td><td>Diploma</td><td colspan="2"></td></tr>
<tr><td>7</td><td>Bachelor’s degree</td><td colspan="2"></td></tr>
<tr><td>8</td><td>Bachelor Hons;<br>Postgraduate Diploma</td><td colspan="2"></td></tr>
<tr><td>9</td><td>Masters</td><td colspan="2"></td></tr>
<tr><td>10</td><td>Doctorate</td><td colspan="2"></td></tr>
</table>

# Early childhood development and Grade R

The National Development Plan (NDP), released in 2012, recognises the key role played by ECD in cognitive, social and physical development, and makes it 'a top priority among the measures to improve the quality of education and long-term prospects of future generations' (NPC, 2012: 71). The policy instrument put forward by the National Planning Commission (NPC) to improve ECD is to make two years of pre-school education accessible to all children.

## Quantity

Pre-school education (defined broadly as pre-Grade 1) is not compulsory and the responsibility for this is shared between the Department of Social Development (DSD), the Department of Health and the DBE. The DSD is primarily responsible for the provision of ECD to children under the age of 5, while the DBE is responsible for ensuring that children 5 years and older have access to quality education (DBE, 2013c: 9). Pre-school education is provided through ECD facilities and programmes[1] which are generally informal and not regulated by government as well as through Grade R, which precedes Grade 1 and which is regulated through the DBE. While Grade R is not compulsory, the DBE has committed to universalising a Grade R so that all children entering Grade 1 will have gone through at least one year of pre-school.

There has been a steady growth in the percentage of children accessing ECD programmes and Grade R. In 2013, 71.3% of 3–5 year olds (or 2 211 213 children) attended an educational institution, up from 60% in 2009 (DBE, 2014: 10). The percentage of 5 year-old children attending an educational institution has increased substantially from just 30.3% in 2002 to 85.3% in 2013.

In 2002 every single province had less than 50% of their 5 year-old population attending an educational institution. By 2008 none of the provinces has less than a 50% attendance rate among 5 year-olds, and by 2013 three-quarters or more of children in this age group were attending an educational institution (see Table 2). In 2013 the Western Cape had the lowest attendance rate among 5-year-olds while Limpopo (96.3%) and the Eastern Cape (93.9%) had the highest. The Northern Cape had the largest increase of all the provinces in the attendance rate of 5-year-olds (63.9%).

1 ECD facilities include pre-school, nursery school, Grade 00, Grade 000, crèche, educare centres, day mother/grandmother/gogos or other facilities (DBE, 2014).

**Table 2. Percentage of 5 year-old children attending educational institutions: 2002, 2008 and 2013**

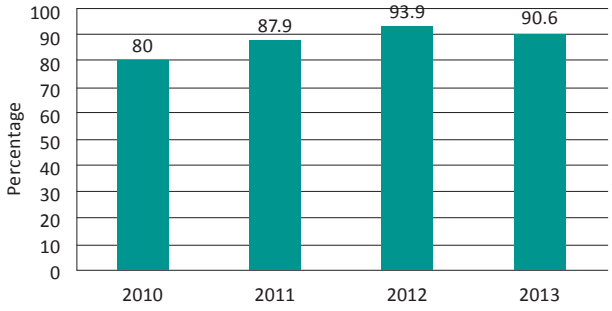
| Province | 2009 | 2011 | 2013 |
|---|---|---|---|
| Eastern Cape | 49.6 | 80.3 | 93.9 |
| Free State | 33.3 | 60.4 | 87.6 |
| Gauteng | 45.9 | 61.3 | 83.3 |
| KwaZulu-Natal | 33.4 | 57.5 | 81.9 |
| Limpopo | 43.1 | 74.3 | 96.3 |
| Mpumalanga | 28.9 | 65.1 | 82.7 |
| North West | 36.6 | 53.2 | 84 |
| Northern Cape | 21.5 | 50 | 85.4 |
| Western Cape | 41.2 | 53.5 | 75.4 |
| National | 39.3 | 63.2 | 85.3 |

*Source:* DBE (2014: 11)

According to the Department of Basic Education the high increase in learners aged 5 attending educational institutions could be attributed to several factors, namely, the provision of nutrition in public ordinary schools to Grade R learners; the increased subsidies to ECD practitioners; the cheaper fees paid by parents at public ordinary schools offering Grade R; the automatic acceptance of registered Grade R learners to Grade 1; and, the prioritisation of registration of ECD centres with the DSD (DBE, 2013b: 9).

With the growth in the attendance-rate of 5 year-olds there has been a growth in the number of Grade 1 learners who have been through Grade R. In 2013, 90.6% of Grade 1 learners had previously enrolled in Grade R, up from 80% in 2010 (see Figure 2). However, it is possible that enrolment in Grade R is levelling off as the percentage of learners Grade 1 learners who had attended in Grade R had dropped from 93.9% in 2012. While it is too soon to tell if this is the case, a concerted effort and policy response will need to be put in place to ensure that the most hard-to-reach 10% get access to Grade R before enrolling in Grade 1. Improving children's access to quality ECD below Grade 1 is a priority goal for the Department of Basic Education in the *Action Plan to 2019* (DBE, 2015c).

Figure 2: Percentage of Grade 1 learners who have received formal Grade R: 2010–2013




*Source:* DBE (2014: 12)

Even below Grade R, attendance of children aged 0–4 at ECD facilities has increased. In 2002 only 7.3% of 0–4 year-olds attended an ECD facility and this had grown to 44.7% by 2013 (DBE, 2014: 9) (Table 3). However, only Gauteng and the Free State had more than half of their respective 0–4 year-old population enrolled in ECD (59.3% and 59.1% respectively). There has been a substantial increase in the Free State, with the attendance rate increasing by 53 percentage points between 2002 and 2013, the highest increase of all the provinces.

**Table 3. Percentage of 0–4 year old children attending ECD facilities by province: 2002, 2008 and 2013**

| Province | 2009 | 2011 | 2013 |
|---|---|---|---|
| Eastern Cape | 9.4 | 20.3 | 37.7 |
| Free State | 6.5 | 18 | 59.1 |
| Gauteng | 11.4 | 25.4 | 59.3 |
| KwaZulu-Natal | 4.3 | 11.7 | 39.9 |
| Limpopo | 5.5 | 14.5 | 46.3 |
| Mpumalanga | 4.8 | 16.2 | 33.7 |
| North West | 6.4 | 8 | 34.8 |
| Northern Cape | 3 | 10.6 | 36.3 |
| Western Cape | 10.4 | 14.4 | 45.7 |
| National | 7.3 | 16.7 | 44.7 |

*Source:* DBE (2014: 9)

## Quality

In order to assess the quality of Grade R provision, the Department of Planning, Monitoring and Evaluation (DPME), a government department in the Office of the President, recently commissioned an evaluation of the impact of Grade R attendance on learner progress through the Foundation Phase. The study concluded that impact was only discernible for children attending Quintile 5 (the most affluent) and, to a lesser extent, Quintile 4 schools (Van der Berg, Girdwood, Shepherd et al., 2013). Thus, the rapid roll-out of Grade R provision appears, in effect, to be exacerbating inequity by strengthening the early educational experiences of the most affluent social cohorts while the very poor quality of Grade R and ECD offered to poor children leaves them no better off educationally and effectively serving as child-minding facilities.

## Equity

As in the case of school enrolment, there is no significant difference between males and females with regard to access to Grade R. This is the case with the percentage of 5 year-olds attending educational instructions in 2013, with 85.6% of males and 85.0% of females giving a gender parity index rating of 1.01 (DBE, 2014: 12).

With respect to race, however, the attendance rate of 0–4 year olds at ECD facilities varied across the race groups, ranging from 66.2% of whites to 38.7% of coloured people in 2013 (see Table 4). The largest increase was experienced among Indian children.

**Table 4. Percentage of 0–4 year old children attending ECD facilities by race: 2009, 2011 and 2013**

| Province | 2009 | 2011 | 2013 |
|---|---|---|---|
| African/Black | 29.4 | 34 | 43.9 |
| Coloured | 21.6 | 27.3 | 38.7 |
| Indian/Asian | 28.6 | 29.3 | 53.1 |
| White | 53.2 | 57 | 66.2 |
| National | 29.9 | 34.5 | 44.7 |

*Source:* DBE (2014: 10)

Females have a slightly higher attendance rate than males – 45.2% and 44.2% respectively in 2013 – giving a gender parity index of 1.02.

The Twenty Year Review undertaken by the Presidency estimates that some 467 000 children under the age of 4 were recipients of the means-tested subsidy through 18 826 registered centres (The Presidency, undated: 47). The review points out, however, that very few children under 2 years-old are in formal early child care and education centres. The report notes that 'among children in households with a monthly expenditure of R200 or less, only 22% are enrolled in an ECD service, as against 56% of children in households with monthly expenditure of R10 000 or more' (The Presidency, undated: 47). To improve access for poor children, multi-sectoral coordination is being strengthened to ensure that a more comprehensive set of services relating to nutrition and food security, antenatal and postnatal care, and home- and community-based ECD programmes are offered (The Presidency, undated: 47).

# Primary and secondary education

The first task of the democratic government in 1994 was to reorganise 19 separate, race-based school systems into a single national department and nine provincial departments. While the results of this exercise ensures uniformity of curricula, norms and standard for school provision and terms of employment for educators, huge disparities between schools largely continue to reflect the country's history of discrimination.

