

UMALUSI
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Council for Quality Assurance in
General and Further Education and Training

# Indicators Report 2008-2013 

National Senior Certificate

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## List of acronyms

| ANA | Annual National Assessment |
| :--- | :--- |
| ASER | Age-Specific Enrolment Rate |
| CAPS | Curriculum and Assessment Policy Statements |
| DBE | Department of Basic Education |
| DoE | Department of Education |
| ECD | Early Childhood Education |
| EFA | Education for All |
| EMIS | Education Management Information System |
| FET | Further Education and Training |
| GENFET | General and Further Education and Training |
| GENFETQA | General and Further Education and Training Quality Assurance Act |
| GER | Gross Enrolment Ratio |
| GER | Gross Enrolment Ratio |
| GPI | Gender Parity Index |
| LOLT | Language of Learning and Teaching |
| NC(V) | National Certificate (Vocational) |
| NCS | National Curriculum Statements |
| NER | Net Enrolment Ratio |
| NQF | National Qualifications Framework |
| NSC | National Senior Certificate |
| SGB | School Governing Body |

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## Executive summary

This report is divided into three main sections that provide indicators of the quality of the education system in South Africa in respect of the National Senior Certificate (NSC). Each section collects and collates data from 2008 until 2013 in most cases, although some individual datasets range from as early as 2002, and some run up until only 2011 where later data is unavailable.

## Section 1 - Enrolment, retention and socio-economic overview

The data in section 1 of this report was sourced primarily from the Department of Basic Education, Statistics South Africa, and Umalusi's own database. It concentrates on learner enrolment and retention within the system, and provides information on the intake of learners into the system, but also shows the outputs of learners, produced by the system. The data also provides information on socio-economic variables that help to put some of the trends into context.

In the early grades, significant improvements in learner enrolment and access are observed. Learner enrolment in Grade R increased from just $15 \%$ in 2002 to $70 \%$ in 2011 - an increase of $370 \%$ over the period. When enrolment by age is considered, it emerges that some $84 \%$ of children of 5 years of age were enrolled in school by 2011 , up from just $40 \%$ in 2002. By 2012, $99 \%$ of children that should have been enrolled in primary school were, and it is clear that the system has been extremely successful in increasing access to education. While the quality of primary schooling is not yet uniform, and there is evidence to show that it is relatively poor in some areas, universal access has almost been achieved - a commendable achievement.

At the top-end of the system, however, the picture is not as rosy. There is a rapid dropout rate between Grades 10 and 12, and more than half of the learners who are enrolled in Grade 10 drop out before they write their final examination at the end of Grade 12. It is clear that it is the weaker learners who generally drop out of the system, and while this increases the pass rate, it must be interpreted as a negative trend as it is not clear whether these learners are entering the workforce or are following another avenue of education. Indeed, it is likely that learners that drop out between Grades 10 and 12 are entering the group known as the NEET (Not in Education, Employment, or Training) group - although the rate at which this is happening is not clear. Generally, male learners are dropping out of the system at a greater rate than female learners.

When spending on education is examined, the rate of increase in spending has been most rapid in the poorer provinces such as the Eastern Cape and Limpopo, and now spending has reached a rate of near-parity across all provinces. This does not suggest, however, that all learners are treated equally across the system. In provinces such as Mpumalanga, Limpopo and KwaZulu-Natal, for instance, there are deep problems in terms of the sizes of classes, which range from an average of 51 to 58 learners in a class.

While the statistics indicate that almost $100 \%$ of our teaching workforce is qualified, our learners on aggregate perform poorly on international comparative tests of achievement (Howie et al., 2011), even when compared with poorer nations. Many factors are certainly at play here, including the socio-economic status of the learners and the schools that they attend, but this reality of poor performance raises questions about whether the quality of
teaching within our schools needs more examination. Notwithstanding the 'textbook crises' of recent years, in general the distribution of textbooks was successful between 2002 and 2009. From 2009 onwards it appears that textbook distribution did not improve perceptibly.

The Annual National Assessments reveal that many learners are not able to keep up with the demands of schooling as they move into each successive grade, and ultimately, this indicates a crisis of education that is hidden by relatively robust pass rates at the end of Grade 12. In the early grades a learner must master the fundamentals of language and numeracy in order to be able to cope with the ever-increasing demands of the subjects as they move through the system. The very rapid rate of drop-out once learners reach Grade 10 and beyond indicates failures in teaching and learning in the early grades, and heavy emphasis needs to be placed on this area, rather than too much being placed on those who have 'survived' in the system until the end of Grade 12.

Finally, the general socio-economic profile of the provinces is intimately related to educational performance, with generally good educational outcomes being observed in socio-economically affluent provinces and poorer performance being observed in provinces that are economically depressed. While this situation cannot be directly remedied by education officials, there does seem to have been an emphasis on the poorer provinces in terms of interventions and financial assistance. It is also clear that the socio-economic profile of the provinces, in general, has remained stagnant during the period under review. The education profile of South Africans by race reveals that Africans are still the most disadvantaged group, even among younger Africans in the age group of 20-29-year-olds.

Ultimately, this section indicates that the system has managed to grow to accommodate all learners, and the goal of 'education for all' is at least at an advanced stage of being achieved. Quality issues remain, however, and while the success in providing access cannot be undervalued, the challenge of providing a truly quality educational environment for all our learners remains only partially realised.

## Section 2 - Performance in the National Senior Certificate

This section of the report draws almost exclusively on data drawn from Umalusi's database, and provides a detailed assessment of overall performance in the NSC examinations, as well as detailed assessments of performance in several key subjects.

Generally, pass rates improved between 2008 and 2013, and it is important to note the milestone of the poorest provinces such as the Eastern Cape and Mpumalanga having achieved the most rapid rates of improvement. Some of these improvements in pass rates, however, are due to reductions in the number of candidates who remain in the system to write the NSC examinations.

The improvements in pass rates are accounted for primarily by the African population group, while for other race groups, pass rates have remained relatively steady. Since schools of low socio-economic status have demonstrated the most rapid rate of improvement in terms of performance, especially at the Bachelors-level of pass, it is likely that real improvements are occurring in poorer schools. While a great deal of work is still required, it is encouraging that such improvements are occurring, and it seems that interventions are being targeted effectively. The statistics demonstrate that there is still a very long way to go in terms of achieving the desired level of quality in the system, however, as in 2013 only about one third of 18-year-olds achieved the NSC with even a basic level of pass. While there are still many
learners in the system who are 19 years of age or older - so the preceding statistic is not definitive in isolation - it is clear that a large proportion of the population does not achieve an NSC of any kind.

In examining subject performance in more detail, a trend that stands out is the move away from Mathematics towards the subject Mathematical Literacy. This is not an overwhelmingly negative result, however, as Mathematical Literacy provides learners with practical numerical skills, giving those with weaker mathematical skills an avenue of study. Since the introduction of the National Curriculum Statement abolished the system of differentiated examinations within a subject (Higher Grade, Standard Grade, etc.), learners who require numerical skills that differ from those taught in Mathematics are in need of a subject such as Mathematical Literacy. Other findings that should be noted are that the very rapid rise in performance in both Geography and History seems to indicate a change in the standard of these subjects. While it is possible that teaching and learning have markedly improved in those subjects, without solid evidence of this, it is difficult to interpret this trend as unrelated to a drop in standards. The only other particular finding related to the standards of the examinations is the clear problem observed in the level of difficulty in both Life Sciences and Physical Sciences in 2009 (i.e. the exams were substantially too difficult). From 2010 onwards that problem has been corrected, and it is clear that both of those subjects have stabilised at an acceptable level.

## Section 3 - Schools and economic quintiles

This section relies almost exclusively on data extracted from Umalusi's database, and focuses on economic quintiles and the trends that can be discerned when socio-economic status is compared with results. It examines schools in the context of their economic situation, and attempts to discern patterns of performance that may indicate the quality of the system across economic categories.

When the Bachelors-level pass is examined, it becomes clear that despite an improvement in the rate of achievement of this standard, there has been little movement at the top end of the spectrum. In other words, schools that traditionally achieved a high rate of success have continued to do so, and little movement at the top end also suggests that it remains challenging to achieve these results. Instead, improvements in the pass-rate for schools achieving a solid rate of Bachelors-level passes have taken place in the middle-performance band. In addition, just $6 \%$ of schools produced no Bachelors-level passes in 2012, compared with $13 \%$ in 2008. Since much of the previous section indicates that the standard of the examinations has remained relatively stable between 2008 and 2012, it can be assumed that these statistics represent, at least in part, real improvements in teaching and learning.

When the quintiles of schools across all the provinces are examined (with Quintile 1 representing 'Most poor' and Quintile 5 'Least poor'), it is disappointing to note the stagnation in these figures. In general, if a school was in Quintile 1 in 2008, it would remain there in 2012. While the rate of socio-economic change in a five-year span cannot be expected to be dramatic, it is always hoped that a marked rate of improvement could be discerned in the longitudinal figures.

The provinces that were singled out in previous sections as having relatively poor performance are shown also to bear a disproportionate burden in terms of the poverty of their schools. Limpopo, for example, in 2012 contained some $36 \%$ of all Quintile 1 (most poor) schools in the country. It was followed closely by KwaZulu-Natal with $27 \%$ of Quintile 1 schools. Taken together, these two provinces had a cumulative $63 \%$ of the poorest schools in South Africa.

There is an inextricable link between poverty and poor educational outcomes. While richer provinces have a better-educated population, it should not be assumed that the direction of this relationship is fully understood. In other words, do provinces become rich because of a well-educated population, or do more educated people migrate to richer provinces? Ultimately, what is clear is that the bulk of the interventions in the schooling system need to be targeted at schools that serve low-income communities. The stability at the upper end of the system adds greater weight to this assertion. An illustration of this is that some $22 \%$ of Quintile 1 (most poor) schools achieved not a single Bachelors-level pass in 2012, while this figure was just $1 \%$ for Quintile 5 schools (least poor).

The analysis in this section also entails a comparison of some subjects in terms of economic quintiles and performance, as well as in terms of Mathematics performance. In this regard, it is interesting to note that improvements seem to be taking place in the middle of the economic spectrum. While schools at the lowest and highest quintiles have seen little change in performance in the period under review, those in the middle quintiles seem to be improving. This suggests that schools that already have some resources are experiencing real improvements in the teaching and learning of Mathematics, while schools at the top end are stable; schools at the very bottom end still find this subject to be a steep challenge. There is a notable rise in the number of schools that exhibit no candidates passing Mathematics, but it is likely that some of this may be due to schools no longer offering Mathematics, with Mathematical Literacy being offered instead. As argued earlier, candidates who are weak in Mathematics should have the option to move to Mathematical Literacy, in order to cultivate numerical skills that are still necessary, but not at the level of abstraction required in Mathematics. It is thus unfortunate that a high percentage of schools in Quintiles 1 and 2 do not offer this subject - most likely due to resource constraints.

## Introduction

In South Africa, learner achievement, particularly at the end of formal schooling, is generally considered the key indicator of educational quality and standards. Learner results in largescale examinations or assessments such as the National Senior Certificate (NSC) or Grade 12 examinations are always the subject of considerable public scrutiny and debate. However, emphasising single aspects, such as examination results, creates a skewed impression of the quality of education. The results are in fact just one element of the broader system and can be more meaningfully interpreted by taking into account the context of the system in which they occur. It cannot be assumed that high pass rates, for instance, are necessarily an indicator of a high-quality education system, in the absence of a nuanced understanding of the many elements that make up that system.

Evaluating the quality and standards of education and training requires, in addition to the examination results, a multi-dimensional picture of the unique and complex character of the institutions and processes making up the system. There is growing interest in developing increasingly effective, systematic, and scientific means of monitoring the quality and outcomes of the whole education system, with particular emphasis on the effectiveness of teaching and learning, on the one hand, and the achievement of educational outcomes, on the other.

Thus, in SA, understanding and evaluating the quality of education requires a comprehensive picture of the socio-economic status of learners and of the complex characteristics of the learning institutions and assessment bodies that embody the education system. Owners of resources - governments in particular - need to understand

> A comprehensive picture of the socio-economic status of learners and of the complex characteristics of the learning institutions and assessment bodies that embody the education system. the systems in which these resources are deployed, and to monitor the indicators that reflect the state of the system.

This publication thus seeks to provide a basis for beginning to evaluate the quality of the NSC in a more complex fashion, taking into account contextual and input factors without over-relying on output indicators alone. This publication will be periodically updated and expanded so that the progress of the system can be tracked over time, and so that an ever more nuanced understanding of the quality of the NSC can be achieved.

## Umalusi's mandate

According to the General and Further Education and Training Quality Assurance Act (GENFETQA) as amended (2008), Umalusi is mandated to:

- develop a sub-framework of qualifications for General and Further Education and Training (GENFET);
- develop policy and criteria for the registration of such qualifications on the National Qualifications Framework (NQF);
- develop and implement policy for:
- quality assurance of the curricula;
- quality assurance of the provision' of private institutions such as independent schools, colleges, adult centres, and assessment bodies; and
- quality assurance of the assessment (exit assessments and site-based continuous assessment);
- issue certificates to learners who have achieved qualifications; and
- conduct and commission research.

Umalusi defines quality assurance in terms of the work of its functional units. This definition of quality plays out on an everyday basis in the form of the activities, instruments, and processes of the four national operations units. These four units are (1) the Quality Assurance of Assessment unit; (2) the Qualifications, Curriculum, and Certification unit; (3) the Evaluation and Accreditation unit; and (4) the Statistical Information and Research unit.

## Purpose of the report

The overall purpose of the NSC Indicator Report, which will be published at regular intervals, is to report on indicators for monitoring and evaluating standards in the NSC qualification, within the context of Umalusi's mandate.

This document is Umalusi's first quality indicator report of its kind, and is focused on the years 2008 to 2013. The scope of this report has been kept deliberately broad, and while a great deal of statistical information is presented herein, analyses of key trends that arise from the data are also provided. Trends are highlighted throughout the report, and wherever possible, data has been examined through a macro lens, in order to provide possible explanations of observed trends. As with any enterprise of this size and scope, most of the explanations provided are hypotheses that will require empirical testing, and in many cases an even broader longitudinal dataset in order to confirm their veracity.

[^0]As much as possible, this report is intended to provide a macro-level overview of the NSC qualification and the system that supports it. As such, a great deal of information on socioeconomic and demographic trends is included, in order to provide a rich dataset that will allow for a nuanced understanding of the NSC qualification and the environment in which it is delivered. It should be noted that the vast majority of the data in this report pertains to the public system, and thus many of the conclusions reached will be advanced in relation to that system, with limited coverage of the private education system that supports the NSC. The private system is also not a monolithic entity, and different assessment bodies operate in that space. There are also many private schools that write the Department of Basic Education's (DBE) examinations. Since the largest slice of the NSC environment is the public sector, Umalusi has resolved to concentrate on that space primarily - at least for this first NSC Indicators report.

When Umalusi conceived of what an 'indicator' might be within the system, it cast the net wide. As the quality assurance body for the sector in which the NSC operates, Umalusi is convinced that individual data points - while instructive - cannot provide us with an adequate picture of what the 'quality' of the system is. While the pass rate for the NSC has increased, that data point alone does not indicate quality without first understanding the trends in the environment in which that statistic pertains. Thus questions about enrolment, dropout rate, relative poverty between provinces, demographic and gender performance patterns must be asked, and the levels at which results in specific subjects are achieved must be ascertained. At every point, Umalusi is interested in what information the data can provide about the overall quality of the system that it works to quality assure. Thus, the idea of an 'indicator' is necessarily broad, and is something that will be developed and expanded as more data is gathered over time.

## The National Senior Certificate (NSC)

The National Senior Certificate (NSC), popularly known as 'matric', is the primary schoolleaving qualification in South Africa. A learner can pass the NSC at any one of the following levels:

Basic Pass - A learner has satisfied the requirements at a level that allows for the schoolleaving certificate to be issued, but does not have access to higher education.
Certificate Pass - A learner has satisfied the requirements at a level that allows for the school-leaving certificate to be issued, and is eligible to apply for further higher certificate-level study.
Diploma Pass - A learner has satisfied the requirements at a level that allows for the school-leaving certificate to be issued, and is eligible to apply for further diploma-level study.
Bachelor's Pass - A learner has satisfied the requirements at a level that allows for the school-leaving certificate to be issued, and is eligible to apply for further degree-level study.

The different levels of pass are determined by the learner's marks in various categories of subject, as detailed in the table below:

Table 1: NSC pass-level marks

|  | National Senior Certificate |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | NSC | With admission requitements to: |  |  |
|  |  | Higher Certificate | Diploma | Bachelors |
| Home Language | 40\% | The NSC with | The NSC with | The NSC with |
| FAL | 3 subjects | a minimum of | a minimum of | a minimum of |
| Life Orientation | passed with | $\geq 30 \%$ in the | $\geq 30 \%$ in the | $\geq 30 \%$ in the LOLT |
| Mathematisc/ Maths Literacy | $\geq 40 \%$ (including the HL ) and 3 | language of learning and | LOLT of the HE institution, and | of the HE institution and |
| 3 subjects offered from group B | passed with $\geq 30 \%$. <br> Can fail one subject, provided there is full evidence of the SBA having been completed. | teaching (LOLT) of the HE institution | $\geq 40 \%$ in four recognized 20-credit subjects [that is, excluding life Orientation] | $\geq 50 \%$ in four designated 20-credit subjects [that is, excluding Life Orientation] |

At the end of 2014, the NSC was examined under the revised Curriculum and Assessment Policy Statements (CAPS), which served to update the National Curriculum Statements (NCS). Thus, in 2015 Umalusi has chosen to release this first Indicators report to trace the development of the education system under the previous iteration of the curriculum. When a new or heavily modified curriculum is instituted, it is likely that many of the observed trends that occurred under the previous curriculum may no longer pertain.

Given that the NCS was stable for a period of five years, between 2008 and 2013, the statistics in this report cover that period so that the reader will be able to observe the development of the system under that curriculum. It is also well understood that any new curriculum requires some years to become entrenched in the system, so it is important to provide information on the developments during the tenure of the NCS, while not attempting to trace trends across the NCS and CAPS curricula.

## Indicators of quality in the NSC

This report provides two broad sets of indicators - input indicators and output indicators. Input indicators are ones that give insight into the environment in which learning takes place within the education system. Output indicators generally are centred on performance, both of learners and schools. Using this as the organising principle, this research reports on the following 10 indicators, which are disaggregated in the relevant sections of the report:

## Input Indicators

Survival to Grade 12
Impact of educational inputs
Contextual factors

## Output Indicators

NSC performance by province
NSC performance by race and gender NSC performance by quintile
Performance of 18-year-olds
NSC performance by subject
School performance in the NSC by province
School performance in the NSC by quintile

At the time of writing, the NSC had been operating as the Grade 12 exit examination for five years, from 2008 to 2013, and this report seeks to review the quality of the NSC over that period. As discussed, this also covers the full period during which the National Curriculum Statements (NCS) were implemented, having been replaced by the Curriculum and Assessment Policy Statements (CAPS) in 2014. While the focus of the report is

An overview of the factors that affect the quality of the school system as a whole and, thus, the NSC results. on the NSC results from 2008 to 2013, a number of indicators have been utilised to expand the scope of the review to include an overview of the factors that affect the quality of the school system as a whole and, thus, the NSC results - both in terms of the number of learners who write the NSC and in terms of the quality of the results.

The report is divided into three sections:

The first section investigates a number of the background factors that affect the NSC results. These factors represent the quality of the school system, as proxied by enrolment coverage, repetition rate and retention of learners; the adequacy of inputs such as educators, materials and school buildings; the relative poverty of the learners' backgrounds; and the educational level of the adults in the country. While none of these factors are analysed in this report in direct relation to the individual learner's performance, they constitute many of the causal factors of performance differences among provinces, race and gender.

The second section gives a detailed description of the NSC results for 2008-2013, both in terms of overall performance and performance in subjects with the highest enrolment. Wherever possible, the data is disaggregated by province, race and gender.

The third section looks at NSC performance at the school level. In this regard, schools' overall pass rates by province and quintile, as well as by performance in individual subjects is analysed.

The first section of the report, which covers the quality indicators of the school system as a whole, draws on a number of monitoring reports and data published by the Department of Basic Education (DBE). The most recent are the:

- Report on the Progress in the Schooling Sector Against Key Indicators (DBE 2013a);
- Education for All (EFA) 2013 Country Progress Report: South Africa (DBE: 2013b);
- Macro Indicator Report: October 2013 (DBE 2013c);
- General Education System Quality Assessment: Country Report South Africa (DBE 2013d); and
- The Development Indicators published by the Department of Performance Monitoring and Evaluation in the Presidency.

These extremely comprehensive reports are drawn from a variety of data sources regularly collected by the DBE, the Education Management Information System (EMIS), the School Register of Needs, PERSAL and ANA, which form the backbone of the DBE's access and quality monitoring system. Data from other government departments such as the Treasury and Statistics South Africa supplement the picture of education delivery, and more recently, the DBE has conducted ad hoc surveys, such as the 2011 School Monitoring Survey, and commissioned research reports.

The calculation of a large number of indicators has been extremely thoroughly conducted by the DBE, and it was not felt necessary or appropriate for this report to replicate its work. It is also not possible in this report to replicate the entirety of the indicators that have been produced by the DBE for a variety of platforms. As such, this report extracts a summary of the indicators that are most pertinent to examining the factors underlying the output from the NSC.

Sections 2 and 3 of this report draw almost exclusively on data generated by, or housed at Umalusi, and pertain directly to the NSC in terms of results and observed trends in the qualification. Wherever possible, important trends are highlighted, and possible reasons for the observed trends are advanced. In general, it is often difficult to say with certainty why a certain trend is occurring, without additional focused research on that particular topic. Thus, while explanations are offered for many of the trends that are highlighted in this report, they will often represent what Umalusi considers to be the most likely contributing factor or factors to a phenomenon - rather than a definitive causal statement.

It should be noted that during the period being analysed, the cohort that was most affected by the policy Age Requirements for Admission to Any Ordinary Public Government School (DoE 1998) reached Grade 12 in 2011 . One of the aspects of the Age Requirements policy (DoE 1998) was the normalisation of the entry age into Grade 1, at 6 years old. This meant the cessation of enrolment by under-age children in Grade 1, which reduced the enrolment in 2000 of Grade 1 learners by as much as $30 \%$. While many of these under-age learners would have repeated Grade 1, a significant number of them would have continued to Grade 2. This reduction in the number of learners carried through with each subsequent Grade enrolment, and a small but significant decrease in this cohort is seen in the decreased number of learners enrolled in Grade 12 in 2011 , along with a reduction in the number of learners enrolling for the NSC in 2011. The impact of this is noted further on in this report.

# 1 Factors affecting the quality of the NSC results 


#### Abstract

The broader educational and socio-economic environment in which learners are situated has a substantial impact on their performance in the NSC. In this regard, home environment as well as the quality of schooling in primary and secondary schools affects the number of candidates writing, and ultimately, the number passing. This section looks at the quality of the school system, as proxied by enrolment coverage, repetition rate and retention of learners; the adequacy of inputs such as educators, materials and school buildings; the relative poverty of the learners' backgrounds; and the educational level of the adults in the country. While none of these factors can be analysed in this report in direct relation to the individual learner's performance, they constitute many of the causal factors distinguishing performance among provinces, race and gender.


Challenges in the quality of primary schooling are certainly pertinent to the attainment of the NSC; however, it is beyond the scope of this investigation to review the various international assessments of primary school achievement, and only the Annual National Assessment of 2012 is presented.

It is hoped that through a detailed examination of enrolment both by race and gender and across the various levels of the system, this report will be able to provide an understanding of where the system as a whole is succeeding in terms of learner retention, and that it will identify which aspects require intervention. In order to indicate 'quality', however, enrolment is not enough. It is not sufficient to know that learners are staying in school, unless we know what kind of infrastructure those schools offer. It is not sufficient to know about infrastructure unless we know about the academic results that learners are able to achieve at the various levels. Thus, this report has provided as much statistical information as possible on this topic in this and subsequent sections in order to get an idea of the environment in which learners must operate on their journey towards achieving an NSC qualification.

### 1.1 Survival to Grade 12

The first indicator of quality examined in this report is that of Survival to Grade 12. This overarching indicator is designed to capture how many learners enrol in the system, and at what ages. It also shows how many of those learners 'survive' until the end of Grade 12. This indicator is disaggregated in various ways, first by examining pre-school or Grade $R$ enrolment and tracing that through primary and secondary schooling. The Further Education and Training (FET) phase is then examined in detail to determine how many learners enter that phase and, in turn, how many exit either as holders of the NSC or otherwise. Wherever possible, aspects of this this indicator have been broken down by province and gender.

Quantitatively there is relative stability in primary school enrolment, with over $98 \%$ of $7-15$-year-olds attending school (DBE 2011). While there are a few percentage points difference in the 7-15-year-olds attending school among the provinces, it is largely in

Learners drop out of secondary school in increasing numbers between Grades 10 and 12.
secondary school where the differences in enrolment between province, race and gender begins to widen.

In the country as a whole, learners drop out of secondary school in increasing numbers between Grades 10 and 12. However, male learners drop out in greater numbers than female learners do. This dynamic leads to some interesting trends in that the dropping out of the weaker male learners and the retention of their female counterparts: in terms of aggregate pass rates, female candidates do not perform as well as male candidates; however, numerically, there are more female than male candidates passing and gaining a Bachelorslevel pass. This dynamic differs among races, with Coloured, Indian and White females gaining higher basic and Bachelor-level pass rates than male candidates, as well as more female than male candidates passing and gaining a Bachelors-level pass.

There are also substantial differences in provincial dropout rates, with the poorer provinces of the Eastern Cape, Free State, North West and Mpumalanga having learners drop out at a greater rate than in the wealthier provinces of Gauteng, KwaZulu-Natal and the Western Cape. Limpopo has a relatively low dropout rate, given that it is the second poorest province (per capita) in the country.

### 1.1.1 Enrolment of five-year-olds in pre-school programmes

One of the policy objectives aimed at improving learners' ability to master the early Grades of primary school, and implemented by the DBE, was the introduction of Grade R. While not compulsory, the inclusion of 5 -year-olds in a pre-school programme is over $80 \%$, and the rollout of formal Grade $R$ in primary schools has reached a gross enrolment ratio (GER) of $69.7 \%$, from $15.2 \%$ in 1999.

The figures in the table and graph below show a steady increase in the percentage of five-year-old children who are enrolled in formal school-based pre-school programmes or informal pre-school programmes. It is clear that this represents a fairly dramatic improvement in the period covered (2002-2011). Although such figures cannot attest to the quality of

A sharp increase in access took place between 2008 and 2009. the institutions represented in these figures, it must be acknowledged that such large-scale increases in access to Early Childhood Education (ECD) can only be interpreted as a positive indicator.

It is of interest that a sharp increase in access took place between 2008 and 2009, although the reasons for such a rapid upward movement are unclear at this stage.

Table 2: Percentage of 5 -year-olds enrolled in an educational institution, by gender, 2002-2011

| Year | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Male | $41 \%$ | $50 \%$ | $52 \%$ | $60 \%$ | $63 \%$ | $61 \%$ | $61 \%$ | $75 \%$ | $82 \%$ | $84 \%$ |
| Female | $39 \%$ | $49 \%$ | $56 \%$ | $60 \%$ | $62 \%$ | $60 \%$ | $66 \%$ | $78 \%$ | $83 \%$ | $84 \%$ |

Source: General Household Survey 2002-2011 in DBE (2013c)


Figure 1: Percentage of 5 -year-olds enrolled in an educational institution, by gender, 2002-2011
Source: General Household Survey 2002-2011 in DBE (2013c)

The set of tables and graphs that follow represent the number and gross enrolment ratio of 5-year-olds attending Grade R attached to formal schools between 1999 and 2011. In 1999 just $15 \%$ of five-year olds attended Grade R at schools, and by 2011 this percentage had increased to $70 \%$.

The ongoing campaign for increased access to schooling at Grade R level and beyond has been unarguably successful.

In terms of actual numbers, the number of 5 -year-olds enrolled for Grade R rose from 156 292 in 1999 to 734654 by 2011 . This represents an increase of some $370 \%$, and indicates a dramatic expansion of early Grade schooling over this period. It is clear that the ongoing campaign for increased access to schooling at Grade R level and beyond has been unarguably successful, and although access is not yet universal, attention should now be focused on the quality of such schooling.

The average annual growth rate of $12 \%$ between 1999 and 2011 of 5 -year-olds enrolled in Grade $R$ in schools indicates that access has been increasing at a steady and rapid rate over the period concerned.

It is also interesting to note that the ratio of males to females enrolled for Grade R is generally balanced, a situation that does not hold true when the enrolment in the later grades is examined, and a high rate of attrition for male learners is observed.

Table 3: Enrolments in Grade R and Gross Enrolment Rates for Grade R, by gender, in ordinary schools 1999-2011

|  | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males | 77718 | 113024 | 120449 | 139018 | 157532 | 177844 | 202590 |
| Female | 78574 | 113607 | 121076 | 139708 | 157855 | 178643 | 202607 |
| Total | 156292 | 226631 | 241525 | 278726 | 315387 | 356487 | 405197 |
| GER (Male) | 15\% | 22\% | 23\% | 27\% | $31 \%$ | 35\% | 40\% |
| GER (Female) | 15\% | 22\% | 24\% | 27\% | $31 \%$ | 35\% | 41\% |
| GER (Tołal) | 15\% | 22\% | 23\% | 27\% | $31 \%$ | 35\% | 40\% |

Table 4: Enrolments in Grade R and Gross Enrolment Rates for Grade R, by gender, in ordinary schools 1999-2011 (cont.)

|  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Avg. ann. <br> growth rate |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Males | 221652 | 245116 | 272686 | 311595 | 355852 | 369398 | $12 \%$ |
| Female | 219969 | 242409 | 271113 | 308628 | 351351 | 365256 | $12 \%$ |
| Total | 441621 | 487525 | 543799 | 620223 | 707203 | 734654 | $12 \%$ |
| GER (Male) | $44 \%$ | $49 \%$ | $50 \%$ | $60 \%$ | $67 \%$ | $70 \%$ |  |
| GER (Female) | $44 \%$ | $49 \%$ | $50 \%$ | $60 \%$ | $67 \%$ | $70 \%$ |  |
| GER (Total) | $44 \%$ | $49 \%$ | $50 \%$ | $60 \%$ | $67 \%$ | $70 \%$ |  |

Source: DBE education statistics and StatsSA mid-year population estimates in DBE (2013c)


Figure 2: Enrolments in Grade R in ordinary schools, by gender, 1999-2011
Source: DBE education statistics and StatsSA mid-year population estimates in DBE (2013c)


Figure 3: Gross Enrolment Rates for Grade R in ordinary schools 1999-2011 (as percentage of total age cohort)
Source: DBE education statistics and StatsSA mid-year population estimates in DBE (2013c)

### 1.1.2 Enrolment in primary school

South Africa has $99 \%$ of primary school-aged children enrolled in school (DBE 2013b), which is a significant achievement for a developing country. Unfortunately, this achievement is not supported by a sufficient quality of teaching and learning to ensure a resultant quality and efficiency of outcomes. A complex interplay of family background, rural deprivation, urban poverty, underresourced schools, and paucity of provincial and school management all contribute to a lack of quality in

South Africa has $99 \%$ of primary school-aged children enrolled in school. primary schools. While learners do drop out of primary school, this number is negligible; the key indicator of a lack of learning is evident in the Annual National Assessment (ANA) results (as well as in several international test results, which are reviewed here).