## Quantity

In terms of the South African Schools Act (Republic of South Africa, 1996b), basic education consists of nine years of school and is compulsory for all children aged between 7– 15 years of age from Grade 1 to Grade 9, although children can enrol in Grade 1 from the year they turn 6. With 99.3% of 7–13 year-olds and 90.3% of 14–18 year-olds enrolled in educational institutions in 2013 (DBE, 2014: 14 & 15) universal access to education has almost been achieved in South Africa. The 98.8% participation rate of those children who fall into the compulsory age group (7–15 years of age) confirm that South African has wide access to education and this is the case in all the provinces (Table 5) (DBE, 2014: 15). As a result, South Africa substantially met the Millennium Development Goal of achieving universal primary education by 2015, and is well on track to meet the quantitative aspects of SGD Goal 4 Target 1.

**Table 5. Percentage of 7–15 year-old children attending educational institutions: 2002, 2008 and 2013**

| Province | 2002 | 2008 | 2013 |
|---|---|---|---|
| Eastern Cape | 95.5 | 97.6 | 98.1 |
| Free State | 97.5 | 98.2 | 98.4 |
| Gauteng | 98.1 | 98.3 | 99.5 |
| KwaZulu-Natal | 94.8 | 97.9 | 98.6 |
| Limpopo | 97.4 | 98.2 | 99.2 |
| Mpumalanga | 97.2 | 98.2 | 99.2 |
| North West | 95.4 | 97.3 | 98.3 |
| Northern Cape | 93.6 | 97.5 | 98.9 |
| Western Cape | 97.3 | 97.0 | 98.1 |
| National | 96.3 | 97.9 | 98.8 |

*Source:* DBE (2014: 15)

Various policies and programmes have played a role in ensuring that children get access to education in South Africa. These include the introduction of compulsory education for children aged 7–15 or up to Grade 9 (Republic of South Africa, 1996b); the National School Nutrition Programme (NSNP) which, by 2013/14 fed more than nine million learners in 19 383 public schools (DBE 2015e); and the incremental introduction of no-fee schools ensuring that learners in the poorest 60% of schools in the country do not pay fees, thus removing the burden of school fees for poor households.

While South Africa is on track to achieving universal access to primary education (Grades 1–7) and basic education (age 7–15), the situation for youth aged 16–18, who are no longer subject to compulsory education, is a cause for concern. In 2013, just 86.1% of 16–18 year-olds were attending an educational institution, and this has increased only marginally (by just 3.1 percentage points) from 82.9% in 2002 (Table 6). In Gauteng, the proportion of youth in this age group attending an educational institution actually declined between 2002 and 2013 from 87.7% to 85%. Only one province had a participation rate of more than 90% for youth in this age group, namely Limpopo, which had a participation rate of 94.5%. KwaZulu-Natal had the next highest participation rate – 87.7%. The Western Cape had the lowest participation rate (78.6%) followed by the Northern Cape (82.7%). However, the lower participation rates in the Western Cape and Northern Cape and the higher participation rates in provinces such as Limpopo and KwaZulu-Natal may reflect the employment opportunities in these provinces rather than problems with the school system, with learners in provinces with better employment opportunities choosing to leave school early and join the job market while those with fewer employment opportunities choose to remain in school (DBE, 2013c: 25; Shindler & Fleisch, 2007).

**Table 6. Percentage of 16–18 year-old children attending educational institutions: 2002, 2008 and 2013**

| Province | 2002 | 2008 | 2013 |
|---|---|---|---|
| Eastern Cape | 83.0 | 83.0 | 84.4 |
| Free State | 85.4 | 85.8 | 86.4 |
| Gauteng | 87.7 | 85.6 | 85.0 |
| KwaZulu-Natal | 79.3 | 84.6 | 87.7 |
| Limpopo | 88.2 | 90.0 | 94.5 |
| Mpumalanga | 86.2 | 87.1 | 84.4 |
| North West | 81.2 | 79.1 | 84.5 |
| Northern Cape | 71.0 | 76.0 | 82.7 |
| Western Cape | 72.6 | 71.6 | 78.6 |
| National | 82.9 | 83.9 | 86.1 |

*Source:* DBE (2014: 17)

# Quality

## Performance on comparative tests

There is widespread acknowledgement that an overriding problem in the South African school system is systemic underperformance. The poor performance of South African schools compared to those in both developed and developing countries has been established at primary level in mathematics and reading and at secondary level in mathematics and science. The 2008 Southern African Consortium for Monitoring Education Quality (SACMEQ) scores for Mathematics at Grade 6 level starkly illustrate the point (Table 7). Most obviously, these show that South Africa is outperformed by eight surrounding countries, many of which, including Mozambique, Kenya, Uganda and Tanzania, are much poorer, with gross domestic products in the order of one-tenth to one-fifth of South Africa's. This is a demonstration of the lesson that, while in general poverty is strongly associated with performance, many school systems achieve higher quality with far fewer resources than South Africa has.

A second reason why the patterns shown in Table 4 are important arises from an analysis of the maths scores by quintile. Even amongst the richest 20% of schools (quintile 5), South Africa is outperformed by Mauritius and Kenya, and in all the other quintiles the South African mean scores fall below those of the SACMEQ all-country means. Clearly, a culture of complacency and low expectation permeates the entire South African system, including those schools which were privileged under apartheid and which continue to enjoy levels of resourcing well in excess of those which pertain in the majority of schools.

In the more recent SACMEQ study 2007, of the 15 countries that participated, South Africa came tenth for reading and eighth for mathematics, still behind poorer countries such as Kenya, Tanzania and Swaziland (Spaull, 2013). More encouragingly, there are indications that South African scores on SACMEQ IV, written in 2010, exhibit a significant improvement, although these results remain in dispute at the time of writing (Spaull, 2016).

The DBE has been administering population tests in language and maths for Grades 1–9 since 2011. While this is a significant achievement in itself, test procedures have not yet evolved to the point where scores are comparable from one year to the next. Thus, there is no national measure currently for assessing the extent to which attempts to raise the quality of test performance are succeeding. The DBE acknowledges this problem and has committed itself to ensuring comparability of annual national assessments (ANA) scores, by linking successive tests through the use of anchor items, and applying more rigorous psychometric procedures to improve reliability (DBE, 2015c).

Regarding improvement in performance, things look more optimistic at high school level, where the results of the Trends in International Maths and Science Study (TIMSS) 2011 tests indicate that South African Grade 10 learners exhibited a very marked rise in scores since 2002. After no improvement across the 1995, 1999 and 2002 iterations of TIMSS, South African learners moved from a mean score of 285 in 2002 to 352 in 2011 in maths and from 268 to 332 in science (Reddy et al., 2015). Reddy et al. note that, although these changes represent very significant improvements, the country still lags behind other countries at a similar stage of development.

## Repetition and drop-out rates

Despite the implementation of age-grade norms in 2000 – aimed at, inter alia, normalising enrolment in Grade 1, reducing excessive repetition throughout the grades (DoE, 1998a and DoE, 1998b) and phasing in Grade R – out-of-age enrolment in Grade 1 and high rates of repetition in many grades remain areas of concern.

The apparent intake rate (AIR)[2] was 104.6% in 2013 (DBE, 2014: 13). Although it had dropped from 122.8% in 2009 (DBE, 2014: 13), implying that more children are now beginning Grade 1 for the first time at the appropriate age than was previously the case, there are still a fair number of children enrolling in Grade 1 who are out-of-age. In addition, the gross enrolment ratios (GER)[3] was 112.8% in Grade 1 and 106.6% in Grade 2 in 2013 (calculated from enrolment data from DBE [2013a] and Statistics South Africa Mid-Year Population Estimates), indicating that there are a large number of children in these grades that did not start school at the appropriate age or because of repetition.

In estimates calculated by Simkins for the period 2010 to 2012 (see Table 7), he notes that repetition rates are high in Grades 1 and 2 and although they drop through the rest of primary school they begin to rise again in secondary school, peaking in Grade 10 and remaining high in Grade 11 (Simkins, 2013: 7). Research undertaken in 2007 found that a third of all children in South Africa had repeated a grade; this applied to 21% of learners in the Foundation Phase and 52% of those in the Further Education and Training Phase (Social Surveys Africa and the Centre for Applied Legal Studies, 2009: 11). While the very high repeater rates indicate that learners persist in trying to get an education, the proportion of 16 to 18 year-olds out of education indicates that they eventually stop trying and drop out.

The effects of repetition and late entry into Grade 1 are already evident by 9 years of age. In 2013, 73% of children who turned 9 the previous year were enrolled in Grade 4 or higher. Similarly 63.1% of children who turned 12 in the previous year were enrolled in Grade 7 or higher (DBE, 2015c: 33). As the *Action Plan to 2019* notes, '[I]n the absence of any grade repetition or late entry in Grade 1, these figures would be 100%'.

Table 8 also provides figures on drop-out rates: From Grade 1 to Grade 8 the rate is minimal. This is consistent with the high enrolment rates in these grades. However, from Grade 10 onwards drop-out increases substantially. As a result the survival rate of those completing, Grade 9 was over 90% (927 out of every 1 000 learners who entered Grade 1). After Grade

2 The apparent intake rate (AIR) measures the total number of new entrants into Grade 1, regardless of age, expressed as a percentage of the population of the official primary schools entrance age.