The tables and graphs below show the enrolment in each Grade of primary school, the gross ${ }^{2}$ and net $^{3}$ enrolment ratios (GER and NER), as well as the age-specific enrolment ratio4. While data for these indicators is usually taken from the EMIS for learner numbers and StatsSA's mid-year estimates of population figures, these figures use StatsSA's General Household

[^1]Survey. A number of experts (Fleisch 2008, Gustafsson 2012) agree with the DBE (2013c) that up to the Census 2011, the population of children in the mid-year estimates was somewhat high and that using one source of enrolment and population data gives a more accurate representation of primary school enrolment indicators.

The following table and graph show the enrolment by Grade and gender in primary school from 2008 to 2013 as well as the average annual growth rate of each Grade. Grades 1 and 2 have seen an average annual growth rate of $2 \%$ for both genders. Given that the overall primary gross enrolment ratio in 2011 was $113 \%$, it is probable that this growth in Grades 1 and 2 is made up of an increasing number of repeaters. In the higher grades of primary school, there has been a negative growth rate. This is not necessarily a problem, as it may be due to a reduction in the number of repeaters in these Grades. In order to assess properly the dynamics of the primary enrolment over this period, a closer examination of the gross and net enrolment by grade, as well as the repeater and dropout rates by grade are required.

Table 5: Primary enrolment, by grade and gender, 2008-2013

|  |  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Avg. ann. growth rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 1 | Male | 584737 | 576539 | 583208 | 612970 | 631490 | 640211 | $2 \%$ |
|  | Female | 537377 | 530288 | 533691 | 564119 | 577483 | 582640 | 2\% |
|  | Total | 1122114 | 1106827 | 1116899 | 1177089 | 1208973 | 1222851 | 2\% |
| Grade 2 | Male | 533058 | 518903 | 513506 | 517839 | 553151 | 576791 | 2\% |
|  | Female | 498763 | 485408 | 480904 | 485514 | 521637 | 539636 | 2\% |
|  | Total | 1031821 | 1004311 | 994410 | 1003353 | 1074788 | 1116427 | 2\% |
| Grade 3 | Male | 524875 | 518371 | 502297 | 492934 | 497656 | 524750 | 0\% |
|  | Female | 492781 | 486214 | 470371 | 464275 | 469717 | 500435 | 0\% |
|  | Total | 1017656 | 1004585 | 972668 | 957209 | 967373 | 1025185 | 0\% |
| Grade 4 | Male | 544224 | 528874 | 520578 | 507964 | 502388 | 500833 | -2\% |
|  | Female | 506636 | 491012 | 482067 | 466896 | 463961 | 463797 | -2\% |
|  | Total | 1050860 | 1019886 | 1002645 | 974860 | 966349 | 964630 | -2\% |
| Grade 5 | Male | 530519 | 516414 | 502136 | 491376 | 484246 | 474716 | -2\% |
|  | Female | 512493 | 492956 | 476847 | 465827 | 454779 | 448846 | -3\% |
|  | Total | 1043012 | 1009370 | 978983 | 957203 | 939025 | 923562 | -2\% |
| Grade 6 | Male | 503968 | 509882 | 496411 | 481719 | 476970 | 464693 | -2\% |
|  | Female | 512493 | 502737 | 481605 | 464708 | 458476 | 444402 | -3\% |
|  | Total | 1016461 | 1012619 | 978016 | 946427 | 935446 | 909095 | -2\% |
| Grade 7 | Male | 478314 | 484720 | 489644 | 474061 | 460925 | 457217 | -1\% |
|  | Female | 486031 | 486182 | 491103 | 467230 | 451603 | 444882 | -2\% |
|  | Total | 964345 | 970902 | 980747 | 941291 | 912528 | 902099 | -2\% |
| Total | Male | 3699695 | 3653703 | 3607780 | 3578863 | 3606826 | 3639211 | 0\% |
|  | Female | 3546574 | 3474797 | 3416588 | 3378569 | 3397656 | 3424638 | -1\% |
|  | Total | 7246269 | 7128500 | 7024368 | 6957432 | 7004482 | 7063849 | -1\% |

[^2]

Figure 4: Primary enrolment, by grade and gender, 2008-2013
Source: DOE 2010, DBE 2011, 2011b, 2012, 2012b and 2013e

As can be seen in the table below, the national GER for primary school is $113 \%$, which indicates that a number of under- or over-age children are enrolled in school, either through entering school younger or older than the official age of entry or through repeating and remaining in school after the official age for finishing primary school. A NER of under $100 \%$ is most often an indication that a number of children are entering school late and/or that children who have

> Gauteng and the Western Cape are the provinces that most often enrol learners at the appropriate age. entered school early are progressing through the system and are in secondary schooling while still of official primary school age.

It is clear that Gauteng and the Western Cape are the provinces that most often enrol learners at the appropriate age, and it can also be inferred that the repeater rate is lowest in these two provinces. In contrast, the Eastern Cape, the North West and Limpopo seem to demonstrate the poorest control of these factors, with gross enrolment rates of $130 \%, 118 \%$ and $117 \%$ respectively.

The Net Enrolment Ratio (NER) is a useful indicator, since it allows us to measure the proportion of children of the correct age who are enrolled in a certain grade. Thus, in the table below, it shows that in the Eastern Cape, for example, some $93 \%$ of children of appropriate primary school age were indeed enrolled in primary school. When comparing this with the Gross Enrolment Ration (GER), it is thus possible to see that $130 \%$ of learners of the appropriate age are enrolled in the Eastern Cape primary schooling system - meaning that more learners are in primary school than there are children of primary schooling age. This in all likelihood is due to a slow throughput rate, with learners not progressing at the correct rate through the system.

Table 6: Primary GERs and NERs, by province, 2011 (\%)

|  | GER |  | NER |
| :--- | :--- | :--- | :--- |
| Eastern Cape |  | 130 | 93 |
| Free State |  | 111 | 92 |
| Gauteng | 102 | 88 |  |
| KwaZulu-Natal | 114 | 90 |  |
| Limpopo | 117 | 91 |  |
| Mpumalanga | 114 | 91 |  |
| North West | 118 | 94 |  |
| Northern Cape | 113 | 93 |  |
| Western Cape | 105 | 91 |  |
| National | 113 | 91 |  |

Source: StatsSA General Household Survey 2011 in DBE (2013c)


Figure 5: Primary GERs and NERs, by province, 2011 (\%)
Source: StatsSA General Household Survey 2011 in DBE (2013c)

Ultimately, the age-specific enrolment rates (ASER) give the most accurate reflection of whether the country's 7-13-year-olds are in school, regardless of what phase they are in. The graph below shows how many 7-13-year-olds were enrolled in school, regardless of grade, in 2002 and 2011. Between

> Learners who are supposed to be in primary school are being successfully enrolled and are remaining in the appropriate grades in almost every instance. 2002 and 2011 there was a stabilisation of enrolment by age, with seven-year-old enrolment growing from $91 \%$ to $99 \%$. This positive indicator for the system at large implies that learners who are supposed to be in primary school are being successfully enrolled, and are remaining in the appropriate grades in almost every instance. The improvements in enrolment are most marked in the early grades, with 7 -year-olds improving from $91.3 \%$ enrolment in 2002 to $98.7 \%$ in 2011.

Table 7: Age-specific enrolment rates for 7-13-year-olds in 2002 and 2011 (\%)

| Age | 2002 |  | 2011 |
| :--- | :--- | :--- | ---: |
| $\mathbf{7}$ | 91.3 |  | 98.7 |
| $\mathbf{8}$ |  | 96.5 |  |
| $\mathbf{9}$ |  | 97.5 |  |
| $\mathbf{1 0}$ | 98.2 | 99.7 |  |
| $\mathbf{1 1}$ | 98.3 | 99.3 |  |
| $\mathbf{1 2}$ | 98.4 | 98.8 |  |
| $\mathbf{1 3}$ | 97.7 | 99 |  |

Source: StatsSA General Household Survey 2002 and 2011 in DBE (2013c)


Figure 6: Age-specific enrolment rates for 7-13-year-olds in 2002 and 2011 (\%)
Source: StatsSA General Household Survey 2002 and 2011 in DBE (2013c)

### 1.1.3 Enrolment in secondary school

The following table and graph show the cohort (highlighted) most affected by the Age Requirements policy (DoE 1998). In 2008, the Grade 9 cohort of 902656 was the lowest of any of the Grade 9 enrolments between 2008 and 2013. In subsequent years this cohort grew at an average annual rate of $4 \%$. This decreased enrolment due to the Age Requirements policy (DoE 1998) flows through to the subsequent grades, up to Grade 12 in 2011 where, again, the cohort at 534498 was the lowest

> For each year in the dataset, there is a dramatic decrease in the number of learners moving from Grade 11 into Grade 12

The table also shows the decrease due to the dropping out of learners in Grades 10, 11 and 12. Enrolment in Grade 10 was the highest in secondary school - due in large part to it having a high repetition rate. Repetition and dropout affected the enrolment of Grades 11 and 12 , with declining numbers enrolling with each subsequent grade.

For each year in the dataset, there was a dramatic decrease in the number of learners moving from Grade 11 to Grade 12. In 2008, for example, there were 902752 learners enrolled in Grade 11, but those who moved to Grade 12 the following year numbered just 602278 - a loss of some 300474 learners. It is not entirely clear what informs this trend, although factors such as 'gate-keeping's or learners dropping out of the NSC to pursue other qualifications such as the NC(V) are possibilities. It is difficult to conceive of this loss of some $300000+$ learners yearly being understood as anything other than a negative trend, and the reasons for such a trend, as well as strategies to arrest it must be investigated urgently.

Table 8: Number of learners enrolled in Grades 8 to 12 in 2008 to 2013 (public and independent)

|  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Avg. ann. growth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 8 | 926603 | 991093 | 1001180 | 1008101 | 971509 | 942345 | 0.1\% |
| Grade 9 | 902656 | 926531 | 1009327 | 1049904 | 1096113 | 1073060 | 4.0\% |
| Grade 10 | 1076527 | 1017341 | 1039762 | 1055790 | 1103495 | 1146285 | 1.6\% |
| Grade 11 | 902752 | 881661 | 841905 | 847738 | 874331 | 834611 | -1.2\% |
| Grade 12 | 595216 | 602278 | 579384 | 534498 | 551837 | 597196 | -0.9\% |
| Total | 4403754 | 4418904 | 4471558 | 4496031 | 4597285 | 4593497 | 1.0\% |

* Average annual growth rate calculated as the slope of natural logs over the intervals. Method used by all graphs unless otherwise stated.
Source: DOE 2010, DBE 2011, 2011 b, 2012, 2012b and 2013e

[^3]

Figure 7: Number of learners enrolled in Grades 8 to 12 from 2008 to 2013 (public and independent)
Source: DOE 2010, DBE 2011, 2011b, 2012, 2012b and 2013e
As evidenced in the table and graph below, there has been growth in the enrolment of independent schools from 140055 to 193370 (an average annual growth of $10 \%$ ). These schools, however, constituted only $3 \%$ and $4 \%$ of total secondary enrolment in 2008 and 2013 respectively.

There appears to be greater retention between Grades 8 and 12 in independent schools than in state schools, particularly between Grades 11 and 12 . While in state schools some $30 \%$ of learners appear to have dropped out between Grades 11 and Grade 12, no such trend is evident in independent schools. It is likely that the independent schooling system is indeed exhibiting far greater retention than that of state schools. This may indicate differences

There appears to be greater retention between Grades 8 and 12 in independent schools than in state schools. in the socio-economic status of the populations that attend each type of school, and may also be an indicator of the quality of schooling in the independent schooling sector such that 'gate-keeping' and learner dropout are not factors that have a large effect on learner retention in such schools.

It is also evident that the independent schooling sector is growing at a far faster rate than state schooling, although given the relatively small size of the independent schooling sector, this is to be expected.

Table 9: Enrolment in all independent schools by grade, and independent school enrolment as a percentage of the national enrolment, 2008 and 2013

| Independent | 2008 | 2013 | Avg. ann. growth |
| :--- | ---: | ---: | ---: |
| Grade 8 | 27506 | 36776 | $5.8 \%$ |
| Grade 9 | 25513 | 36505 | $7.7 \%$ |
| Grade 10 | 28653 | 39272 | $7.3 \%$ |
| Grade 11 | 29627 | 37307 | $5.6 \%$ |
| Grade 12 | 28756 | 40751 | $7.1 \%$ |
| Total | 140055 | 190611 | $6.7 \%$ |
| \% of national enrolment | $3 \%$ | $4 \%$ |  |
| Soun |  |  |  |

Source: DOE 2010, DBE 2011, 2011b, 2012, 2012b and 2013e


Figure 8: Enrolment in independent schools, by grade, 2008 and 2013
Source: DOE 2010, DBE 2011, 2011b, 2012, 2012b and 2013e

### 1.1.4 Gross enrolment of Grades 8 to 12 learners between 2008 and 2012

The gross enrolment ratio for each grade is an important indicator of the relative number of learners in each grade and shows the extent to which the respective cohort of children is enrolled at school. Again, the impact of the Age Requirements policy (DoE 1998) is seen with a drop in the enrolment ratio most evident in Grade 9 in 2008, Grade 10 in 2009, Grade 11 in 2010 and Grade 12 in 2011 (highlighted). As seen in the section above, enrolments and consequently the gross enrolment ratio starts to rise again after this.

In terms of the overall cohort dynamics, the enrolment ratio rises in Grade 10, with the greatest repeater rate seen in this Grade. It is likely that this is due to learners being held back in Grade 10 far more frequently than in other grades - in some cases due to 'gate-keeping', a process whereby weaker learners are held back to ensure that they do not progress to Grade 12 and ultimately fail the NSC, thus negatively affecting a school's pass statistics.

By Grade 12 the enrolment ratio of male and female learners was $55 \%$ and $65 \%$ respectively in 2008 and $48 \%$ and $58 \%$ in 2012 . However, the enrolment ratio in Grade 12 in future years is likely to rise, due to the stabilisation of the learner flow-through, as the effects of the Age Requirements policy (DoE 1998) wear off. Irrespective of any such correction in subsequent years, the extremely rapid dropout rate between Grades 11 and 12 is a cause for serious concern. Indications are that some $40 \%$ of learners drop out at the end of Grade 11, before entering Grade 12 - a phenomenon that is difficult to explain in the absence of widespread gate-keeping.

It is a disturbing feature of these statistics, however, that even beyond the dropout rate already observed above, it is particularly male learners whot are dropping out of the schooling system at Grade 12 level at an alarming rate. It is also likely that the enrolment rates of more than $100 \%$ in Grades 9 and 10 indicate learners being held back in these Grades in particular.

Table 10: Number of Grade 8-12 learners between 2008 and 2012, as a percentage of the respective age cohort between 2008 and 2012

| Grade | Gender | 2008 | 2009 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 8 | Male | 90\% | 95\% | 97\% | 98\% | 96\% |
|  | Female | 90\% | 97\% | 96\% | 98\% | 94\% |
| Grade 9 | Male | 89\% | 90\% | 98\% | 103\% | 108\% |
|  | Female | 87\% | 90\% | 98\% | 101\% | 105\% |
| Grade 10 | Male | 103\% | 98\% | 99\% | 99\% | 103\% |
|  | Female | 109\% | 100\% | 103\% | 105\% | 110\% |
| Grade 11 | Male | 83\% | 80\% | 77\% | 76\% | 77\% |
|  | Female | 97\% | 94\% | 87\% | 88\% | 92\% |
| Grade 12 | Male | 55\% | 54\% | 52\% | 48\% | 48\% |
|  | Female | 65\% | 66\% | 62\% | 56\% | 58\% |

Source: StatsSA Mid-Year Estimates; DOE 2010, Source: DOE 2010, DBE 2011, 201 1b, 2012, 2012b


Figure 9: Number of Grade 8-12 learners between 2008 and 2012, as a percentage of the respective age cohort between 2008 and 2012 (\%)
Source: StatsSA Mid-year Estimates; DOE 2010, Source: DOE 2010, DBE 2011, 201 1b, 2012, 2012b

As with the primary school cohorts, both an over-estimation of the population in the StatsSA Mid-year Estimates and the dynamics of repetition give slightly lower gross enrolment ratios than the data extracted from the General Household Survey does. The table below gives the secondary school gross and net enrolment ratios by province. As can be seen, the national GER of $103 \%$ is higher than that which would have been imputed from the data above. While learners certainly dropped out of secondary school (see the section on dropout, below), there are a substantial number of learners who repeated - particularly from Grade 10 onwards. While repetition by itself is not an explicitly negative indicator, if it is used to hold back learners who schools feel are in danger of failing the NSC, and thereby negatively affecting the pass statistics of that school, this then becomes a perverse practice.

Table 11: Secondary gross and net enrolment ratio, by province, 2011 (\%)

| Province | GER |  |
| :--- | ---: | ---: |
| Eastern Cape | 94 | NER |
| Free Stałe | 104 | 71 |
| Gauteng | 103 | 73 |
| KwaZulu-Natal | 107 | 79 |
| Limpopo | 120 | 76 |
| Mpumalanga | 106 | 80 |
| North West | 95 | 74 |
| Northern Cape | 93 | 74 |
| Western Cape | 86 | 73 |
| National | 103 | 71 |

Source: General Household Survey in DBE (2013c)


Figure 10: Secondary gross and net enrolment ratio, by province, 2011 (\%)
Source: General Household Survey in DBE (2013c)

The extent of learner repetition can be seen in the following graph, which shows the age-specific enrolment rates of 14- to 22-year-olds who are still in school. Between 14 and 16 years of age, the age-specific enrolment rates
are over $90 \%$, which suggests that by 16 years of age, some $10 \%$ of learners have left school it is not clear whether they have left the education system, as the ASER shown below pertains only to school. By 18 years old, some $67 \%$ of the cohort are still in school, and a significant number of 19-21-year-olds are still enrolled.

Table 12: Age-specific enrolment rates (ASER) in school, for 14-22-year-olds,
2002 and 2011 (\%)

| Age | GER | NER |
| :--- | ---: | ---: |
| 14 | 97 | 97.2 |
| 15 | 94 | 97 |
| 16 | 90.5 | 91 |
| 17 | 84 | 85 |
| 18 | 67 | 67.5 |
| 19 | 48 | 43 |
| 20 | 32 | 28 |
| 21 | 22 | 18 |
| 22 | 12 | 10 |

Source: General Household Survey in DBE (2013c)


Figure 11: Age-specific enrolment rates (ASER) in school, for 14-22-year-olds, 2002 and 2011 (\%)
Source: General Household Survey in DBE (2013c)

The age-specific enrolment shown above does not give us information on what grades the learners are in. The graph below shows the ASER of the candidates in the NSC in 2008 and 2012. In 2008 some $15 \%$ of candidates were 17 years of age - this dropped to less than $5 \%$ by 2012 due to the introduction of the Age Requirements policy (DoE 1998). In 2012 only $35 \%$ of candidates were the correct age for their grade, $22 \%$ being 19 years old and the remaining $40 \%$ or so being 20 years or older.

There are few explanations that could account for this trend other than fairly widespread 'gatekeeping' - a practice in which learners who are unlikely to pass the NSC are held back in the lower grades or 'encouraged' to exit the system. The extent of this practice cannot be ascertained from these figures, and indeed requires focused research to be determined with any accuracy. It should be noted, however, that there are incentives in place for schools to improve NSC pass rates,

Widespread 'gate-keeping' - a practice in which learners who are unlikely to pass the NSC are held back in the lower grades or 'encouraged' to exit the system. and holding back weaker learners or allowing them to exit the system can achieve this without the substantial work required to improve each school as a whole. It is clear that interventions must be put in place to reverse this trend.


Figure 12: Age-specific enrolment of candidates in the NSC, 2008 and 2012

### 1.1.5 Gender parity in enrolment of Grades 8-12 learners, 2008-2013

The following table shows the number of learners enrolled by gender and the Gender Parity Index (GPI) from 2008 to 2013. Highlighted again are the Grades affected by the Age Requirements policy (DoE 1998).

[^4]The relative enrolment of male and female learners is interesting - changing from close to equal enrolment in Grades 8 and 9, to a GPI heavily in favour of female students by Grade 12. In Grade 10 the GPI is approximately 1.05, in Grade 11 it rises to between 1.14 and 1.19, and by Grade 12 the GPI ranges from between 1.17 and 1.21 .

This change in gender enrolment is attributable to male learners dropping out of school in higher numbers than female learners do. Despite male learners also repeating more than female learners in secondary school, they ultimately drop out of school and enter vocational training or the labour force at a greater rate than female learners do. The repeater rates (DBE 2011c) show that male learners repeat more than female learners in Grade 10 ( $18.7 \%$ and $15.7 \%$ respectively) and Grade 11 ( $15.9 \%$ and $9.2 \%$ respectively), and less than female learners in Grade 12 ( $6.9 \%$ and $9.2 \%$ respectively). This shift in Grade 12 can be attributed to the fact that male learners are more likely to have exited the system before the end of Grade 12, rather than to have repeated the Grade.

Table 13: Enrolment in Grades 8-12 of learners, by gender and GPI, 2008-2013 (public and independent)

| Grade | Gender | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Avg. ann. growth rate* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 8 | Male | 464956 | 492726 | 502393 | 506551 | 491447 | 478775 | 0.4\% |
|  | Female | 461647 | 498367 | 498787 | 501550 | 480062 | 463570 | -0.2\% |
|  | GPI | 0.99 | 1.01 | 0.99 | 0.99 | 0.98 | 0.97 |  |
| Grade 9 | Male | 459853 | 464415 | 503027 | 530110 | 554806 | 548242 | 4\% |
|  | Female | 442803 | 462116 | 506300 | 519794 | 541307 | 524818 | 4\% |
|  | GPI | 0.96 | 1.00 | 1.01 | 0.98 | 0.98 | 0.96 |  |
| Grade 10 | Male | 525411 | 504863 | 510663 | 512355 | 535198 | 554727 | 1\% |
|  | Female | 551116 | 512478 | 529099 | 543435 | 568297 | 591558 | 2\% |
|  | GPI | 1.05 | 1.02 | 1.04 | 1.06 | 1.06 | 1.07 |  |
| Grade 11 | Male | 418875 | 406649 | 393694 | 393185 | 399126 | 381113 | -2\% |
|  | Female | 483877 | 475012 | 448211 | 454553 | 475205 | 453498 | -1\% |
|  | GPI | 1.16 | 1.17 | 1.14 | 1.16 | 1.19 | 1.19 |  |
| Grade 12 | Male | 271836 | 272266 | 261809 | 246809 | 250964 | 268410 | -1\% |
|  | Female | 323380 | 330012 | 317575 | 287689 | 300873 | 328786 | -1\% |
|  | GPI | 1.19 | 1.21 | 1.21 | 1.17 | 1.20 | 1.22 |  |

[^5]

Figure 13: Enrolment in Grades 8-12 of learners, by gender and 2008-2013 (public and independent)
Source: DOE 2010, DBE 2011, 2011b, 2012, 2012b and 2013e

The dynamics evident in secondary school enrolment are seen again in the age-specific enrolment of candidates in the NSC. The table and graph below show the number and percentage of male and female candidates enrolled in the NSC, by age. In 2012, as well as there being more female candidates than male candidates, $40 \%$ of the males and $53 \%$ of the females were 17
or 18 . The phenomenon of male learners repeating more than female learners and dropping out more frequently than female learners is quite evident in this data.

Table 14: Number and percentage of candidates* aged 17-24 enrolled for the NSC, 2008 and 2012

|  | 2008 |  |  |  | 2012 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Male cand | \% of total | Female cand | \% of total | Male cand | \% of total | Female cand | \% of total |
| 17 | 27921 | 11\% | 56324 | 19\% | 5822 | $3 \%$ | 13249 | 5\% |
| 18 | 78805 | 31\% | 111481 | 37\% | 80362 | 37\% | 123372 | 48\% |
| 19 | 57698 | 23\% | 58226 | 20\% | 51044 | 24\% | 54699 | 21\% |
| 20 | 40110 | 16\% | 33126 | 11\% | 34893 | 16\% | 30762 | 12\% |
| 21 | 25401 | 10\% | 18867 | 6\% | 21664 | 10\% | 17379 | 7\% |
| 22 | 14520 | 6\% | 10678 | 4\% | 12362 | 6\% | 9374 | 4\% |
| 23 | 7261 | $3 \%$ | 5701 | $2 \%$ | 5723 | 3\% | 4554 | $2 \%$ |
| 24 | 3026 | 1\% | 2885 | 1\% | 2486 | 1\% | 2229 | 1\% |
| Total | 254742 | 100\% | 297288 | 100\% | 214356 | 100\% | 255618 | 100\% |

* Note: the totals do not add up to the full enrolment of candidates in the NSC, as shown in the following section, due to the existence of candidates older than 24 and candidates who have no date of birth.

Source: Umalusi NSC database


Figure 14: Number and percentage of candidates aged 17-24 enrolled for the NSC, 2008 and 2012

At a provincial level, these dynamics are more marked in the provinces with large urban centres, suggesting that there may be more alternative opportunities for male learners in either the labour market or other educational institutions than is the case in the rural provinces. However, further research needs to be undertaken into what male learners do when they leave school without having obtained an NSC.

The following table and graph show, by province, the number of male and female learners enrolled in Grade 8 in 2008 and Grade 12 in 2012, as well as the Grade 12 learners as a percentage of Grade 8 learners. In Grade 8 in 2008, there were slightly more male learners than female learners in most provinces (except the Eastern and Western Cape). In Grade 12 the higher dropout of male learners means that the ratio of male Grade 12 learners to Grade 8 learners is $54 \%$, and for females it is $65 \%$, an 11 percentage point difference. Across the provinces this difference ranges from 8 percentage points or less (in the Eastern Cape, Free State and North West) to 14 percentage points or more (in Gauteng and the Western Cape).

Gauteng and KwaZulu-Natal have the highest male retention, with the ratio of Grade 12 to Grade 8 being $61 \%$. Female retention is greatest in Gauteng, KwaZulu-Natal and the Western Cape, with a Grade 12 to Grade 8 ratio of $75 \%, 73 \%$ and $72 \%$ respectively.

Ultimately, these figures attest to the fact that almost half ( $46 \%$ ) of male learners dropped out of the schooling system nationally between Grade 8 and Grade 12 in the years in question. Less alarming, although still a matter of serious concern, is that just over one third of female learners (35\%) also dropped out of the system over this time period.

Although there is uncertainty surrounding whether learners are following alternative learning pathways, such as the $\mathrm{NC}(\mathrm{V})$, if a large percentage of the learners who drop out of school are indeed attempting to enter the labour market without an NSC or equivalent qualification, this is a serious cause for concern. Evidence is robust that the absorption rate of people into formal employment is strongly related to their level of education. Learners without an NSC or equivalent qualification face bleak prospects in the labour market, and the possibility of unemployment is very high for such a group.

Table 15: Number of male and female learners enrolled in Grade 8 in 2008, Grade 12 in 2012, and Grade 12 learners as a percentage of Grade 8 learners, by province

|  | Gender | 2008 Grade 8 | 2012 Grade 12 | Grade 12 learner as a \% of Grade 8 learners |
| :---: | :---: | :---: | :---: | :---: |
| EC | Male | 74848 | 32157 | 43\% |
|  | Female | 77716 | 40211 | 52\% |
| FS | Male | 26189 | 11728 | 45\% |
|  | Female | 25638 | 13478 | 53\% |
| GT | Male | 72522 | 44231 | 61\% |
|  | Female | 72378 | 54078 | 75\% |
| KZN | Male | 105369 | 64024 | 61\% |
|  | Female | 102814 | 74960 | 73\% |
| LP | Male | 69753 | 37873 | 54\% |
|  | Female | 67626 | 44259 | 65\% |
| MP | Male | 41544 | 23234 | 56\% |
|  | Female | 40815 | 27537 | 67\% |
| NW | Male | 29150 | 13339 | 46\% |
|  | Female | 28206 | 14894 | 53\% |
| NC | Male | 10276 | 4275 | 42\% |
|  | Female | 10090 | 5199 | 52\% |
| WC | Male | 35305 | 20103 | 57\% |
|  | Female | 36364 | 26257 | 72\% |
| National | Male | 464956 | 250964 | 54\% |
|  | Female | 461647 | 300873 | 65\% |

Source: DOE 2010, DBE 2011, $2011 \mathrm{~b}, 2012$, and 2012b


Figure 15: Number of male and female learners enrolled in Grade 8 in 2008 and Grade 12 in 2012, by province
Source: DOE 2010, DBE 2011, 2011 b, 2012, and 2012b

### 1.1.6 Main findings

In the preceding section the main findings are as follows:

- Learner enrolment figures have improved dramatically over time, most notably in the lower grades.
- Learner retention in the system is adequate until the FET phase (Grades 10-12) is examined; at that point a very large proportion of learners drop out of the system before attempting to write the NSC examinations.
- Learner retention is particularly poor in the case of male learners, who drop out of the system at a far greater rate than female learners.
- The figures indicate that there is a strong likelihood of 'gate-keeping' at the school level, a malpractice in which weaker learners are encouraged to leave the schooling system before writing the NSC - thus improving the overall pass rate of the school in question by not risking the learner being counted as a failure.


### 1.2 The impact of spending, teachers, textbooks and management on education quality

The previous indicator looked at the access of learners to the school system. In this section the primary indicator at issue is Impact of educational inputs. This indicator concerns the adequacy of educational inputs in primary and secondary school and looks at the quantitative markers that have been established as both measures of policy implementation and input quality, which are assumed to have an effect on the quality of the output. In this regard, sub-indicators of spending on education; the provision of educators and textbooks; curriculum coverage; and management are presented. In the final instance, the results of the Annual National Assessment give some focus to the quality of education in the early grades.

### 1.2.1 Spending on education

Government spending on education has increased in real terms between the budget years 2000/01 and 2011/12, and extremely progressive steps have been taken to increase funding to the poorest schools. The categorisation of schools into quintile recognises both the poverty of the community that the school serves and the physical facilities that the school may be lacking.

The following table and graph show the growth in government per-pupil spending on education. There has been substantial growth in per-learner spending in the poorest provinces between the 2000/01 and 2010/11 budget years, with the Eastern Cape,
Limpopo, Free State and KwaZulu-Natal having the greatest average annual increases in perlearner spending levels.

Table 16: Per-learner expenditure, by province, and average annual growth*
2000/01-20011/12 (rands)

|  |  | 2000/01 | 20011/12 |
| :--- | ---: | ---: | ---: |
| Eastern Cape | 3414 | 10781 | Avg. ann. growth rate |
| Free State | 3873 | 11653 | $11 \%$ |
| Gauteng | 4896 | 10421 | $11 \%$ |
| KwaZulu-Natal | 3109 | 9471 | $7 \%$ |
| Limpopo | 3346 | 10385 | $11 \%$ |
| Mpumalanga | 3486 | 9958 | $11 \%$ |
| North West | 3854 | 10235 | $10 \%$ |
| Northern Cape | 4340 | 10763 | $9 \%$ |
| Western Cape | 4496 | 10081 | $9 \%$ |
| National | 3868 | 10243 | $8 \%$ |
|  |  |  | $9 \%$ |

* Note: Growth rate calculated by endpoints. ${ }^{7}$

Source: The National Treasury 2012, DBE (2012b)


Figure 16: Per-learner expenditure, by province, 2000/01-2011/12
Source: The National Treasury 2012, DBE (2012b)

[^6]
### 1.2.2 Educators

The provision of educators as the largest school input is well within the policy target ranges - in terms of the learner:educator ratio of state-paid educators. However, the average class size target of 40 learners per class is exceeded by KwaZulu-Natal, Limpopo and Mpumalanga, where the figures range from 50 learners per class to close on 60 . These are rural provinces with small schools where it may be difficult to optimise educators, and to some extent, the problem could reside with a shortage of classrooms. An average class size of over 50 learners, however, suggests problems with the allocation, management and utilisation of educators.