3 The gross enrolment rate (GER) is defined as the number of children enrolled in the grade as a proportion of the appropriately aged population for the grade.

**Table 7: SACMEQ II scores for Grade 6 mathematics, 2000**

| QUINTILE | 1 | 2 | 3 | 4 | 5 | Mean |
|---|---|---|---|---|---|---|
| Botswana | 491 | 499 | 510 | 508 | 557 | 513 |
| Kenya | 540 | 545 | 555 | 565 | 611 | 563 |
| Lesotho | 443 | 448 | 448 | 445 | 452 | 447 |
| Malawi | 422 | 427 | 435 | 433 | 447 | 433 |
| Mauritius | 519 | 564 | 587 | 620 | 640 | 584 |
| Mozambique | 526 | 525 | 531 | 530 | 538 | 530 |
| Namibia | 403 | 402 | 411 | 425 | 513 | 431 |
| Seychelles | 520 | 541 | 555 | 576 | 579 | 544 |
| South Africa | 442 | 445 | 454 | 491 | 597 | 486 |
| Swaziland | 506 | 511 | 511 | 513 | 541 | 517 |
| Tanzania | 484 | 511 | 529 | 528 | 560 | 522 |
| Uganda | 484 | 497 | 498 | 509 | 543 | 506 |
| Zambia | 414 | 425 | 436 | 434 | 466 | 435 |
| Zanzibar | 478 | 472 | 478 | 479 | 484 | 478 |
| **Mean** | **468** | **480** | **485** | **492** | **560** | **468** |

*Source* Van der Berg & Louw (2006)

**Table 8. Promotion, repetition, drop-out and transfer rates: 2010–2012**

| Grade | Pass | Repeat | Drop-out | Transfer | Survivors* |
|---|---|---|---|---|---|
| 1 | 80.3 | 19.7 | 0.1 | 0 | 999 |
| 2 | 87.8 | 11.8 | 0.3 | 0 | 996 |
| 3 | 91 | 8.8 | 0.2 | 0 | 994 |
| 4 | 90.6 | 9.4 | 0 | 0 | 994 |
| 5 | 94.2 | 5.5 | 0.4 | 0 | 990 |
| 6 | 94.5 | 3.1 | 2.4 | 0 | 967 |
| 7 | 95.2 | 1.8 | 2.9 | 0 | 938 |
| 8 | 91.4 | 7.4 | 1.2 | 0 | 927 |
| 9 | 82.5 | 15.1 | 2.4 | 0 | 905 |
| 10 | 63.4 | 23.4 | 12.6 | 0.7 | 791 |
| 11 | 64.3 | 21.8 | 12.5 | 1.4 | 692 |

*of every 1 000 learners entering Grade 1
*Source:* Simkins (2013: 7)

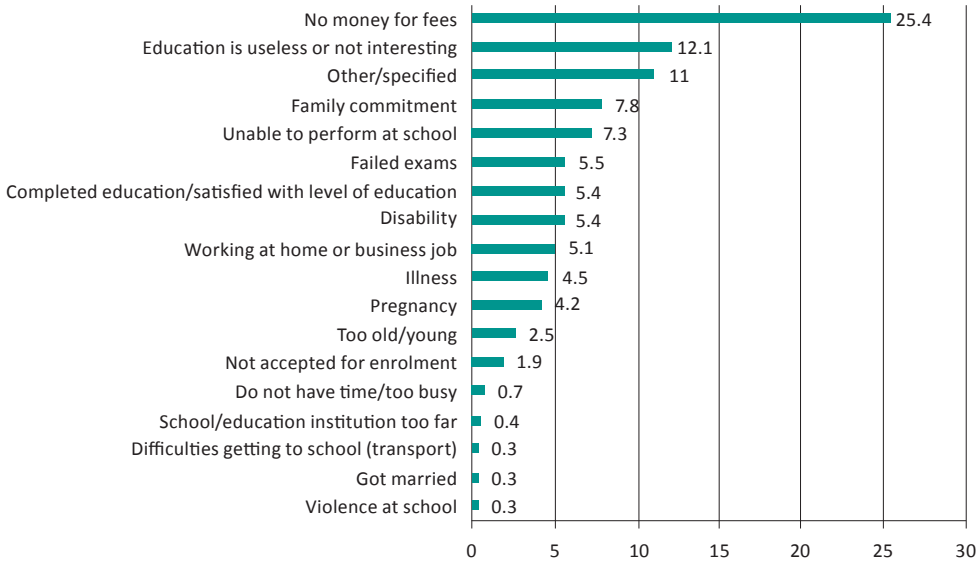
9, however, the survival rate drops substantially, with just 69% of the original cohort completing Grade 11.

Information provided by the 2013 General Household Survey on reasons for not attending an educational institution, shows that the main reason given among 7–18 year-olds related to poverty. Just over 25% were not attending an educational institution because there was insufficient money for fees and a further 5% were working (see Figure 3). It is concerning that despite the introduction of no-fee schools in 2007 for Quintile 1 and 2 schools and the extension of this policy to Quintile 3 schools in 2010, a quarter of 7–18 year-olds who were out of school indicated that no money for fees was a problem.

The second most common reason given for not attending an educational institution in 2013 was that education was useless or uninteresting. This applied to 12.1% of 7–18 year-olds out of school. Pregnancy was cited by 4.2% of 7–18 year-olds out of school. However, 8.2% of girls cited pregnancy as a reason for being out of school. Additionally 15.3% of girls cited family commitment as a reason for being out of school (DBE, 2015d).

There has been a large increase in Grade 12 enrolment – increasing by 18.6% between 2010 and 2015 (DBE 2012, 2015b) This large increase in the Grade 12 enrolment can be attributed to the government policy introduced in 2013 stating that learners in Grades 10 to 12 may fail only once before progressing to the next grade. While this policy was introduced to minimise drop-out rates in the FET Phase, especially after Grade 11, it did have the consequence of Grade 11 learners who might ordinarily have been held back in Grade 11 being promoted to Grade 12. In 2015 at least 65 671 learners who entered to write the matric exam had been progressed from Grade 11 even though they had not passed Grade 11 the previous year (DBE undated (b): 76).

Figure 3.Reason for non-attendance provided by 7–18 year olds not attending an educational institution, 2013




*Source:* DBE (2014: 29)

## Attempts to address the quality problem

Government's chief instrument for improving school performance has been in-service training (or continuous professional development, CPD) of educators, encompassing not only teachers, but principals, and district and higher-level officials. With respect to CPD, government budgeted R1.1 billion to training in 2014 (DBE, 2015a). Although only R4.2 million was spent, this is a significant sum. The private sector contributed at least an equivalent amount (Trialogue, 2015). But what have we learnt from all this activity, which has been operating at this kind of scale for decades? Not much, is the honest answer. The priority here is not only to evaluate individual programmes, but to systematically build a knowledge base that guides effective policy, programme design and classroom practice. In this regard, the findings of Raudenbush et al. (1993) indicate that in-service training does not appear to have any significant effect on student performance, whereas internal supervision (by the school principal or another teacher at the school) has a large and significant effect. These and similar findings pose questions for current initiatives in South Africa, such as those launched by the National Education Collaboration Trust (NECT), and the DBE in the form of its 1+4 Programme. Are we learning from our past mistakes and successes? Are we building a knowledge base to guide better development? Are we designing programmes that draw on past experience and scientific evidence? Or are we merely recycling ideas that have largely not been effective in the past?

## Equity

Unusually for a developing country, an equal percentage of male and females aged 7–15 attend educational institutions in South Africa. In 2013, 98.6% of males and 98.9% of females in this age group were attending an educational institution, giving a gender parity index of 1.00. Access to education for children aged 7–15 with disabilities is also high: in 2013, 92.5% attended an educational institution up from 90.2% in 2009 (DBE, 2014: 21).

In the 16–18 year-old cohort, the overall participation rate hides disparities across the different race groups. In 2013 white and African/black youth had the highest participation rates (both around 88%), while Indian (76.3%) and coloured youth (74.3%) had the lowest (Table 9). It is not clear why there has been a drop among Indian youth; one possibility is that this could be a result of the small number of Indian youth in the General Household Survey sample (DBE 2014: 18). Coloured youth have historically had the poorest attendance rates among 16–18 year-olds. As a large proportion of the coloured population live in the Western Cape and Northern Cape, it is possible that coloured youth are taking advantage of better job opportunities rather than remaining in school.

**Table 9. Percentage of 16–18 year-old children attending an education facility by race, 2009, 2011 and 2013**

| Province | 2009 | 2011 | 2013 |
|---|---|---|---|
| African/Black | 84.6 | 86.4 | 87.5 |
| Coloured | 68.0 | 69.2 | 74.3 |
| Indian/Asian | 79.7 | 81.1 | 76.3 |
| White | 86.6 | 85.7 | 88.2 |
| National | 82.9 | 84.9 | 86.1 |

*Source:* DBE (2014: 18)

Not only is the overall quality of the school system, on average, comparatively poor, but quality is inequitably distributed, with the poorer 80% of the population generally receiving schooling of significantly inferior quality to that enjoyed by the most affluent 20%. The majority of South African children, from homes of working class or unemployed parents, and frequently child-headed households, attend township or rural schools which, prior to 1994, were administered by the Department of

Education and Training (DET) or one of the homeland administrations. On the other hand, children located in the rapidly deracialising middle class in urban areas, attend schools formerly reserved for minority race groups, which generally produce educational achievement that is closer to the standards achieved in developed countries. Encouragingly, a number of schools serving poor communities are beginning to improve their performance very significantly, although they make up a negligible fraction of the total school population.

The full extent of this inequality is illustrated by comparing the performance of historically white schools (previously administered by the House of Assembly, or HOA) with that of former DET schools for African children living in urban areas. Using data from the National Schools Effectiveness Study (NSES) (Taylor & Taylor, 2013), Figure 4 shows the distribution of literacy scores for Grade 3, 4 and 5 learners from two segments of the school system. The three solid lines are for DET schools and the three broken lines for historically white schools. For both groups of schools, the distribution of achievement improved with each year (shifting to the right). It is alarming, however, that the distribution for Grade 5 students in historically disadvantaged schools still showed a considerably weaker pattern than that of Grade 3 students in historically white schools. It is clear that by the fifth grade the educational backlog experienced in historically black schools is already equivalent to well over two years' worth of learning.

These patterns are mirrored in the distribution of NSES maths scores, and are replicated by both the Progress in Reading Literacy (Howie et al., 2008) and the Southern and Eastern African Consortium for Monitoring Education Quality (Spaull, 2011) studies. It is distressing that, more than two decades after the end of apartheid, historical patterns of disadvantage persist in the schooling of poor children.

Regarding school attendance, male youths aged 16–18 years had a slightly higher rate than females in 2013 (87.4% and 84.9% respectively), giving a gender parity index of 0.97. The gender parity gap has narrowed substantially since 2002 when the parity index was 0.92 (DBE, 2014: 18). But the completion rate for male learners is more problematic than for female learners. While in 2002 the completion rate for males was 39% and for females 40.2%, the gap in the completion rate has grown and in 2013, 44.9% of males aged 22–25 had completed Grade 12 or higher compared to 51% of females in the same age group (Table 10).

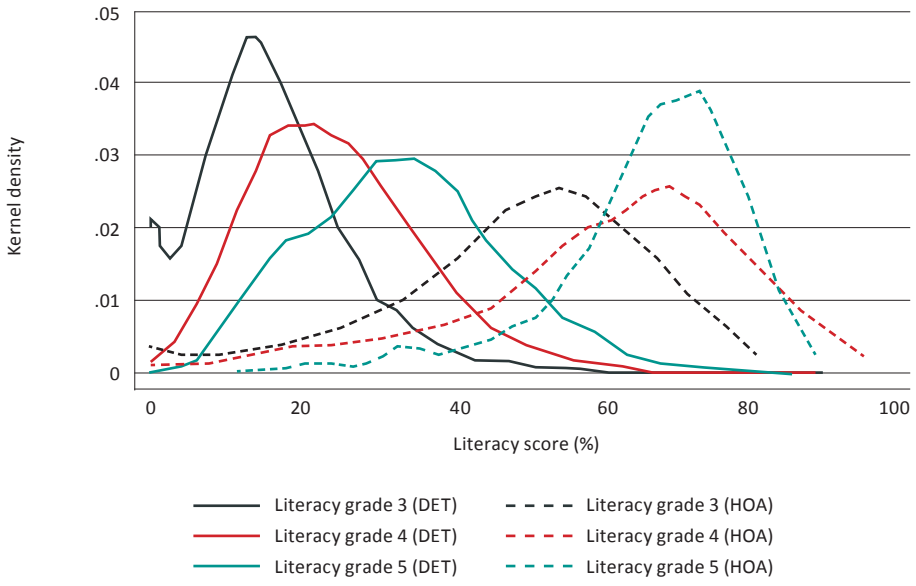
**Table 10. Percentage of 22–25 year-olds with Grade 12 (matric) and above by gender: 2002, 2008 and 2013**

| | 2002 | 2008 | 2013 |
|---|---|---|---|
| Female | 40.2 | 44.3 | 51 |
| Coloured | 39.0 | 42.1 | 44.9 |
| Total | 39.6 | 43.2 | 47.9 |

*Source:* DBE (2015d: 53)

Access to education for youth aged 16–18 with disabilities has improved substantially since 2009, increasing from 53.3% of youth with disabilities in that year to 70.3% in 2013 (DBE, 2014: 21). Despite this improvement, 30% of disabled youth are not accessing education. When compared to the 92.5% of disabled 7–15 year-olds who are catered for, it is evident that accessing educational opportunities becomes more difficult for older disabled youth.

## Figure 4: Kernel density curves of Grades 3, 4 and 5 literacy by ex-department




*Source:* Taylor &Taylor (2013)

# Tertiary education

In this section we deal with the university sector, which offers certificates, diplomas and degrees at levels 5–10 on the National Qualifications Framework (Figure 1). This excludes short courses and qualifications offered below level 5, generally of a technical and/or vocational nature. These are discussed below under the post-school sector.

## Quantity

Following the merger of traditional universities and former technikons in the early 2000s and the establishment of the University of Mpumalanga and Sol Plaatjie University in 2014, South Africa has 26 public higher education institutions (HEIs) In 2003 initial teacher education was further rationalised, with around one hundred teacher education colleges closed, and the remainder, around ten, incorporated into university education faculties. Teacher education is now a fully graduate occupation, with newly qualified teachers possessing a four-year Bachelor of Education (BEd) degree, or a Bachelor degree in arts, commerce or science, with teaching subjects and capped by a one-year Post Graduate Certificate in Education (PGCE).

Higher education has experienced a massive increase in enrolment in the two decades between 1986 (the first year for which reliable data is available [Bunting & Cloete, 2007] and 2005, growing from just over 300 000 to close to 750 000, an increase of 143% (Table 11). Much of this growth occurred prior to 1994, when numbers increased by 73% between 1986 and the advent of democratic government. This increase has been maintained, rising to a total enrolment of 983 698 in 2013, the latest year for which reliable figures are available. Thus, there has been an increase in higher education enrolments of 225% since 1986 and 87% since 1994.

**Table 11. Headcount enrolment at higher education institutions: 1986–20013**

| x 1000 | 1986 | 1994 | 2005 | 2010 | 2013 |
|---|---|---|---|---|---|
| Total Enrolment | 303 | 525 | 735 | 893 | 984 |

The National Policy for Higher Education, published in 2001, set a target participation rate in higher education[4] at 20% over a ten to 15 year period (Republic of South Africa, 2001). It would appear from Table 12 below that with the growth in university enrolment, this target was achieved in 2013. The White Paper for Post-School Education and Training, published in 2013, has set a new target participation rate of 25% by 2030 for universities (DHET, 2013: 30).

With specific reference to initial teacher education (ITE), much progress has been made in the last two or three years with expanding provision in order to meet the needs of the school system. Following the realisation some five years ago that South Africa was not producing teachers in sufficient numbers to serve the school system, the DHET undertook a concerted effort to expand provision, using the Funza Lushaka bursary programme, opening two new universities and two colleges, and providing capital grants to existing institutions. The effects have been nothing short of dramatic, with enrolments rising from 10 500 in 2004 to 15 650 in 2013, and projected to reach 23 000 by 2019 (Van Broekhuizen, 2015). Particularly encouraging has been the production of greater numbers of teachers for the Foundation Phase (Grades R–3). Nevertheless, the production of teachers remains skewed, with shortages, across the system, of new teachers qualified to teach maths and African languages.

## Quality

According to a study commissioned by the National Planning Commission (Taylor, 2011: 34), 'There are strong indications that the increased numbers admitted into universities since the advent of the new NSC curriculum in 2008 have been bought at the expense of quality'. A number of challenges relating to quality include very slow throughput and graduation rates, and the poor preparation of students for tertiary study arising from the very poor quality of primary and secondary schooling (Taylor, 2011: 16).

### Low throughput and graduation rates

A recent report from the CHE (2013) notes that:

- Only about one in four students in contact institutions (that is, excluding UNISA, South Africa's main distance university) graduate in regulation time (for example, three years for a three-year degree).
- Only 35% of the total intake, and 48% of contact students, graduate within five years.
- When allowance is made for students taking longer than five years to graduate or returning to the system after dropping out, it is estimated that some 55% of the intake

4 Enrolment in higher education as a proportion of 20–24 year-olds in the population.

will never graduate.

- Access, success and completion rates continue to be racially skewed, with white completion rates being on average 50% higher than African rates. However, the fact that only 44% of white students graduate in regulation time, and that 33% drop out by the end of regulation time, indicates that under-preparedness cuts across the racial divides of South African society.

## Under-prepared students

We have mentioned low quality across the school system, even for the most affluent 20%, but poor African students experience a language disadvantage in addition to their low socio-economic status. African university entrants not attending the better schools in suburban areas matriculate in English First Additional Language (EFAL), a language they study not only as a subject, but also as the language of instruction for all their other subjects. Recent research indicates that EFAL is an inappropriate vehicle for developing the higher cognitive skills. The EFAL examination papers for National Senior Certificate (NSC) were examined and described by the ministerial task team examining the NSC as being dominated by low-level, recall-type questions, with very little inferential or deductive reasoning or analysis required (DBE, 2014). Unused to exercising these cognitive skills, which are essential for successful tertiary-level study, the large majority of university entrants are woefully ill-equipped for rigorous academic discourse in any discipline.