The following table and graph shows the learner:educator ratio by province in 2012 for both the state-paid and the School Governing Body- (SGB) paid educators, and for just the statepaid educators. In the first case, the learner:educator ratio ranges between 29:1 and 31:1 (except for the Free State, where it is $27: 1$ ). However, when looking at the learner:educator ratio for only state-paid educators, there is a greater difference in the learner:educator ratio. These range from 29:1 in the Free State to 36.5:1 in the Western Cape.

Table 17: Learner:Educator ratio, by province, 2012

|  | State paid and SGB | State paid |
| :--- | ---: | ---: |
| Eastern Cape | 29.1 | 30.5 |
| Free State | 27.1 | 28.9 |
| Gauteng | 31.4 | 34.9 |
| KwaZulu-Natal | 31.2 | 32.6 |
| Limpopo | 30.1 | 30.5 |
| Mpumalanga | 31.1 | 32 |
| North West | 30.6 | 32.3 |
| Northern Cape | 31.8 | 33.5 |
| Western Cape | 30.6 | 36.5 |
| National | 30.4 | 32.3 |

[^7]

Figure 17: Learner:Educator ratio, by province, 2012
Source: DBE School Realities 2012 in DBE (2013c: 67)

The following table and graph show the average class size by province in 2002 and 2011. In 2002, the average class sizes in KwaZulu-Natal, Limpopo and Mpumalanga were well above the average of 42 learners per class - ranging between 50 learners per class and close on 60. In 2011, the average class size in these provinces was roughly the same, except for KwaZuluNatal, which had increased to 58 learners per class, and the North West, which had increased to 49 learners per class.

Table 18: Average class size by province, 2002 and 2011

|  | 2002 |  |
| :--- | :--- | :--- |
| Eastern Cape | 39 | 41 |
| Free State | 40 | 40 |
| Gauteng | 42 | 39.5 |
| KwaZulu-Natal | 53 | 58 |
| Limpopo | 57 | 56 |
| Mpumalanga | 51 | 51 |
| North West | 40 | 49 |
| Northern Cape | 39 | 40 |
| Western Cape | 42 | 39 |

[^8]The graph below reveals in particular a sharp increase in class size in the North West province, and a smaller but still significant rise in KwaZulu-Natal. It is possible that this is a reflection of the out-migration of teachers, who had either left the profession or moved to other provinces. It should be noted that the North West is the most sparsely populated province in South Africa, and thus, teacher out-migration would more easily show up in figures such as these. Further, since the province is relatively rural, it may be difficult to attract teachers into classrooms in this province - especially in more the A sharp increase in class size in the North West province, and a smaller but still significant rise in KwaZulu-Natal.


Figure 18: Average class size, by province, 2002 and 2011
Source: DBE (2013a)
South Africa has a large proportion of qualified educators. By 2012 the national percentage of qualified educators was $97 \%$, with most provinces having up to $99 \%$ of their educators qualified. Despite this, our schools perform worse in international tests than other counties with similarly qualified educators - Botswana for example. Spaull (2011) suggests in his work on the SAQMEC III data that lower levels of educator subject knowledge and

Our schools perform worse in international tests than other counties with similarly qualified educators. time on task have a more significant impact on learner performance than qualifications per se. There is also some evidence to suggest that the PERSAL system may overestimate the qualification status of educators in some instances, and it is thus possible that the qualification statistics presented below may be lower in reality if teachers' qualifications were examined directly.

Table 19: Percentage of qualified educators, 2008 and 2012 (\%)

|  | 2008 |  |
| :--- | :--- | :--- |
| Eastern Cape | 95 | 99 |
| Free State | 91 | 96 |
| Gauteng | 98 | 99 |
| KwaZulu-Natal | 88 | 92 |
| Limpopo | 97 | 100 |
| Mpumalanga | 95 | 99 |
| North West | 93 | 99 |
| Northern Cape | 92 | 95 |
| Western Cape | 95 | 97 |
| National | 94 | 97 |

Source: PERSAL in DBE (2013c: 62)


Figure 19: Percentage of qualified educators, 2008 and 2012 (\%)
Source: PERSAL in DBE (2013c: 62)

### 1.2.3 Textbooks

Learner support materials - including workbooks, textbooks and other media - have been shown in many studies to be a critical component of education quality. The correct use of the textbook is as important as its presence in the classroom, and monitoring such as the DBE's School Monitoring Survey is being conducted and is providing an indicator of textbook usage.

By 2007, according to the SAQMEC results, only $45 \%$ of Grade 6 learners had their own reading textbook, and only $36 \%$ of learners had their own Maths textbook. By 2011, according to the school monitoring survey, $61 \%$ of learners had all the necessary textbooks and workbooks for the entire year (DBE 2013a).

While the system improved in terms of the distribution of textbooks, there have been no recorded improvements in the situation since 2009.

The table and graph below indicate the percentage of StatsSA's General Household Survey respondents with schoolgoing children who indicated that a lack of books was a problem experienced at school from 2002-2012.

In 2012 and 2013, there were several widely reported 'textbook crises', and in the wake of these, it is expected that additional resources and attention will be devoted to this area, and improvements will perhaps resume.

The percentage decreased from 22.5\% in 2002 to $6.6 \%$ in 2012 . While this is a generally positive trend, and it is clear that the system has been improving in terms of the distribution of textbooks, it should be noted that there have been no recorded improvements in the situation since 2009. Given the rate of improvement that was recorded between 2002 and 2009, it is disappointing that textbook shortages are still a feature of the South African schooling system. In 2012 and 2013, there were several widely reported 'textbook crises', and in the wake of these, it is expected that additional resources and attention will be devoted to this area, and improvements will perhaps resume.

Table 20: Lack of books cited as a problem experienced at schools, 2002-2012 (\%)

|  | 2008 |
| :--- | ---: |
| 2002 | 22.5 |
| 2003 | 20.5 |
| 2004 | 15.7 |
| 2005 | 16.6 |
| 2006 | 14.8 |
| 2007 | 11.4 |
| 2008 | 11 |
| 2009 | 6.6 |
| 2010 | 6.4 |
| 2011 | 6.1 |
| 2012 | 6.6 |

Source: StatisticsSA General Household Survey 2002-2012, DBE (2013a)


Figure 20: Lack of books cited as a problem experienced at schools, 2002-2012 (\%)
Source: StatisticsSA General Household Survey 2002-2012, DBE (2013a)

### 1.2.4 School poverty quintiles

The following tables show the distribution of secondary schools in each province by quintile. While the analysis of pass rates, Bachelors-level passes and Mathematics achievement is analysed by quintile, it is important to reflect the relative share of schools by quintile and province. The quintiles are ranked from 1 (most poor) to 5 (least poor). Some schools in this table are listed as having 'no quintile', and in these cases, not enough data has been gathered for the schools concerned to allow for classification. While some $88 \%$ of all South African schools were accounted for in the quintile data by 2012, a province like Gauteng has some $31 \%$ of its schools listed as having 'no quintile'. This points to the rapid growth in the number of schools in that province having outstripped the ability of provincial authorities to gather the requisite data for proper classification. Although such gaps in the data are perhaps understandable, every effort should be made to acquire complete data for this indicator, as it forms one of the basic building blocks of our understanding of the socioeconomic situation that prevails in schools.

The provincial variation in the distribution tends to a higher distribution of Quintile 1 schools in the Free Sate, KwaZulu-Natal and Limpopo, with the Free State and KwaZulu-Natal having approximately $50 \%$ of their schools in Quintiles 1 and 2. Mpumalanga and Limpopo both have over 74\% of their schools in Quintiles 1 and 2. The Eastern Cape has a higher proportion of schools in Quintiles 2 and 3 . Gauteng, the Western Cape, and the Northern Cape have the highest proportions of schools in Quintile 5 - although it should be noted that in terms of actual number of schools, the Northern Cape has the smallest number of schools overall.

When the years 2008 and 2012 are compared, there seems to have been little, if any, movement of schools into higher quintiles. While the poverty quintile is only a small part of measuring the quality of a school, as a school moves into a higher quintile, some concomitant improvement in the quality of that school can be expected. The statistics in the tables below reveal a picture of schools remaining generally static in terms of their quintile, and thus their overall socio-economic status. It is not clear whether it is possible for education authorities to have much of an impact on this measure - since poverty quintiles are heavily influenced by the community that a school serves. Education role-players ultimately must be aware of the socio-economic dynamics within each province, however, and tailor any interventions to be appropriate to that setting.

This dataset will be extended in subsequent publications of the NSC Indicators report, as it will be important to understand the speed at which socio-economic dynamics are changing the face of the schooling system in South Africa.

Table 21: Distribution of secondary schools, by province and quintile, and percentage of schools in each province, by quintile, 2008

| Province | No Quintile |  | Quintile 1 |  | Quintile 2 |  | Quintile 3 |  | Quintile 4 |  | Quintile 5 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 75 | 8\% | 130 | 14\% | 169 | 19\% | 281 | 31\% | 115 | 13\% | 134 | 15\% | 904 | 100\% |
| Free State | 16 | 5\% | 97 | $31 \%$ | 63 | 20\% | 66 | $21 \%$ | 25 | 8\% | 49 | 16\% | 316 | 100\% |
| Gauteng | 194 | $27 \%$ | 41 | 6\% | 73 | 10\% | 108 | 15\% | 124 | 17\% | 171 | 24\% | 711 | 100\% |
| KwaZulu- <br> Natal | 121 | 7\% | 400 | 24\% | 410 | 25\% | 349 | 21\% | 193 | 12\% | 183 | 11\% | 1656 | 100\% |
| Limpopo | 68 | 5\% | 521 | 37\% | 559 | 40\% | 216 | 15\% | 9 | 1\% | 21 | $2 \%$ | 1394 | 100\% |
| Mpumalanga | 25 | 5\% | 195 | 38\% | 186 | 36\% | 43 | 8\% | 39 | 8\% | 30 | 6\% | 518 | 100\% |
| North West | 68 | 18\% | 44 | 12\% | 42 | $11 \%$ | 92 | 25\% | 80 | 22\% | 46 | 12\% | 372 | 100\% |
| Northern Cape | 22 | 17\% | 17 | 13\% | 26 | 20\% | 21 | 16\% | 9 | 7\% | 34 | 26\% | 129 | 100\% |
| Western Cape | 63 | 16\% | 19 | 5\% | 28 | 7\% | 59 | 15\% | 81 | 20\% | 155 | 38\% | 405 | 100\% |
| Tołal | 652 | 10\% | 1464 | 23\% | 1556 | 24\% | 1235 | 19\% | 675 | 11\% | 823 | 13\% | 6405 | 100\% |

[^9]Table 22: Distribution of secondary schools, by province and quintile, and percentage of schools in each province, by quintile, 2012

| Province | No Quintile |  | Quintile 1 |  | Quintile 2 |  | Quintile 3 |  | Quintile 4 |  | Quintile 5 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 71 | 8\% | 130 | 14\% | 178 | 20\% | 287 | 32\% | 110 | 12\% | 133 | 15\% | 909 | 100\% |
| Free state | 25 | 8\% | 96 | 29\% | 65 | 20\% | 66 | 20\% | 25 | 8\% | 49 | 15\% | 326 | 100\% |
| Gauteng | 246 | $31 \%$ | 48 | 6\% | 81 | 10\% | 123 | 15\% | 131 | 16\% | 173 | 22\% | 802 | 100\% |
| KwaZulu- <br> Natal | 139 | 8\% | 410 | 24\% | 431 | 25\% | 355 | 21\% | 194 | 11\% | 184 | 11\% | 1713 | 100\% |
| Limpopo | 72 | $5 \%$ | 535 | 38\% | 562 | 40\% | 220 | 16\% | 9 | 1\% | 21 | 1\% | 1419 | 100\% |
| Mpumalanga | 53 | 10\% | 194 | $36 \%$ | 179 | 34\% | 41 | 8\% | 38 | 7\% | 28 | 5\% | 533 | 100\% |
| North Wes | 69 | $18 \%$ | 45 | 12\% | 43 | $11 \%$ | 97 | 25\% | 83 | 22\% | 47 | 12\% | 384 | 100\% |
| Northern Cape | 27 | 20\% | 18 | 13\% | 27 | 20\% | 22 | 16\% | 9 | 7\% | 34 | 25\% | 137 | 100\% |
| Western Cape | 89 | 20\% | 19 | 4\% | 28 | 6\% | 62 | 14\% | 82 | 19\% | 157 | 36\% | 437 | 100\% |
| Total | 791 | 12\% | 1495 | 22\% | 1594 | 24\% | 1273 | 19\% | 681 | 10\% | 826 | 12\% | 6660 | 100\% |

Source: Umalusi NSC database, 2012

### 1.2.5 Measuring the quality of schooling

The Annual National Assessments (ANA) were conducted for the second time in 2012 and represent an important measure of the quality of schooling in South Africa. Unfortunately, the test instrument was changed between the first and the second ANA tests, and it is therefore not possible to get an accurate measure of the progress between the two. Nevertheless, the 2012 ANA results offer a baseline picture against which future progress must be measured.

The following tables and graphs show the national and provincial average percentage scores by grade and subject and by gender and subject.

The overall pattern of scores in the ANA reveals a distinct downward trend in Mathematics scores as learners move into the higher levels of the schooling system. The scores move from an average of $68.1 \%$ for Mathematics in Grade 1 to just $12.7 \%$ in Grade 9. While it could be expected that learners will score slightly more poorly in Mathematics as they move into each new level of schooling, as the subject complexity increases, this precipitous decline in scores to such a very low level in Grade 9 is cause for deep concern. This indicator highlights a deeply problematic state of affairs for mathematical skills in South Africa, and calls for urgent and sustained interventions in order to correct this severely negative trend.

A somewhat different picture presents itself for Home Language skills, with average scores remaining relatively stable until Grade 4, at which stage there is a decrease of about 10 percentage points in learner achievement. It is likely that this drop is

The ANA results present a picture of a system that requires substantial improvement. associated with the transition to English as the LoLT for most learners at this point in their schooling. It will be interesting to see how the new Curriculum and Assessment Policy Statements (CAPS) will affect this trend. Since the

CAPS now stipulates that English (or the target LoLT) is to be taught as a subject from Grade 1 onwards, rather than moving straight from $100 \%$ Home Language to an immersion model, as was the case under the NCS curriculum. It is hoped that this will improve learner outcomes, both in language classes and across the board - since all material must be learned and acquired in and through the medium of language.

While the Home Language results are not as poor as those of Mathematics, it is nonetheless concerning that learners are achieving an average of $40 \%$ in their grade-appropriate Home Language tests. This is the minimum mark required for a pass at Home Language level in the NSC, which would mean that the majority of learners in South Africa are at the borderline of minimally acceptable competence.

Overall, the ANA results present a bleak picture of a system that requires substantial improvement.

Table 23: National average scores in ANA, by Grade and subject, 2012 (\%)

|  | Maths | Home <br> language | First additional <br> language |
| :--- | ---: | ---: | ---: |
| Grade 1 | 68.1 | 57.5 |  |
| Grade 2 | 57.4 | 55.3 |  |
| Grade 3 | 41.2 | 52 |  |
| Grade 4 | 37 | 42.6 | 33.6 |
| Grade 5 | 30.5 | 39.9 | 29.6 |
| Grade 6 | 26.7 | 42.8 | 35.6 |
| Grade 9 | 12.7 | 43.4 | 34.6 |

Source: DBE (2012c:45)


Figure 21: National average scores in ANA, by Grade and subject, 2012 (\%)
Source: DBE (2012c:45)

While the trend of ever-poorer performance as learners move up the grades, especially in Mathematics, is robust across genders, it is more pronounced for male learners. In every subject and in every Grade, male learners on average perform more poorly than their female counterparts. This may also be a contributing factor to the increased dropout rate for males highlighted earlier in this report - as male learners experience less success

In every subject and in every grade, male learners on average perform more poorly than their female counterparts do. and achievement, which might spur them on to continue their studies. It is clear, however, that both genders are performing at a level lower than they should be, and even the relatively stable Home Language results from Grade 6 onwards have settled at a relatively low level.