Various interventions have been made by universities to improve student performance by introducing bridging courses, access courses and extended programmes to support students from disadvantaged backgrounds (HESA, 2011). However, despite these experiments existing in various forms for over three decades now, universities remain unable to be 'able to produce more quality graduates demanded by the country's economy' (HESA, 2011: 16). Yet, instead of prioritising the quality question, DHET expects universities to improve throughput while taking in increasing numbers of students: the white paper on post-secondary education states that as participation increases, universities must simultaneously focus their attention on improving student performance and providing additional places for growing numbers (DHET, 2015).

As in all other sectors, the rapid expansion of initial teacher education has occurred on the back of poor quality, described in the wide-ranging review of programmes in the sector conducted by the Higher Education Quality Council (CHE, 2010). Of the 81 programmes reviewed, only 39 (48%) received full accreditation, with 18 (22%) either not accredited at all or 'On Notice of Withdrawal', and the remainder being conditionally accredited. Thus, not quite half the programmes were fully accredited, despite the 'developmental' approach adopted by the HEQC, taking due cognisance of the strategic importance of the provision of teacher education and the fact that closing programmes would have had a serious impact on the supply of teachers. Across all four types of programmes reviewed – MEd, BEd, PGCE and ACE – the greatest difficulties lay in programme design, raising for the reviewers the critical question as to:

> the extent to which academics responsible for these programmes understand the nature and purpose of each of them and how they are to respond to South Africa's specific needs in the area of teacher education. (CHE, 2010: 147)

More recent research indicates that curricula continue to miss some of the most important skills teachers need in primary school classrooms, such as the ability to teach reading, writing and basic mathematics to their learners (Taylor, 2014). Teachers' knowledge, both of the subjects they teach (Venkat & Spaull, 2014; Taylor &Taylor 2013) and the pedagogic skills required to teach them (Draper & Spaull, 2015; NEEDU, 2013a, b and c) are sorely lacking in the majority of teachers currently in service.

## Attempts to address the quality problem

In a recent wide-ranging report, the Council on Higher Education (CHE) proposes that undergraduate curriculum reform in South Africa deserves serious consideration as a way of overcoming the current scenario of 'high attrition and low graduation rates [which] have largely neutralised important gains in access' (CHE, 2013: 9). The CHE argues that 'modifying the existing undergraduate curriculum structure is an essential condition for substantial improvement of graduate output and outcomes', and advocates 'a flexible curriculum structure for South Africa's core undergraduate qualifications' (CHE, 2013: 16). In practice, this would mean that, to meet the needs of the majority of the student intake, the formal time of all current undergraduate qualifications should be increased by one year, and 'to provide effectively and fairly for diversity in preparedness, the new curriculum structure [would] be flexible to allow students who can complete a programme in less than the formal time to be permitted to do so' (CHE, 2013: 20). The CHE concludes that such a new curriculum structure will entail significant transformation in the field of learning and teaching – which needs to be linked to building the academic capabilities of universities. A flexible framework, recognised in the funding formula, would include the four-year degree, modularisation of courses, and foundation programmes to address knowledge deficiencies.

A risk with respect to the CHE proposals regarding curriculum reform is that the research evidence for the impact of foundation programmes is thin, providing space for opposition to these approaches within the universities, where they are seen as 'add-ons' that have little effect on student success (Kraak, 2011). Another objection is that if a flexible approach were adopted, there would effectively establish two streams within universities – a predominantly African stream doing four-year degrees and a predominantly minority stream on three-year programmes – and any institution would feel uncomfortable with this situation. There is no doubt that the long-term solution to poor throughput in the tertiary sector is to improve the quality of our schools. In the meantime, the evidence base for addressing the quality problem is weak despite decades of experimental programmes in this area.

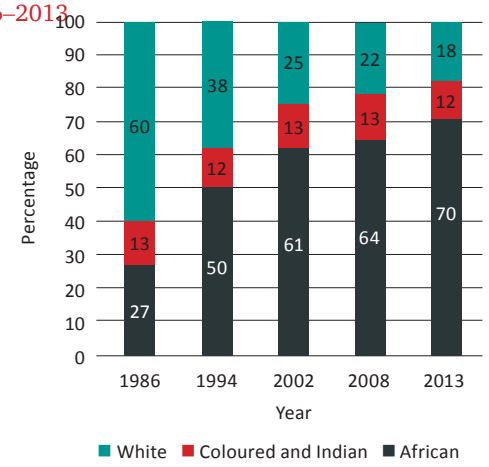
In initial teacher education, government is attempting to address the weaknesses described above through the promulgation of the Minimum Requirements for Teacher Education Quali-

fications (DHET, 2015). Such broad-brush policy, on its own, is unlikely to prove to be an adequate vehicle for raising quality. In this regard the emergence of a nation-wide initiative involving all teacher education faculties aimed at developing more appropriate language, literacy and maths curricula for primary school teachers in training is most encouraging. The quality of schooling cannot improve without the currently very low levels of teacher knowledge and pedagogic skill improving first.

## Equity

Two dramatic changes in the demographic profile of university students have occurred over the last three decades. The first concerns race, where the relative proportions of African students has moved from a mere 27% in 1986 to 70% in 2013 (Figure 5). Conversely, the proportion of white students has declined from 60% to 18% over the same period, with the proportion of coloured and Indian students remaining static.

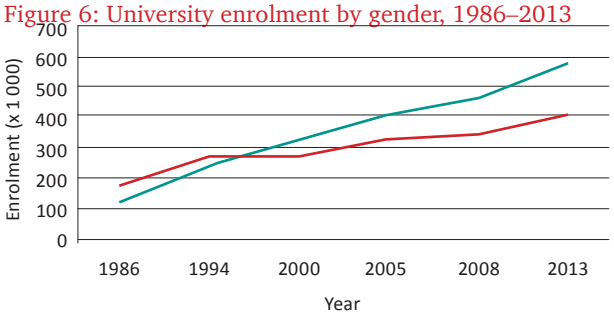
Figure 5: Percentage university enrolment by race, 1986–2013




*Source:* Constructed from Taylor et al. (2008) and CHE (2015)

Almost as impressive has been the growth in the number of women students, to the point where they began to outnumber men in the mid-nineties (Figure 6). Furthermore, the gap between females and male enrolment has increased over the years. Between 2008 and 2013 female enrolment grew by 24.5% while male enrolment increased by 17.5%. In 2008, males constituted 43.1% of total enrolment but in 2013 this had dropped to 41.7% of total enrolment.

Figure 6: University enrolment by gender, 1986–2013




*Source:* Constructed from Taylor et al. (2008) and CHE (2015)

Despite achieving the target set in 2001, the overall participation rate hides disparities between females and males, with males (16%) having a much lower participation rate than females (23%) in 2013 (see Table 12). The participation rate of males has improved only very slightly, by one percentage point, between 2008 and 2013 while females have improved four percentage points.

The poor participation rate of African and coloured students especially when compared to that of Indians and whites is a cause for concern (Table 13). Although the number of African and coloured students enrolled in universities has increased substantially, the inequity in the participation rate between the different race groups is evident. While the participation rates for whites was 55% and for Indians 49% in 2013, this applied to just 16% for African and 15% for coloured students.

A further area of disparity for higher education institutions lies in the throughput rate and drop-out rates. Table 14 shows that just 19% of all students who enrolled in 2008 for a three-year diploma had graduated in the minimum time, with African students graduating at a slower rate (17%) compared to their white counterparts (34%).

Table 15 reveals that only 30% who enrolled for a three year degree in 2008 graduated in the minimum time: this overall mean hides the fact that African students (23%) were progressing far more slowly than white students (43%).

The same disparities are evident in the graduation rates for four-year degrees (Africans – 38%; whites – 51%) (Table 16).

In 2013, six years after their first year of enrolment, only half of those enrolled for a diploma (Table 14), 59% of those enrolled for a three-year degree (Table 15) and 63% of those enrolled for a four-year degree (Table 16) had graduated.

## Funding

According to the spokesperson on higher education for the opposition in Parliament, government subsidies to universities have declined in real terms by over 30% in the last two decades, while there has been a neglect of infrastructure, including research equipment, residences, laboratories, classrooms and maintenance, to the point where eight universities are, according to the higher education and training minister himself, on the verge of bankruptcy (Bozzoli, 2015). The decline in government subsidies to higher education institutions has put pressure on the other two sources of income available to universities: tuition fees and third-stream income such as research grants, contract income and donations (HESA, 2014). Although universities have to some extent increased levels of third-stream income, the gap left by the decrease in government subsidies is by no means compensated by the increase, which culminated in universities being left in increasingly worsening financial positions. The situation has become even more fraught, with the no-fee increase granted to students late in 2015 and the ongoing student protests in 2016.