It is clear from the ANA results that teaching and learning is neither uniform nor adequate across the country, and school infrastructure aside, there is an urgent need to intervene in the teaching space in South Africa. In schools where learners consistently perform poorly at the NSC level, it is very likely that such poor performance has been a feature in that particular school throughout the learners' school careers. The ANA is intended to be a systemic test, rather than an evaluation of individual learner performance, and as such, it should indicate to teachers and principals what weaknesses are present in the teaching and learning that take place in each school. Rather than being an evaluation of learner performance, this test is at its heart intended to diagnose difficulties in individual schools and provide a supportive framework for school improvement.

Table 24: National average scores in ANA, by gender, grade and subject, 2012 (\%)

|  | Male | Female |
| :--- | ---: | ---: |
| Grade 3 Maths | 39.6 | 42.9 |
| Grade 3 HL | 48.2 | 56.1 |
| Grade 6 Maths | 25.8 | 27.5 |
| Grade 6 HL | 39.6 | 46 |
| Grade 6 FAL | 32.6 | 38.8 |
| Grade 9 Maths | 11.9 | 13.4 |
| Grade 9 HL | 39.9 | 46.9 |
| Grade 9 FAL | 31.4 | 38.1 |

[^10]

Figure 22: National average scores in ANA, by gender, grade and subject, 2011 (\%)
Source: DBE (2012c:45)

### 1.2.6 Main findings

The main findings in the preceding section are as follows:

- Spending on learners has increased at a rapid rate, and has increased the most in poorer provinces. By 2012 near parity of spending per learner had been achieved across the country.
- The average class size in South Africa is about 40 learners per class, but in the provinces of KwaZulu-Natal, Limpopo and the Eastern Cape, this number is far higher, at between 51 to 58 learners in a class. In both KwaZulu-Natal, the Eastern Cape and the North West, the average number of learners per class has increased - and it is unclear why class sizes are rising in these provinces. It is possible that there is sustained teacher out-migration from these provinces which is causing the ratio of teachers to learners to deteriorate.
- The majority of the teacher workforce is qualified.
- Learners perform poorly on the Annual National Assessment diagnostic tests, and show deteriorating performance as they move into successively higher grades. This suggests that learners are entering each successive grade with accumulated deficits in knowledge and skills from the previous grade. Essentially, many South African learners have not been able to keep up with the curriculum as they move through each grade.


### 1.3 The impact of socio-economic conditions on learner participation and performance

The third and final overarching indicator of quality examined in this first section of the report is that of Contextual factors. While the previous two sections focused on direct inputs into the system, in the form of learners and then in terms of education-focused spending and infrastructure, this third input indicator reflects the general environment or context in which schools must operate.

While debate continues among education researchers as to which factors within both the school and home environments have the greatest impact, there is broad consensus that the socioeconomic conditions that learners are confronted with on a daily basis have a substantial impact on their educational

The socio-economic conditions that learners are confronted with on a daily basis have a substantial impact on their educational outcomes. outcomes. The impact of family income, physical living conditions, educational resources available to them, and the educational level of the adults who they live with all determine learners' achievements in school.

This report does not attempt a statistical analysis of the extent of each of these impacts, but rather offers an overview of conditions in the respective provinces that are most likely to have a bearing on provincial performance in the NSC examinations. In this regard, the large, rural and economically disadvantaged provinces of the Eastern Cape and Limpopo have the lowest socio-economic indicators in the country. Other provinces, while having higher average indicators, most certainly also experience intra-provincial inequality in access to socio-economic welfare.

The following factors are included as being indicative of the relative impact of socioeconomic and home environmental conditions affecting education in the provinces: adult education levels, per capita income and access to water in the home. These factors are neither comprehensive nor necessarily provide the best proxy for socio-economic conditions. In addition, there may be intra-provincial inequality that is not sufficiently explained by these factors or possible to capture in aggregate statistics.

### 1.3.1 Adult education levels, by province, race and age

The education levels of the adults with whom a child resides have an important impact on the child's schooling outcomes. The table below shows adult education levels by age group in the provinces.

The Eastern Cape, the Northern Cape and Limpopo all have fewer than $20 \%$ of the adult population between 30 and 64 with a completed secondary education. These three provinces are also generally rural, and thus, it is expected that educational outcomes will be somewhat lower in less accessible areas. Finally, these provinces are also fairly impoverished, as statistics further on in this report show.

While the 30-64 age group is at least fairly easily understood - though still a cause for concern - in terms of the reasons for some of these observed patterns, the same cannot be said for the 20-24 age group. It is particularly concerning that less than $30 \%$ of this group in both Limpopo and the Eastern Cape have completed their secondary education. While some of
the participants in this group may still be in the schooling system, such statistics point to fairly large-scale dropout rates in these two provinces, or perhaps gatekeeping.

There is a consistent association between educational status and economic success.

It is also clear that the two wealthiest provinces - Gauteng and the Western Cape - also display the best tertiary and secondary completion rates, or at least have a population with the best educational profile. There is a consistent association between educational status and economic success, although it is also likely that well-qualified people who qualified in poorer provinces may migrate to wealthier urban centres. It is clear, however, that an essential avenue for the economic upliftment of poorer provinces is that of improving educational outcomes in these provinces.

Table 25: Adult education levels, by age group and province, 2011

| Province | Age group | Secondary complete | Tertiary |
| :---: | :---: | :---: | :---: |
| EC | 20-24 | 26\% | 3\% |
|  | 25-29 | 34\% | 8\% |
|  | 30-64 | 17\% | 11\% |
| FS | 20-24 | 36\% | 4\% |
|  | 25-29 | 30\% | 9\% |
|  | 30-64 | 22\% | 13\% |
| GT | 20-24 | 49\% | 8\% |
|  | 25-29 | 34\% | 19\% |
|  | 30-64 | 28\% | 21\% |
| KZN | 20-24 | 39\% | 4\% |
|  | 25-29 | 37\% | 9\% |
|  | 30-64 | 22\% | 11\% |
| LP | 20-24 | 26\% | 4\% |
|  | 25-29 | 26\% | 8\% |
|  | 30-64 | 15\% | 11\% |
| MP | 20-24 | 38\% | 3\% |
|  | 25-29 | 36\% | 9\% |
|  | 30-64 | 20\% | 11\% |
| NW | 20-24 | 39\% | 4\% |
|  | 25-29 | 34\% | 10\% |
|  | 30-65 | 21\% | 12\% |
| NC | 20-24 | 33\% | 7\% |
|  | 25-29 | 31\% | 9\% |
|  | 30-64 | 16\% | 11\% |
| WC | 20-24 | 38\% | 6\% |
|  | 25-29 | 36\% | 14\% |
|  | 30-64 | 25\% | 15\% |

[^11]The provincial inequality in educational attainment is most certainly a legacy of rural predominantly African but also Coloured - communities' lack of economic opportunity, but educational attainment has a racial dimension that is not confined to rural communities alone. The following table and graph show the proportions of the respective age groups' educational attainment by race.

The educational attainment of the 30-64-year-old age group with incomplete secondary schooling is as follows for the various population groups: African -70\%, Coloured - 66\%, Indian $-40 \%$ and White $-19 \%$. The 25-29-year-old population has substantially more education than their parents, with the percentages for the various population groups with incomplete schooling being as follows: African $-57 \%$, Coloured $-50 \%$, Indian $-22 \%$ and White $-15 \%$. In terms of the 20-24-year-old population, the relatively high number of Africans $161 \%$ with secondary schooling incomplete compared with $17 \%$ of Whites) is an indication of the higher repeater rate among African learners and a consequently older cohort in the latter years of school. As such, many 20-24-year-old African youths have not yet completed secondary school.

Again, this pattern is largely attributable to the socio-economic situation of the various race groups, as it was at the end of the apartheid era, and although substantial improvements have been made, such socio-economic and race-based patterns persist in South Africa's educational and socio-economic landscape. In subsequent issues of this report, this indicator will be tracked over time in an attempt to determine the rate at which improvements are taking place.

Table 26: Educational attainment, by age category and race, 2011

| Age | Race | Secondary incomplete | Secondary complełe | Tertiary |
| :---: | :---: | :---: | :---: | :---: |
| 20-24 <br> years old | African | 61\% | 35\% | 4\% |
|  | Coloured | 55\% | 40\% | 5\% |
|  | Indian | 23\% | 64\% | 10\% |
|  | White | 17\% | 63\% | 20\% |
| 25-29 <br> years old | African | 57\% | 32\% | 9\% |
|  | Coloured | 50\% | 40\% | 9\% |
|  | Indian | 22\% | 49\% | 28\% |
|  | White | 15\% | 44\% | 39\% |
| 30-64 <br> years old | African | 70\% | 19\% | 10\% |
|  | Coloured | 66\% | 22\% | 10\% |
|  | Indian | 40\% | 36\% | 23\% |
|  | White | 19\% | 39\% | 41\% |

[^12]

Figure 23: Educational attainment, by age category and race, 2011
Source: StatsSA Labour Force Survey, 3rd Q 2011, own calculations

### 1.3.2 Relative poverty of the provinces

The Census 2011 found that Limpopo remains the province with the lowest average annual household income at R56 844, followed by the Eastern Cape where the average was R64 539. At the other end of the scale, Gauteng had the highest average annual household income at R156 243, followed by the Western Cape with a figure of R143460.

Again, it should be noted that the intra-provincial income inequalities are not apparent in these averages. Nor are the racial, gender or urban/rural inequalities. While the Eastern Cape and Limpopo are the least resourced provinces, and the Western Cape and Gauteng have the highest average per capita incomes, a complex interplay of racial disadvantage, rural poverty and urban migration has given rise to intra-provincial inequality, which is not immediately evident. While the average income of KwaZulu-Natal is the fourth highest in the country, it contains some of the poorest rural magisterial districts in the country. The Western Cape, while having the second highest average income, has the lowest levels of Coloured and African learner enrolment in secondary schools. Nevertheless, there remains, as will be seen, a high correlation between NSC performance and educational and socio-economic conditions in the provinces.

Thus, as noted earlier in this section, there is an association between poverty and poor educational outcomes, and vice versa. While the income improvements evident in these results are substantial,

There is a coincidence between poverty and poor educational outcomes... the average resident of Gauteng is likely to earn about three times as much as a resident of Limpopo.
these figures do not represent 'constant prices' (thus the effects of inflation have not been factored in to render the figures comparable in terms of buying power). What is clear is that the two richest provinces are wealthier than the other provinces by a substantial margin, and when compared against the poorest province, the average resident of Gauteng is likely to earn about three times as much as a resident of Limpopo. Such a large gap between rich and poor is a negative indicator, and will likely cause further out-migration from poor provinces to richer ones. This pattern will tend to leave poorer provinces impoverished, as wealthier and better-educated individuals are likely to be those with greater mobility.

Education authorities need to be mindful of these dynamics while making policies, especially for poorer and more rural provinces, although it is difficult for the education sector alone to alter such structural patterns.

Table 27: Average annual income, by province, 2001 and 2011

|  | 2001 | 2011 |
| :--- | :--- | :--- |
| Gauteng | 78541 | 156243 |
| Western Cape | 78157 | 143460 |
| Northern Cape | 39757 | 86175 |
| KwaZulu-Natal | 38905 | 83053 |
| Mpumalanga | 31186 | 77609 |
| Free State | 30726 | 75312 |
| North West | 30189 | 69955 |
| Eastern Cape | 29334 | 64539 |
| Limpopo | 22985 | 56844 |

Source: StatsSA Census Results


Figure 24: Average annual income, by province, 2001 and 2011
Source: StatsSA Census Results

### 1.3.3 Main findings

The main findings in the preceding section are as follows:

- This section provides evidence that there is a strong association between the socioeconomic status of a province and the educational outcomes in that province. Thus, provinces with a generally higher income per head will also generally have a more highly educated population, and vice versa.
- Historical patterns of disadvantage among the race groups remain clearly noticeable in the data on education and socio-economic status.
- Although there are improvements in average incomes across all provinces in South Africa, the average resident of the richest province, Gauteng, is likely to earn about three times as much as the average resident of the poorest province, Limpopo.


# 2 NSC examination results, 2008 to 2013 

This section of the report focuses on the NSC results from 2008 to 2013 . It is divided into two main sections: the overall number of candidates enrolled, passes, and Bachelors-level passes in the NSC; and the number of candidates passes in subjects with over 80000 candidates enrolled. The subjects are analysed both in terms of the number of students passing and in terms of the internal distribution of marks. Wherever practical, the data is analysed by race and gender.

All analyses were done on those candidates who were full-time and who wrote seven or more subjects. This protocol was established by the Department of Education and other stakeholders in order to ensure uniformity in the population being analysed from year to year. The number of candidates writing part-time, repeating, or who did not write seven subjects amounted to no more than 2000 candidates per year over this period.

By way of an overview, the number of candidates, pass rates and Bachelors-level passes in Independent schools was analysed. However, due to the relatively small number of candidates in independent schools (in the order of 20000 in 2008 and 24000 in 2012), and in order to simplify the analysis, it is not disaggregated into state and independent schools. All tables, unless otherwise stated, include both state and independent schools.

Note that unless otherwise stated, all data on the NSC examinations are extracted from the Umalusi NSC databases. The pass requirements for each level of pass in the NSC, mentioned at the beginning of this report, are re-presented in tabular form below, and should be referred to when reading the tables and other information in this section.

Table 28: National Senior Certificate: pass requirements by level

|  | National Senior Certificate |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | NSC | With admission requitements to: |  |  |
|  |  | Higher Certificate | Diploma | Bachelors |
| Home Language | 40\% | The NSC with a minimum of $\geq 30 \%$ in the language of learning and teaching (LOLT) of the HE institution | The NSC with a minimum of $\geq 30 \%$ in the LOLT of the HE institution, and $\geq 40 \%$ in four recognized 20-credit subjects [that is, excluding life Orientation] | The NSC with a minimum of $\geq 30 \%$ in the LOLT of the HE institution and $\geq 50 \%$ in four designated 20-credit subjects [that is, excluding Life Orientation] |
| FAL | 3 subjects passed with $\geq 40 \%$ (including the HL ) and 3 passed with $\geq 30 \%$. <br> Can fail one subject, provided there is full evidence of the SBA having been completed. |  |  |  |
| Life Orientation |  |  |  |  |
| Mathematisc/ Maths Literacy |  |  |  |  |
| 3 subjects offered from group B |  |  |  |  |

### 2.1 Enrolments and performance in the NSC, by province

The entire Section 2 of this report is devoted to performance in the NSC, and almost all data is drawn from Umalusi's internal database. The first indicator related to performance is that of NSC Performance by Province. While the NSC is a national qualification underpinned by national examinations, it is axiomatic that each province will display a different performance profile. When compared against the previous section, which provided input and contextual factors by province, some of these performance differences become explicable when the context of each province is taken into account. Therefore, this section provides subindicators, by province, for the number of full-time candidates writing seven or more subjects, the number passing overall, ${ }^{8}$ the number passing with a Bachelors-level pass, and the pass rate from 2008-2013. The average annual growth rate in the number of candidates and in the number of candidates passing is shown in the tables.

### 2.1.1 Candidates enrolled for and passing the NSC

Over the period from 2008 to 2012, the number of candidates writing the NSC decreased by $3 \%$ annually, from 561306 candidates in 2008 to 511724 candidates in 2012 . In 2013 there was a marked increase in the number of candidates over 2012, with 562200 candidates writing. This is an increase of $9.8 \%$ from 2012.

While nationally the number of candidates has reverted to the 2008 numbers, the proportion among provinces has changed. The provinces that saw an overall decrease in the number of candidates between 2008 and 2013 were the Free State, Limpopo and the North West, with average annual decreases of $3 \%, 3 \%$ and $4 \%$ respectively, followed by Mpumalanga, which has seen an average annual decrease in candidates of $2 \%$.