However, since 1994, government's financial support for higher education in the form of direct funding to students has increased very significantly. Between 1994 and 2012, approximately one million university beneficiaries received loans and bursaries from the National Student Financial Aid

**Table 12. Participation rate in higher education institutions by gender: 2008–2013**

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|
| Female | 15% | 15% | 15% | 15% | 16% | 16% |
| Male | 19% | 19% | 21% | 20% | 23% | 23% |
| Total | 17% | 17% | 18% | 17% | 19% | 20% |

*Source:* CHE (2015: 5)

**Table 13. Participation rate in higher education institutions by race: 2008–2013**

| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|
| African | 13% | 13% | 14% | 14% | 16% | 16% |
| Coloured | 14% | 14% | 15% | 14% | 14% | 15% |
| Indian | 45% | 45% | 46% | 47% | 47% | 49% |
| White | 56% | 58% | 57% | 57% | 55% | 55% |
| Overall | 17% | 17% | 18% | 17% | 19% | 20% |

*Source:* CHE (2015: 5)

**Table 14. Throughput rate for 360-credit diplomas with first year enrolment in 2008 (excluding UNISA)**

| Year | African | | Coloured | | Indian | | White | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Grad | Drop out | Grad | Drop out | Grad | Drop out | Grad | Drop out | Grad | Drop out |
| 2010 | 17% | 39% | 27% | 42% | 22% | 39% | 34% | 38% | 19% | 39% |
| 2011 | 33% | 44% | 41% | 45% | 38% | 41% | 49% | 40% | 36% | 43% |
| 2012 | 43% | 45% | 47% | 45% | 49% | 43% | 54% | 40% | 45% | 45% |
| 2013 | 48% | 52% | 51% | 49% | 52% | 48% | 57% | 43% | 50% | 50% |

*Source:* CHE (2015: 61-62)

**Table 15. Throughput rate for three-year degree with first year enrolment in 2008 (excluding UNISA)**

| Year | African | | Coloured | | Indian | | White | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Grad | Drop out | Grad | Drop out | Grad | Drop out | Grad | Drop out | Grad | Drop out |
| 2010 | 23% | 36% | 25% | 43% | 27% | 34% | 43% | 32% | 30% | 35% |
| 2011 | 41% | 40% | 41% | 45% | 48% | 35% | 59% | 33% | 48% | 37% |
| 2012 | 51% | 41% | 49% | 46% | 58% | 36% | 63% | 34% | 56% | 39% |
| 2013 | 55% | 45% | 51% | 49% | 61% | 39% | 65% | 35% | 59% | 41% |

*Source:* CHE (2015: 61-62)|

**Table 16. Throughput rate for four-year degree with first year enrolment in 2008 (excluding UNISA)**

| Year | African | | Coloured | | Indian | | White | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Grad | Drop out | Grad | Drop out | Grad | Drop out | Grad | Drop out | Grad | Drop out |
| 2011 | 38% | 30% | 37% | 37% | 38% | 33% | 51% | 28% | 42% | 30% |
| 2012 | 54% | 32% | 50% | 39% | 55% | 34% | 64% | 29% | 57% | 32% |
| 2013 | 61% | 39% | 56% | 44% | 62% | 38% | 68% | 32% | 63% | 37% |

*Source:* CHE (2015: 64–65)

Scheme (NSFAS). Furthermore, the NSFAS increased funding from R11 billion in 2006 to R26 billion in 2013. Despite the amount of government funding being doubled in this period, there is an indication that NSFAS allocations were not adequate to meet the needs of eligible students, raising the question of how increased enrolments were to be funded (HESA, 2014).

Financial difficulty has been cited as a main cause of student dropout throughout the system. In 2010, struggling students at 14 universities owed more than R2 billion in outstanding tuition and accommodation fees; eight institutions were forced to write off almost R70 million in bad debts; and 17 were battling to recover a further R827.6 million in fees from previous years (Govender, 2010). In 2009 total student debt was at R3 billion (HESA, 2011).

NSFAS loans are granted on the understanding that, once graduates obtain employment, the loan will be repaid. However, Jenvey (2012) indicated that in 2012, graduates owed NSFAS R13.4 billion in unpaid loans, which means that about 20% of those owing, the NSFAS had not made any payments to the government. According to Lund (2015), the South African Revenue Services (SARS) established that there are over 300 000 beneficiaries who owed the NSFAS R13 billion in outstanding loan repayments in 2015. This figure includes only those who are working and can repay their loans to the NSFAS.

It must also be borne in mind that, although the allocation to the NSFAS has been increased significantly in recent years, these figures are inclusive of the TVET sector. The recent student protests at some universities highlight the sad reality

that the allocation is not adequate to meet the funding needs of students eligible for NSFAS loans and bursaries. This followed a national student protests (#FeesMustFall campaign) in 2015, where students were demanding, first, that fees not be increased in 2016 and, second, free tertiary education for those who qualify. This culminated in government announcing a zero fee increment for 2016 academic year in all public universities and the establishment of a presidential task team to look into solutions for the future. More recently, the president has announced the establishment of a commission of inquiry into the funding model and the feasibility of free university education.

# Post-school education

The post-school sector lies outside of school and below the university level. This sector is responsible for preparing learners for a variety of trade and occupationally oriented qualifications (Taylor, 2011: 40). Part of the post-school sector parallels the last three years of academic high school, offering the National Certificate (Vocational) (NC(V)), through the TVET colleges as an alternative to the National Senior Certificate, which is offered in schools (see Figure 1). Also partly in parallel and partly beyond the NC(V) are the 'N' courses, which are also known as NATED or Report 191 courses, which are offered to apprentices in the TVET colleges as the theory component of their path to artisanship (N1–N3) and advanced artisanship (N4–N6).

The TVET colleges were formally constituted in 2002 (but were then called further education training (FET) colleges) when the 152 former technical colleges were merged with colleges of education and skills centres to create 50 new FET colleges with 165 campus sites distributed across the nine provinces (SSACI, JET Education Services & NBI, 2015: 3). In addition to the 50 public TVET colleges with multi-site campuses, there are also 627 private TVET colleges (DHET, 2015: 40).

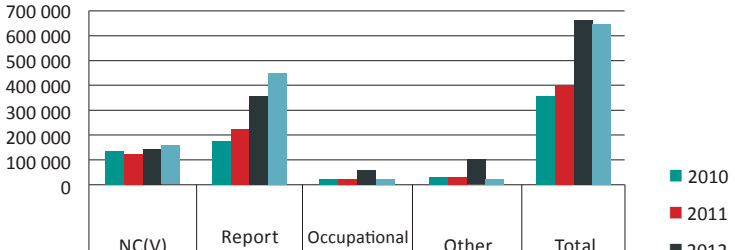
The NC(V), which was introduced in 2007, is a three-year, full-time course of study in one of 19 vocational fields. The NC(V) was initially intended to replace the NATED courses and to prepare students for both the job market and for higher education. This objective was not attained and both the NATED and NC(V) courses are currently offered by all public TVET colleges Both the NATED and NC(V) programmes provide training at levels 2, 3 and 4 on the National Qualifications Framework (see Figure 1) and are open to school-leavers who have completed at least Grade 9.

## Quantity

According to the DHET's report on *Statistics on Higher Education and Training in South Africa*, in 2013 there were a total of 794 250 learners enrolled in public and private TVET colleges – 639 618 (80.5%) in public and 154 632 (19.4%) in private TVET colleges (DHET, 2015: 23). However the number of students attending private colleges is an underestimation, as only 503 (DHET, 2015: 40) of the 627 private TVET colleges registered with the DHET responded to the annual survey sent to them .

As shown in Figure 7, public TVET colleges experienced an increase in student enrolment between 2010 and 2013. Most of the growth in enrolment is in Report 191 (N) programmes, which increased by 160.5% between 2010 and 2013. NC(V)

Figure 7: Number of students enrolled in public FET/TVET colleges, by qualification category, 2010–2013




| | NC(V) | Report 191 | Occupational qualifications | Other | Total |
|---|---|---|---|---|---|
| 2010 | 130 039 | 169 774 | 23 160 | 31 504 | 354 477 |
| 2011 | 124 658 | 222 754 | 20 799 | 32 062 | 400 273 |
| 2012 | 140 575 | 359 624 | 62 359 | 95 132 | 657 690 |
| 2013 | 154 960 | 442 287 | 19 000 | 23 371 | 639 618 |

*Source:* DHET (2015: 26)
*Notes:* NC(V) refers to the National Certificate (Vocational); Report 191 refers to the NATED or 'N' programmes, namely N1–N6; Occupational qualifications refer to qualifications associated with a trade, occupation or profession resulting from work-based learning, and consisting of knowledge unit standards, practical unit standards and work experience unit standards; other refers to all other skills development and short courses.

programmes, on the other hand grew by just 19.2% over the same period.

With the huge growth in Report 191 students in TVET colleges in 2013, these students constituted just over 69% of total TVET college enrolment, up from 47.9% in 2010 (Table 17). NC(V) students dropped from 36.7% of TVET college enrolment to just 24.2%.

**Table 17. Percentage of students enrolled in public FET/ TVET colleges, by qualification category**

| | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|
| NC(V) | 36.7 | 31.1 | 21.4 | 24.2 |
| Report 191 | 47.9 | 55.7 | 54.7 | 69.1 |
| Occupational qualifications | 6.5 | 5.2 | 9.5 | 3.0 |
| Other | 8.9 | 8.0 | 14.5 | 3.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

*Source:* Calculated from DHET (2015: 26)

In addition, the 21 sector education and training authorities (SETAs) facilitate a number of learning programmes, including learnerships, bursaries, internships and skills programmes. Skills programmes are predominantly short courses that can be completed and certified within a year, while learnerships, bursaries and internships are linked to qualification-based programmes that take a year or more to complete. SETAs are able to perform their functions through funding obtained from the skills development levy paid by employers, currently at 1% of a company's pay roll (Snyman, 2013: 527).

Over 176 000 individuals (both workers and unemployed persons) registered for SETA-supported learning programmes in the 2013/14 financial year. This represented an increase of 30.4% since 2011/12. Just over half (52.5%) were registered for skills programmes in 2013/14, while 43% were enrolled in learnerships. Internships comprised just 4.5% of those registered (see Table 18).

The number of persons who were certified in SETA-supported learning programmes increased by 28.3% from 117 602 in 2011/12 to 150 853 in 2013/14. The majority (62.1%) received certification for skills programmes (see Table 18).

## Quality

The national completion rate for NC(V) is very low. In 2013, only 23.3% of learners who registered for NC(V) level 2 examinations completed the qualification (see Table 19). Similarly, 26.1% who registered for level 3 examination completed, and 33.2% who registered for level 4 examination completed. Mpumalanga had the highest completion rate at all three of the NC(V) levels while the Free State had the lowest at all three levels.

**Table 19. Percentage of students who completed NC(V) qualification, 2013, by province**

| Province | NCV 2 | NCV3 | NCV4 |
|---|---|---|---|
| Eastern Cape | 26.9 | 30.0 | 35.7 |
| Free State | 11.4 | 15.1 | 26.2 |
| Gauteng | 20.3 | 23.6 | 30.0 |
| KwaZulu-Natal | 22.1 | 26.0 | 29.5 |
| Limpopo | 22.6 | 21.3 | 29.1 |
| Mpumalanga | 35.7 | 34.7 | 41.6 |
| North West | 19.6 | 18.5 | 30.2 |
| Northern Cape | 23.5 | 25.5 | 36.9 |
| Western Cape | 28.8 | 30.9 | 41.5 |
| National | 23.3 | 26.1 | 33.2 |

Calculated from DHET (2015: 34)
*Note:* This table refers to students who completed as a percentage of those who had registered for the examinations and were eligible to complete an NC(V) qualification during 2013. It excludes students who registered to write individual subjects but who were not eligible to complete the NC(V) level during 2013

## Equity

In 2013 there were slightly more female (51.1%) than male students (48.9%) enrolled in TVET colleges overall. However, females predominated in NC(V) courses (56.2% female and 43.8% males) while males predominated marginally in the Report 191 programmes (50.6% males compared to 49.5% females) (DHET, 2015: 29). Figures for disabled students are not available.

## Youth not in employment, education or training

In 2013, 32.9% of South Africa's youth aged 15–24 years were not in employment, education or training (NEET) (Figure 8). The NEET rate was much higher among women (36.1%) than men (27.9%). The North West had the highest rate (38.7%) followed by Mpumalanga (34.2%). The Free State had the lowest NEET rate among 15–24 year-olds followed by Limpopo (30.9%).

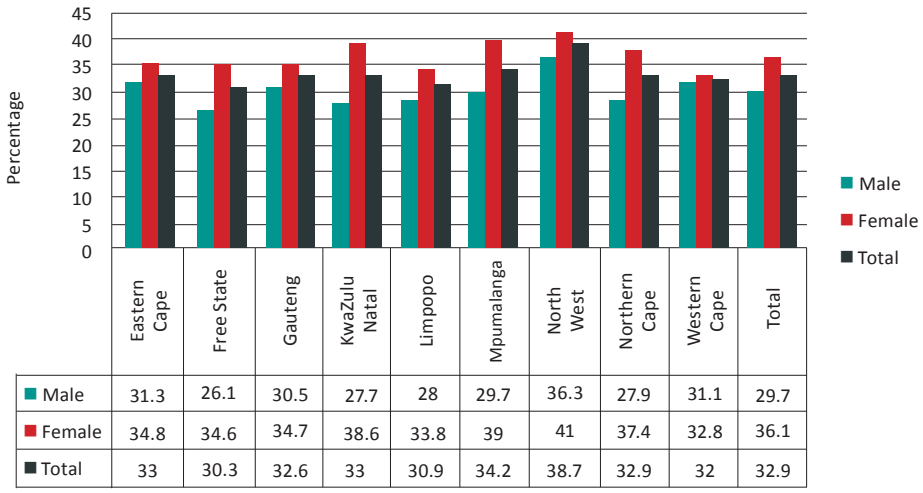
It is intended that the needs of NEET youth be catered for by the TVET colleges and a variety of programmes regulated by the SETAs. Testimony to perceptions that these means are inadequate is given by current moves to establish a new set of institutions, the community education and training colleges, of

**Table 18. Number of workers and unemployed persons in SETA-supported learning programmes, by programme type**

| Year | Registered | | | | Certified | | | |
|---|---|---|---|---|---|---|---|---|
| | Learnerships | Internships | Skills programmes | Total | Learnerships | Internships | Skills programmes | Total |
| 2011/12 | 43 871 | 3 452 | 87 906 | 135 229 | 29 197 | 878 | 87 527 | 117 602 |
| 2012/13 | 50 885 | 6 127 | 74 587 | 131 599 | 37 158 | 2 195 | 86 491 | 125 844 |
| 2013/14 | 75 782 | 8 017 | 92 508 | 176 307 | 38 796 | 2 510 | 109 547 | 150 853 |

*Source:* DHET (2015: 62)

Figure 8. NEET rate[5] of youth aged 15–24 years by gender and province, 2013




| | Eastern Cape | Free State | Gauteng | KwaZulu Natal | Limpopo | Mpumalanga | North West | Northern Cape | Western Cape | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Male | 31.3 | 26.1 | 30.5 | 27.7 | 28 | 29.7 | 36.3 | 27.9 | 31.1 | 29.7 |
| Female | 34.8 | 34.6 | 34.7 | 38.6 | 33.8 | 39 | 41 | 37.4 | 32.8 | 36.1 |
| Total | 33 | 30.3 | 32.6 | 33 | 30.9 | 34.2 | 38.7 | 32.9 | 32 | 32.9 |

*Source:* Statistics South Africa (2013: xvi)

which nine were inaugurated in 2013/14 (DHET, 2015).

It is clear that, poor as the quality of formal primary, secondary and tertiary education are, the TVET college/SETA sector is in even worse shape, as shown in the very low throughput rates and paucity of reliable data, particularly concerning the quality of both extended and short courses. Despite having been identified in 1994 as an area of high priority, the skills terrain remains very undeveloped, a damning indictment of the 15 year-old SETA system, the learnership design and incentives regime, and the ability of the NQF to promote coherence and quality.

As a result, government seems to be returning to the artisan model which was so successful prior to 1994 in providing technical skills for the economy, where state-owned enterprises (SOEs) were incentivised to provide artisanships to young people well in excess of their own needs. The artisan training programmes of the SOEs have been revived, and the SOEs are now once again major contributors to the supply of artisans. Artisan training by SOEs has received a further boost in recent years through the Infrastructure Plan under the Presidential Infrastructure Coordinating Commission (PICC). Between 2011 and 2013 the SOEs trained 4 740 artisans. The rise in popularity of the N programmes in TVET colleges reflects this growth in artisanships (Table 17). Both SOEs and the private sector have been constrained by the lack of adequate, sustainable, guaranteed funding from the SETAs and the National Skills Fund (NSF), as well as the lack of a single artisan learner administration and grant disbursement system across the SETAs. Government has recently addressed these blockages by directing SETAs, in new grant regulations, to use 80% of their discretionary grants for pivotal programmes, of which artisan training is a major part.

Moving the governance of the TVET colleges to the national level is an attempt by government to improve the functionality and accountability of colleges. However, this places a very significant responsibility on the DHET and it will have to boost capacity significantly if this move is to achieve its aims. Similarly, questions must be asked about the ability of the sector to sustain yet another layer of institutions – the CETCs – under present conditions.

5 According to Statistics South Africa the NEET rate is calculated as follows: (number of unemployed youth +number of youth not in the labour force) – (number of unemployed youth and youth not in the labour force who are in education) / Total number of youth x 100.

# Adult education

## Quantity

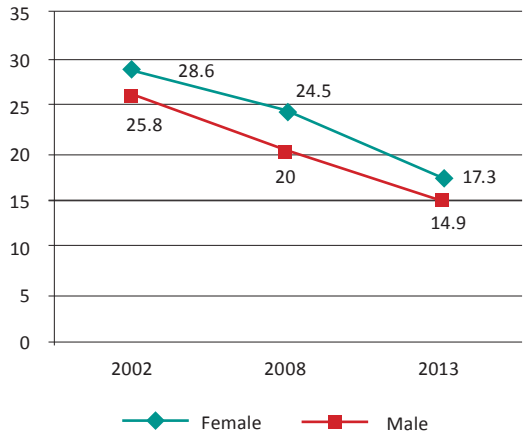
To meet the challenges of adult illiteracy two adult education programmes have been introduced. The South African National Literacy Initiative was launched in 1999 and ran until 2003. In 2008 the Kha Ri Gudi Literacy Programme was introduced by the DBE and is still running. Kha Ri Gude is a mass literacy campaign, which caters for illiterate adult learners aged 15 years and above in all 11 official languages. The programme enables adult learners to read, write and calculate in their mother tongue in line with the unit standards for Adult Basic Education and Training (ABET) level 1 (see Figure 1), and also to learn spoken English. The programme integrates themes and life skills such as health, gender, the environment and civic education. The material has been adapted for use in Braille in 11 languages, and for use by the hearing impaired. The campaign is expected to have reached 4.7 million people by 2017 (DBE undated (a): 23). According to the DBE, by the end of the 2013/14 financial year, the project had produced 3.4 million graduates who had become literate and numerate (DBE undated (a): 37).