As explained in Section 1, these decreases to 2011 and, to some extent, to 2012, in the number of candidates are due to the impact of the implementation of the Age Requirements policy (DoE 1998) in 2000, which effected the normalisation of the entry age into Grade 1 at 6 years old. This reduced the number of learners in Grade 1 and carried through with each subsequent Grade enrolment, and finally a small but significant decrease in this cohort was seen in the decreased number of learners enrolled in Grade 12 in 2011, as well as a reduction in the number of learners enrolling for the NSC in 2011.

As the number of learners in Grades 8 to 11 have begun to increase (see Section1), the impact of an increase in the NSC candidates was observed in 2013, and most likely some small increases can be expected from this point onwards.

There has been a 15 percentage point increase in the NSC pass rate between 2008 and 2013. In addition, there has been an average annual increase of $4 \%$ in the number of candidates passing the NSC, which has certainly contributed to the improved pass rate. In terms of provincial performance, between 2008 and 2013, the Eastern Cape and Mpumalanga saw the greatest increases in the number of candidates passing, with $7 \%$ average annual increases respectively. In 2013, the Eastern Cape's pass rate of $65 \%$ lagged behind the national pass rate by 13 percentage points.

[^13]Table 28: Number of candidates writing, passing, percentage pass rate and average annual growth rate, by province, 2008-2013

|  | 2008 |  |  | 2009 |  |  | 2010 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Province | Total cand | Total pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | Total cand | Total pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | Total cand | Total <br> pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ |
| Eastern Cape | 60621 | 30804 | 51\% | 67811 | 34737 | 51\% | 63838 | 37184 | 58\% |
| Free State | 30293 | 21693 | 72\% | 29797 | 20680 | 69\% | 27446 | 19418 | $71 \%$ |
| Gaułeng | 96169 | 73478 | 76\% | 97392 | 70114 | 72\% | 92132 | 72525 | 79\% |
| KwaZulu-Natal | 143544 | 83125 | 58\% | 133384 | 81771 | 61\% | 122046 | 86311 | 71\% |
| Limpopo | 88872 | 48691 | 55\% | 90963 | 44528 | 49\% | 94614 | 54667 | 58\% |
| Mpumalanga | 54516 | 28482 | 52\% | 53462 | 25855 | 48\% | 51694 | 29277 | 57\% |
| North West | 33274 | 22707 | 68\% | 31937 | 21575 | 68\% | 28906 | 21873 | 76\% |
| Northern Cape | 10067 | 7334 | 73\% | 10537 | 6445 | 61\% | 10180 | 7363 | 72\% |
| Western Cape | 43950 | 34648 | 79\% | 45150 | 34195 | 76\% | 45699 | 34787 | 76\% |
| Total | 561306 | 350962 | 63\% | 560433 | 339900 | 61\% | 536555 | 363405 | 68\% |

Table 29: Number of candidates writing, passing, percentage pass rate and average annual growth rate, by province 2008-2013, cont.

|  | 2011 |  |  | 2012 |  |  | 2013 |  |  | Avg. ann. growth rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Province | Total <br> Cand | Total pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | Total <br> Cand | Total pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | Total Cand | Total pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | Cand | Passes |
| Eastern Cape | 64797 | 37903 | 58\% | 63986 | 39398 | 62\% | 72143 | 46815 | 65\% | 2\% | 7\% |
| Free State | 25901 | 19601 | 76\% | 24345 | 19751 | 81\% | 27111 | 23686 | 87\% | -3\% | 1\% |
| Gauteng | 85332 | 69203 | 81\% | 89932 | 75440 | 84\% | 97933 | 85108 | 87\% | -1\% | $3 \%$ |
| KwaZulu- <br> Natal | 120953 | 82907 | 69\% | 127363 | 92993 | 73\% | 145333 | 112269 | 77\% | 0\% | 5\% |
| Limpopo | 73714 | 47063 | 64\% | 77357 | 51777 | 67\% | 82489 | 59170 | 72\% | -3\% | $4 \%$ |
| Mpumalanga | 48044 | 31128 | 65\% | 47935 | 33437 | 70\% | 50084 | 38826 | 78\% | -2\% | 7\% |
| North West | 25332 | 19737 | 78\% | 27192 | 21648 | 80\% | 29149 | 25413 | 87\% | -4\% | 1\% |
| Northern Cape | 10097 | 6953 | 69\% | 8935 | 6672 | 75\% | 10403 | 7749 | 74\% | -1\% | 1\% |
| Western Cape | 39920 | 33087 | 83\% | 44679 | 36987 | 83\% | 47555 | 40473 | 85\% | 1\% | 3\% |
| Total | 494090 | 347582 | 70\% | 511724 | 378103 | 74\% | 562200 | 439509 | 78\% | -1\% | $4 \%$ |

Undoubtedly, a great many factors inform the rapid rise in pass rates over the period under review. It should be noted that the NSC was written for the first time in 2008 and, thus, was an unfamiliar examination for both teachers and learners in that year. As familiarity with the examination increased, an incremental improvement in results can be expected - although that alone does not explain the rapid rate of improvement. Such improvements in overall pass rates are also perhaps in part attributable to the effects of numerous interventions in the schooling system, including both private sector and public initiatives. It is also expected that apart from special initiatives, there will also have been an overall improvement in the state of schooling in South Africa, especially since the system emerged from an overall very low base of quality and has striven to improve at a rapid rate.

Overall, it is encouraging to see that since 2011, even as the number of candidates has begun once again to increase, the number of passes has generally tracked this increase. Once a high pass rate has been achieved and is stable, the next essential milestone is to concentrate on the quality of such passes, to ensure that learners are equipped with the skills to operate successfully in a modern economy.


Figure 25: Number of candidates writing and passing the NSC, 2008-2013

### 2.1.2 Independent school enrolment and performance

In order to give an overview of the enrolment and performance of candidates attending independent schools and writing the DBE NSC examinations, the following table and graphs show the enrolment, passes and pass rates in 2008 and 2012 of independent school candidates by province. Note that these independent schools do not include the IEB schools.

In 2008, independent school candidates constituted $4 \%$ of all NSC candidates; in 2012 the number of candidates had grown by approximately 4300 candidates, or $5 \%$ of all NSC candidates. The proportion of independent school candidates across the provinces varied from $1 \%$ in the North West to $10 \%$ in Gauteng in 2012.

The pass rate of independent school candidates was $77 \%$ in 2008 and $79 \%$ in 2012, and the number of candidates has been growing at an average annual rate of $5 \%$, while the number of passes increased at an average annual rate of about 6\%.

Table 30: Enrolment, passes and pass rates in independent schools writing the DBE examinations, by province, 2008 and 2012

|  | 2008 |  |  |  | 2012 |  |  |  | Avg. ann. growth* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Province | Total cand | \% of total cand | Total pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | Total cand | \% of total cand | Total pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | Cand | Passes |
| Eastern Cape | 2151 | 4\% | 1244 | 58\% | 2807 | 4\% | 1854 | 66\% | 8\% | 12\% |
| Free State | 719 | 2\% | 568 | 79\% | 656 | 3\% | 516 | 79\% | -2\% | -2\% |
| Gauteng | 8314 | 9\% | 6526 | 78\% | 9113 | 10\% | 7707 | 85\% | $2 \%$ | 5\% |
| KwaZulu- <br> Natal | 2653 | 2\% | 2117 | 80\% | 2960 | 2\% | 2265 | 77\% | $3 \%$ | 2\% |
| Limpopo | 2324 | $3 \%$ | 1741 | 75\% | 3251 | 4\% | 2409 | 74\% | 10\% | 10\% |
| Mpumalanga | 1401 | 3\% | 967 | 69\% | 2714 | 6\% | 1893 | 70\% | 23\% | 24\% |
| North West | 395 | 1\% | 333 | 84\% | 387 | 1\% | 333 | 86\% | -1\% | 0\% |
| Northern Cape | 184 | 2\% | 160 | 87\% | 164 | 2\% | 127 | 77\% | -3\% | -5\% |
| Western Cape | 1891 | 4\% | 1748 | 92\% | 2317 | 5\% | 2093 | 90\% | 6\% | 5\% |
| Total | 20032 | 4\% | 15404 | 77\% | 24369 | 5\% | 19197 | 79\% | 5\% | 6\% |

* Av annual growth calculated by endpoints


Figure 26: Enrolment and passes in independent schools writing the DBE examinations, by province, 2008 and 2012


Figure 27: Pass rates in independent schools, by province writing the DBE examinations by province, 2008 and 2013

### 2.1.3 Candidates passing with Bachelors-level pass

The following tables and graphs show the number of full-time candidates writing seven or more subjects, the number passing with a Bachelors-level pass and the percentage passing with a Bachelors-level pass from 2008 to 2013, by province. The average annual growth rate in the number of candidates and in the number of candidates passing is shown in the second of these two tables. The Bachelors-level pass requires achieving $\geq 50 \%$ in four designated subjects, and a minimum of $30 \%$ in the language of a higher education institution.

The greatest gains made in the NSC have been in terms of the growth in the number of candidates passing with a Bachelors-level pass. Bachelorslevel passes have increased annually on average by $8 \%$ between 2008 and 2013. The total number of candidates achieving Bachelors-level passes has increased from 111731 in 2008 to 171 727 in 2013.

The greatest gains have been made in the NSC in terms of the growth in the number of candidates passing with a Bachelors-level pass.

The greatest growth in the number of candidates passing with a Bachelors-level pass has been in Mpumalanga, KwaZulu-Natal and Limpopo: $12 \%, 10 \%$ and $10 \%$ per annum respectively. In the Eastern Cape, Bachelors-level passes have grown by $8 \%$ annually. This finding points to an improving schooling system, and in the absence of any anomalous changes in examination difficulty (something that is unlikely given that the final results are
standardised annually to limit such fluctuations), this can be regarded as an indication that the quality of passes is improving in South Africa.

There are still debates about whether this category of pass has sufficiently high requirements, and generally, universities select only candidates from within this category who occupy the upper level of the mark spectrum. Thus, using this category of pass as a proxy for quality is somewhat problematic; indeed, Umalusi has published a position paper that argues for a slightly raised language requirement for this category. Nonetheless, such rapid increases in this category of pass add merit to the argument that the system is improving to a point where it should be ready to systematically increase the rigour of the Bachelors-level pass, and these figures are undoubtedly an encouraging finding.

Table 31: Number of candidates writing, passing with a Bachelors-level pass; percentage Bachelors-level pass rate and average annual growth rate, by province, 2008-2013

|  | 2008 |  |  | 2009 |  |  | 2010 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Province | Total cand | Bach | \% bach | Total cand | Bach | \% bach | Total cand | Bach | \% bach |
| Eastern Cape | 60621 | 8713 | 14\% | 67811 | 9494 | 14\% | 63838 | 10207 | 16\% |
| Free State | 30293 | 6344 | 21\% | 29797 | 6030 | 20\% | 27446 | 5873 | $21 \%$ |
| Gauteng | 96169 | 29134 | 30\% | 97392 | 28431 | 29\% | 92132 | 31299 | $34 \%$ |
| KwaZulu- <br> Natal | 143544 | 26314 | 18\% | 133384 | 26584 | 20\% | 122046 | 31466 | 26\% |
| Limpopo | 88872 | 11233 | 13\% | 90963 | 10969 | 12\% | 94614 | 14739 | 16\% |
| Mpumalanga | 54516 | 6921 | 13\% | 53462 | 6557 | 12\% | 51694 | 8147 | 16\% |
| North West | 33274 | 6478 | 19\% | 31937 | 6686 | 21\% | 28906 | 8020 | 28\% |
| Northern Cape | 10067 | 2022 | 20\% | 10537 | 1752 | 17\% | 10180 | 2152 | 21\% |
| Western Cape | 43950 | 14572 | 33\% | 45150 | 14381 | 32\% | 45699 | 14129 | $31 \%$ |
| Total | 561306 | 111731 | 20\% | 560433 | 110884 | 20\% | 536555 | 126032 | 23\% |

Table 32: Number of candidates writing, passing with a Bachelors-level pass, percentage Bachelors-level pass rate and average annual growth rate, by province, 2008-2013, cont.

|  | 2011 |  |  |  | 2012 |  |  |  | 2013 |  | Avg. ann. growth rate Bach |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Province | Total cand | Bach | $\begin{gathered} \% \\ \text { bach } \end{gathered}$ | Total cand | Bach | $\begin{gathered} \% \\ \text { bach } \end{gathered}$ | Total cand | Bach | $\begin{gathered} \% \\ \text { bach } \end{gathered}$ | Cand |  |
| Eastern Cape | 64797 | 10281 | 15\% | 63986 | 11246 | 18\% | 72143 | 13686 | 19\% | $2 \%$ | 8\% |
| Free State | 25901 | 6817 | 26\% | 24345 | 6963 | 29\% | 27111 | 8961 | 33\% | -3\% | 7\% |
| Gauteng | 85332 | 30036 | 34\% | 89932 | 32528 | 36\% | 97933 | 38098 | 39\% | -1\% | 5\% |
| KwaZulu- <br> Natal | 120953 | 27395 | 22\% | 127363 | 34803 | 27\% | 145333 | 47195 | 32\% | 0\% | 10\% |
| Limpopo | 73714 | 12946 | 17\% | 77357 | 15347 | 20\% | 82489 | 18781 | 23\% | -3\% | 10\% |
| Mpumalanga | 48044 | 8865 | 18\% | 47935 | 9508 | 20\% | 50084 | 12954 | 26\% | -2\% | 12\% |
| North West | 25332 | 7187 | 28\% | 27192 | 7469 | 27\% | 29149 | 10166 | 35\% | -4\% | 7\% |
| Northern Cape | 10097 | 2012 | 19\% | 8935 | 2060 | 23\% | 10403 | 2424 | 23\% | -1\% | 4\% |
| Western Cape | 39920 | 15206 | 37\% | 44679 | 16327 | 37\% | 47555 | 19462 | 41\% | 1\% | 5\% |
| Total | 494090 | 120745 | 24\% | 511724 | 136251 | 27\% | 562200 | 171727 | $31 \%$ | -1\% | 8\% |



Figure 28: Percentage of candidates passing the NSC with a Bachelors-level pass, by province, 2008-2013

### 2.1.4 Independent school candidates passing with Bachelors-level pass

As with the number of candidates in independent schools enrolled for and passing the NSC, this section gives a brief overview of the number of candidates in independent schools passing the NSC with a Bachelors-level pass.

The following table and graph show the number of candidates in independent schools writing and passing the NSC with a Bachelors-level pass in 2008 and 2012. The province with the highest number of candidates attaining a Bachelors-level pass is Gauteng, with 4024 candidates, and the highest percentage of candidates attaining a Bachelors-level pass is in the Western cape, with $58 \%$.

> Improved results observed when there are fewer learners in the public system indicate shortages of both teachers and infrastructure.

It must be emphasised that increases in pass numbers at independent schools are associated with increases in learner numbers - the opposite trend to that observed in the public system. This may attest to the fact that independent schools may not be overburdened in terms of learner numbers and infrastructure requirements to a similar extent as the public schools are. It is likely that the improved results observed when there are fewer learners in the public system indicate shortages both of teachers and infrastructure - and as learners leave the public system, so such burdens become somewhat relieved, and thus the results of the remaining learners improve.