Despite the claims concerning the success of Kha Ri Gude, in measuring literacy levels in South Africa, the completion of primary school is used as a proxy: it is assumed that functional literacy is attained, that is, a person is capable of reading, writing and comprehending basic numeracy, if he/she has completed Grade 7 or above. Against this measure, there has been a substantial increase in South Africa's adult literacy rate with the proportion of functionally literate adults aged 20 and older increasing from 72.5% in 2002 to 83.7% in 2013 (see Table 20).

For both females and males the percentage of adults who have no education or less than Grade 7, is decreasing (see Figure 9).

In 2013, there were 249 507 learners enrolled in adult education and training centres, a drop of 18.6% from the 306 378 enrolled in 2012 (Table 21). All the programmes except Grades 10 and 11 experienced a decrease. The number of leaners enrolled in Grade 11 increased by almost 149%, but off a low base of just 471 in 2012.

Figure 9: Percentage of the population aged 20 years and older with highest education less than Grade 7 by gender




*Source:* Statistics South Africa (2014: 25)

## Quality

Little is known about the quality of adult education programmes, which is itself a reflection of the underdevelopment of this sector.

**Table 20. Percentage of the population aged 20 and over by level of education, 2002, 2008 and 2013**

| | 2002 | 2008 | 2013 |
|---|---|---|---|
| No schooling | 10.6 | 8.7 | 5.6 |
| Some primary | 17.0 | 13.9 | 10.7 |
| Grade 7 complete and higher | 72.5 | 77.4 | 83.7 |
| Total | 100.1 | 100 | 100 |

*Source:* Statistics South Africa (2014b: 23)

**Table 21. Number of learners enrolled in adult education and training centres by programme, 2012 and 2013**

| Programme | 2012 | 2013 | % change |
|---|---|---|---|
| ABET levels 1–3 | 93 936 | 62 183 | -33.8 |
| ABET level 4 | 134 276 | 109 352 | -18.6 |
| Grades 10 &11 | 471 | 1 172 | 148.8 |
| Grade 12 | 71 037 | 70 536 | -0.7 |
| Other/Skills development | 6 658 | 6 264 | -5.9 |
| Total | 306 378 | 249 507 | -18.6 |

## Equity

Gender disparities are evident in adult literacy rates: there are fewer male adults with less than Grade 7 education than females (Figure 9). While the gap between males and females widened in 2008 to 4.5 percentage points, it narrowed in 2013 so that the gap between males and females in 2013 was similar to that in 2002 (2.8 and 2.4 percentage points respectively). Regarding race and socio-economic status, the overwhelming majority of illiterate adults are African and living in rural areas or urban squatter camps.

# Conclusion

## Achievements and gaps

Reading the targets set for Goal 4 of the Sustainable Development Goals (Table 1) through the foregoing scan of the South African education system produces clear patterns in terms of quantity, quality and equity, as summarised in Table 22.

**Table 22: Progress made by the South African education sector against targets for SDG Goal 4**

| Target | Quantity | Quality | Equity |
|---|---|---|---|
| **Primary and secondary schooling**<br>By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes. | Close to 100% participation in Grades 1–9.<br>86% participation rate among those aged 16–18. | Learning outcomes very poor in comparative tests: SACMEQ, TIMSS, PIRLS. | Girls slightly outnumber boys due to higher progression and lower drop-out rates.<br>By Grade 5 the educational backlog experienced in schools serving the poorest (mostly African) 80% of children is already equivalent to well over two years' worth of learning. |
| **ECD and pre-primary**<br>By 2030, ensure that all girls and boys have access to quality ECD, care and pre-primary education so that they are ready for primary education. | Since 1996 the proportion of 5 year-olds in educational programmes has risen from 22.5% to 80.0%; participation of those aged 6 increased from 49.1% to 91.4%.<br>These gains largely achieved through the introduction of a pre-Grade 1 (Grade R) in primary schools.<br>But provision for 0–4 year-olds also increased significantly in last decade | An external evaluation found that attendance of Grade R had a moderate impact on learning in the Foundation Phase, but that these effects were felt mainly in the two school quintiles serving the most affluent communities. | Far from ameliorating social inequality, the introduction of Grade R appears to be increasing it. |
| **University, TVET, NEET youth**<br>By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university. | TVET college enrolments increased 87% in the period 2010–13; university by 82% 1994–2012 | Less than 50% of all university entrants ever obtain a qualification<br>Throughput in TVET colleges is under 30%.<br>Quality of SETA programmes unknown but doubtful | Great strides made in increasing the proportion of women (now in the majority) and African students in universities.<br>But participation, throughput and graduation rates still lag for African students.<br>Africans are also generally the poorest students and, although there have been significant increases in student funding, shortage of funds continue to further disadvantage them. |
| **Teachers**<br>By 2030, substantially increase the supply of qualified teachers. | Since 2003 teaching is an all-graduate profession. Enrolments in initial teacher education programmes increased 48% in the period 2004–13; on track to meet the needs of the school system by 2019. | Skewed production of teachers, with shortages in the Foundation Phase, African languages, maths and science.<br>Quality of graduate teachers severely criticised by Higher Education Quality Council in 2010 | Gender and racial patterns mirror those of university students generally |
| **Adult literacy and numeracy**<br>By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy. | Claims by Kha Ri Gude will reach 4.7 million adult learners by 2017.<br>Illiteracy rate down to 16.3% in 2013. | Quality unknown | Predominantly poor and African |

Much has been achieved in pursuit of the fundamental rights to education enshrined in the constitution since the establishment of the first democratic government in 1994. The most significant development has been the growth in numbers enrolled at all levels of provision: early childhood development, Grade R (a pre-primary year), primary and secondary schools, post-school (TVET except university qualifications), university study, and adult education. Primary schooling has grown less rapidly than all other sectors, but only because enrolments had reached near-saturation by 1995. Rapid growth in the secondary school sector occurred in the seventies and eighties, in response to the Soweto uprising of 1976. Not only have realistic levels of universal access to schooling been achieved, but also, unlike many other developing countries, access to schooling in South Africa has, on the whole, been achieved equally for male and female children.

However, while significant gaps remain in the provision of education, particularly in the post-school skills development sector, profound questions regarding relevance and quality pose the greatest challenge to every sector. In addition, quality is inequitably distributed, adding a further brake on the life chances of poor learners in all sectors.

## Teacher professional development

The very inefficient rate of learning in schools serving the poor is undoubtedly the greatest problem faced by the entire education system. Poorly educated primary school children battle when entering high school, university, TVET college and adult education programmes. They constitute the large majority of the NEET youth, unable to access work or skills programmes; in the words of the higher education and training minister, this is 'a ticking time bomb' (Freeman, 2010). Improving the quality of teaching in primary schools, particularly in the first three grades, will not only bring higher levels of learning to all other sectors, but in addition will bring efficiency savings to every sector beset by weak literacy, numeracy and language skills and very low throughput rates. Key to this problem, in turn, is the quality of teaching. It follows that improving the quality of teacher education, particularly ITE for primary school teachers (but also for teachers of maths, science, TVET and ECD) should constitute the priority focus for research and intervention by both the public and private sectors.

## Post-school skills training

A second major priority must be the recently-named post-school sector (excluding universities), which is intended to cater for a host of skills training programmes, including training for the NEET youth. A host of problems bedevil the system: systemic turmoil (from institutional management to national governance), with governance of the TVET colleges moving from provincial to national level; widespread dissatisfaction with the SETA system; a paucity of reliable information concerning the quality of most programmes; very low student throughput rates; and unknown employment prospects. What is needed is:

- Research on student progress and employment, including tracer studies of student throughput and employment histories;
- Evaluation of current interventions: we need to learn, both positive and negative lessons, from current and past programmes; and
- New models of intervention, based on the above, which can be proven to provide increased opportunities for employment.

## Universities

There is an urgent need for language, literacy and numeracy programmes for at least 80% of entrants into tertiary studies. Much has been done in this regard over three decades, yet little is known about which programmes are most successful, if any. Here too, research and evaluation is needed before embarking on supposedly new interventions that in the end turn out to be a recycling of models known not to have fulfilled their intentions.

## Early childhood development and pre-school

This is another area in which teacher training is poor but in which, unlike primary and secondary schools, the majority of teachers are unqualified. A number of South African donors have formed a consortium and are giving systematic attention to strengthening this sector. Joining this initiative may be an option for Porticus, depending on whether it wants to address areas receiving less attention, or contribute to achieving economies of scale in the ECD/Grade R sector.

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