Table 33: Number of candidates in independent schools writing and passing the NSC with a Bachelors-level pass in 2008 and 2012

|  | 2008 |  |  |  | 2012 |  |  |  | Avg. ann. growth |  | Avg. ann. growth rate Bach |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Province | No. of cand | Bach | \% Bach | No. of cand | Bach | \% Bach | Cand | Bach | $\begin{gathered} \% \\ \text { bach } \end{gathered}$ | Cand |  |
| Eastern Cape | 2151 | 391 | 18\% | 2807 | 585 | 21\% | 8\% | 12\% | 19\% | 2\% | 8\% |
| Free State | 719 | 208 | 29\% | 656 | 177 | 27\% | -2\% | -4\% | 33\% | -3\% | 7\% |
| Gauteng | 8314 | 3230 | 39\% | 9113 | 4024 | 44\% | $2 \%$ | 6\% | 39\% | -1\% | 5\% |
| KwaZuluNatal | 2653 | 1361 | 51\% | 2960 | 1361 | 46\% | $3 \%$ | 0\% | 32\% | 0\% | 10\% |
| Limpopo | 2324 | 720 | $31 \%$ | 3251 | 1034 | 32\% | 10\% | 11\% | 23\% | -3\% | 10\% |
| Mpumalanga | 1401 | 346 | 25\% | 2714 | 591 | 22\% | 23\% | 18\% | 26\% | -2\% | 12\% |
| North West | 395 | 102 | 26\% | 387 | 114 | 29\% | -1\% | $3 \%$ | 35\% | -4\% | 7\% |
| Northern Cape | 184 | 45 | 24\% | 164 | 43 | 26\% | -3\% | -1\% | 23\% | -1\% | 4\% |
| Western Cape | 1891 | 1161 | 61\% | 2317 | 1348 | 58\% | 6\% | 4\% | 41\% | 1\% | 5\% |
| Total | 20032 | 7564 | 38\% | 24369 | 9277 | 38\% | 5\% | 6\% | $31 \%$ | -1\% | 8\% |



Figure 29: Percentage of independent school candidates passing the NSC with a Bachelorslevel pass, by province, 2008-2012


Figure 30: Percentage of independent school candidates passing the NSC with a Bachelorslevel pass, by province, 2008-2012

### 2.1.5 Main findings

The main findings in the preceding section are as follows:

- During the period under review (2008-2012), pass rates have risen rapidly across all provinces.
- The pass rates in the poorest provinces have seen the most rapid rate of improvement.
- Some of the improvements in pass rates seem to have been driven by reductions in the number of candidates who wrote the examinations.
- The rate of improvement in Bachelors-level passes is about $8 \%$ annually, which may indicate, in the absence of any anomalous changes in the difficulty of examinations, substantial improvements in the quality of the NSC passes of learners who have moved out of the system.


### 2.2 Enrolment and performance in the NSC, by race and gender

While provincial poverty levels are a large determinant of education performance, race and, to some extent, gender are still factors in the inequality in outputs from the NSC examinations. Thus, this indicator provides information on NSC Performance by Race and Gender primarily so that these kinds of inequalities in performance can be understood better. The following section looks at enrolment and performance in the NSC by race and gender. ${ }^{9}$

The tables above show that the while the overall number of candidates has been declining, the number of candidates passing with a Bachelorslevel pass has been growing at $8 \%$ per annum. As can be seen in the tables below, this growth is accounted for by the growth in passes for African candidates. The number of African candidates of both genders has decreased annually on average by $3 \%$, but the number of candidates passing has increased by $3 \%$ for male candidates and $2 \%$ for female candidates.

All other race groups have seen annual average decreases in the number of candidates enrolled and in the number of candidates passing the NSC. Of particular note are the decrease in the number of Indian candidates of both genders (a decrease of $14 \%$ for males and $16 \%$ for females) and the decrease in the number of Coloured female candidates $16 \%$ decrease).

It is unclear why these differing racial patterns are present, but it is plausible that a proportion of White candidates, in particular, may have migrated to schools that write IEB examinations, and are thus not represented in the data considered in this section of the report. This hypothesis is somewhat supported by data presented further on in this report, which shows that some 5621 White learners were in the IEB system by 2011 - although historical data showing an upward trend of enrolment was not available at the time of writing.

[^14]Table 34: Number of candidates writing, passing, percentage pass rate and average annual growth rate, by race, 2008-2011

|  | 2008 |  |  |  | 2009 |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Race | Total <br> cand | Total <br> pass | \% pass | Total <br> cand | Total <br> pass | \% pass | Cand | Bach |
| African | 462389 | 261948 | $57 \%$ | 463856 | 254896 | $55 \%$ | $8 \%$ | $12 \%$ |
| Coloured | 38395 | 30533 | $80 \%$ | 38789 | 29402 | $76 \%$ | $-2 \%$ | $-4 \%$ |
| Indian/Asian | 16392 | 14716 | $90 \%$ | 14801 | 13621 | $92 \%$ | $2 \%$ | $6 \%$ |
| White | 43385 | 43072 | $99 \%$ | 42419 | 41849 | $99 \%$ | $3 \%$ | $0 \%$ |
| Not known | 745 | 693 | - | 568 | 132 | - | $10 \%$ | $11 \%$ |
| Total | 561306 | 350962 | $63 \%$ | 560433 | 339900 | $61 \%$ | $23 \%$ | $18 \%$ |
| North West | 395 | 102 | $26 \%$ | 387 | 114 | $29 \%$ | $-1 \%$ | $3 \%$ |
| Northern <br> Cape | 184 | 45 | $24 \%$ | 164 | 43 | $26 \%$ | $-3 \%$ | $-1 \%$ |
| Western <br> Cape | 1891 | 1161 | $61 \%$ | 2317 | 1348 | $58 \%$ | $6 \%$ | $4 \%$ |
| Total | 20032 | 7564 | $38 \%$ | 24369 | 9277 | $38 \%$ | $5 \%$ | $6 \%$ |

Table 35: Number of candidates writing, passing, percentage pass rate and average annual growth rate, by race, 2008-2011, cont.

|  | 2010 |  |  | 2011 |  |  | Avg. ann. growth* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | Total cand | Total pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | Total cand | Total pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | Cand | Passes |
| African | 442737 | 279961 | 63\% | 412829 | 273504 | 66\% | -4\% | 2\% |
| Coloured | 38343 | 30038 | 78\% | 32337 | 26379 | 82\% | -5\% | -4\% |
| Indian/Asian | 13841 | 12937 | 93\% | 10164 | 9405 | 93\% | -15\% | -14\% |
| White | 40591 | 40293 | 99\% | 38511 | 38064 | 99\% | -4\% | -4\% |
| Not known | 1043 | 176 | - | 249 | 230 | - | - | - |
| Tołal | 536555 | 363405 | 68\% | 494090 | 347582 | 70\% | -4\% | 0\% |

[^15]

Figure 31: Number of candidates writing and passing the NSC, by race, 2008-2011

In terms of the number of candidates passing with a Bachelors-level pass, again, the number of African candidates passing with a Bachelors-level pass has grown at an average annual rate of $9 \%$, that of Coloured candidates by $1 \%$ per annum, and those of Indian and White candidates by $13 \%$ and $5 \%$ per annum respectively.

The percentage Bachelors-level pass rate of African candidates increased from $14 \%$ to $19 \%$ between 2008 and 2012. While, as mentioned in the section above, much of this increase would be accounted for by the decreasing number of candidates, this is still an appreciable increase. Coloured and Indian Bachelors-level pass rates increased by 5 and 3 percentage points respectively, and that of White candidates dropped by 1 percentage point.

Table 36: Number of candidates writing, passing with a Bachelors-level pass, percentage Bachelors-level pass rate and average annual growth rate, by race, 2008-2011

|  | 2008 |  |  | 2009 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | Total cand | Bach | \% Bach | Total cand | Bach | \% Bach |
| African | 462389 | 62777 | 14\% | 463856 | 64406 | 14\% |
| Coloured | 38395 | 9158 | 24\% | 38789 | 9138 | 24\% |
| Indian/Asian | 16392 | 8876 | 54\% | 14801 | 8139 | 55\% |
| White | 43385 | 30498 | 70\% | 42419 | 29150 | 69\% |
| Not known | 745 | 422 | - | 568 | 51 | - |
| Total | 561306 | 111731 | 20\% | 560433 | 110884 | 20\% |

Table 37: Number of candidates writing, passing with a Bachelors-level pass; percentage Bachelors-level pass rate and average annual growth rate, by race, 2008-2011 cont.

|  | 2010 |  |  | 2011 |  |  | Avg. ann. growth rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | Total cand | Bach | $\begin{gathered} \% \\ \text { Bach } \end{gathered}$ | Total cand | Bach |  | Cand | Bach-level pass |
| African | 442737 | 81541 | 18\% | 412829 | 78900 | 19\% | -3\% | 9\% |
| Coloured | 38343 | 9268 | 24\% | 32337 | 9330 | 29\% | -5\% | 1\% |
| Indian/Asian | 13841 | 7986 | 58\% | 10164 | 5798 | 57\% | -15\% | -13\% |
| White | 40591 | 26905 | 66\% | 38511 | 26572 | 69\% | -4\% | -5\% |
| Not known | 1043 | 332 | - | 249 | 145 | - | - | - |
| Tołal | 536555 | 126032 | 23\% | 494090 | 120745 | 24\% | -4\% | 4\% |



Figure 32: Number of candidates passing with a Bachelors-level pass, by race, 2008-2011

As mentioned in Section 1 and in the introduction to this section, the gender dynamic in the NSC results is complex. Female candidates' enrolment is numerically greater than male candidates' is, by approximately 40000 candidates, and the number of African female candidates passing exceeds that of African males by between 15000 and 20000 candidates.

This phenomenon of more female learners being retained in secondary school, while male learners both repeat more and drop out of the school system across Grades 10, 11 and 12 at a far greater rate. Performing poorly and

Performing poorly and disillusioned by the school system, young men leave in search of other options. disillusioned by the school system, young men leave in search of other options. Young women, possibly due to both the tradition of further study opportunities in nursing, teaching and social work, as well as possibly having more protective families, stay in school. Unfortunately, these young women do not necessarily
gain a better quality of education merely by staying in school. The same socio-economic and school quality issues pertain that lead to the male learners dropping out of the system.

Despite there being more female candidates passing, and passing with a Bachelors-level pass, their pass rate is consistently between 2 and 3 percentage points lower than that of males. So, while there are more females writing the NSC, the cohort includes the weaker candidates who, had they been male, might have dropped out of the system. This trend is demonstrated by the comparisons of pass rates and actual numbers, by gender, below.

Table 38: Number of candidates writing, passing, percentage pass rate and average annual growth rate, by gender, 2008-2012

|  | 2008 |  |  | 2009 |  |  | 2010 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Total cand | Total pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | Total cand | Total pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | Total cand | Total pass | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ |
| Male | 258048 | 163267 | 63\% | 254930 | 158171 | 62\% | 243758 | 168851 | 69\% |
| Female | 303258 | 187695 | 62\% | 304993 | 181648 | 60\% | 292546 | 194523 | 66\% |
| Unknown |  |  |  | 510 | 81 | 16\% | 251 | 31 | 12\% |
| Tołal | 561306 | 350962 | 63\% | 560433 | 339900 | 61\% | 536555 | 363405 | 68\% |

Table 39: Number of candidates writing, passing, percentage pass rate and average annual growth rate, by gender, 2008-2012, cont.

|  | 2011 |  |  | 2012 |  |  | Avg. ann. growth rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Total cand | Total pass | \% pass | Total cand | Total pass | \% pass | Cand | Passes |
| Male | 229944 | $\begin{aligned} & 165 \\ & 768 \end{aligned}$ | 72\% | 216403 | 165473 | 76\% | -5\% | 1\% |
| Female | 264146 | $\begin{aligned} & 181 \\ & 814 \end{aligned}$ | 69\% | 259183 | 189297 | 73\% | -5\% | 0\% |
| Unknown |  |  |  | 36138 | 23333 | 65\% |  |  |
| Total | 494090 | $\begin{aligned} & 347 \\ & 582 \end{aligned}$ | 70\% | 511724 | 378103 | 74\% | -3\% | 2\% |



Figure 33: Number of candidates writing and passing, by gender, 2008-2012

A similar phenomenon pertains to the number of female candidates passing the NSC with a Bachelors-level pass. In 2008 there were 13000 more female than male candidates obtaining a Bachelor pass, and in 2012 there were 15 000 more female candidates obtaining a Bachelors-level pass. Subject selection may contribute somewhat to the greater

In 2008 there were 13000 more female than male candidates obtaining a Bachelor pass, and in 2012 there were 15000 more female candidates obtaining a Bachelors-level pass. number of female candidates achieving a Bachelors-level pass, with male candidates selecting subjects leading to more genderspecific post-school studies and employment opportunities.

Table 40: Number of candidates writing, passing with a Bachelors-level pass, percentage Bachelors-level pass rate and average annual growth rate, by gender, 2008-2012

|  | 2008 |  |  | 2009 |  |  | 2010 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Total cand | Bach | \% bach | Total cand | Bach | \% bach | Total cand | Bach | \% bach |
| Male | 258048 | 49313 | 19\% | 254930 | 49110 | 19\% | 243758 | 56254 | 23\% |
| Female | 303258 | 62418 | 21\% | 304993 | 61752 | 20\% | 292546 | 69768 | 24\% |
| Unknown |  |  |  | 510 | 22 | 4\% | 251 | 10 | 4\% |
| Tołal | 561306 | 111731 | 20\% | 560433 | 110884 | 20\% | 536555 | 126032 | 23\% |

Table 41: Number of candidates writing, passing with a Bachelors-level pass, percentage Bachelors-level pass rate and average annual growth rate, by gender, 2008-2012, cont.

|  | 2011 |  |  | 2012 |  |  | Avg. ann. growth rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Total cand | Bach | \% bach | Total cand | Bach | \% bach | Cand | Bach-level pass |
| Male | 229944 | 55529 | 24\% | 243758 | 56254 | 27\% | -5\% | 5\% |
| Female | 264146 | 65216 | 25\% | 292546 | 69768 | 27\% | -5\% | $3 \%$ |
| Unknown |  |  |  | 251 | 10 | 18\% | - |  |
| Total | 494090 | 120745 | 24\% | 536555 | 126032 | 27\% | -3\% | 5\% |



Figure 34: Number of candidates passing with a Bachelors-level pass, by gender, 2008-2012

The following tables and graphs give a breakdown by race and gender of the NSC. The pass rate of African candidates improved between 2008 and 2011 , from $58 \%$ for males and $56 \%$ for females to $66 \%$ and $62 \%$ respectively.
The phenomenon of more females enrolled for the NSC is most marked for African candidates, but pertains to all race categories.

Irrespective of the differential patterns of performance discussed earlier, the

The marked improvement in examination results may be an indicator of improvement in the schooling system. marked improvement in examination results may be an indicator of improvement in the schooling system since 2008. As previously discussed, pass rates by themselves do not necessarily indicate improvements in schooling, and thus, this indicator must be treated with caution. No clear evidence suggests an overall drop in examination standards during the period under review, despite some fluctuations in certain years, and thus, the improved results can likely be attributed, at least in part, to systemic improvement.

A point of concern in these results is that while African results have improved markedly, and White and Indian results have remained generally static, there has been a drop in performance for the Coloured population group. This indicates a need for targeted interventions in schools that serve these communities, coupled with research to establish the causes of the observed trend.

Table 42: Number of candidates writing, passing, percentage pass rate and average annual growth rate, by race and gender, 2008-2011

|  |  | 2008 |  |  | 2009 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | Gender | Cand | Pass | \% pass rate | Cand | Pass | $\begin{gathered} \% \\ \text { pass } \\ \text { rate } \end{gathered}$ |
| African | Male | 212219 | 122159 | 58\% | 210261 | 118826 | 57\% |
| African | Female | 250170 | 139789 | 56\% | 253595 | 136070 | 54\% |
| Coloured | Male | 16258 | 12714 | 78\% | 16661 | 12493 | 75\% |
| Coloured | Female | 22137 | 17819 | 80\% | 22128 | 16909 | 76\% |
| Indian/Asian | Male | 7767 | 6871 | 88\% | 7007 | 6297 | 90\% |
| Indian/Asian | Female | 8625 | 7845 | 91\% | 7794 | 7324 | 94\% |
| White | Male | 21447 | 21195 | 99\% | 20970 | 20528 | 98\% |
| White | Female | 21938 | 21877 | 100\% | 21449 | 21321 | 99\% |
| Not known |  | 745 | 693 | 93\% | 568 | 132 | 23\% |

Table 43: Number of candidates writing, passing, percentage pass rate and average annual growth rate, by race and gender, 2008-2011, cont.

|  |  | 2010 |  |  | 2011 |  |  | Avg. ann. growth rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | Gender | Cand | Pass |  | Cand | Pass |  | Cand | Passes |
| African | Male | 200446 | 130300 | 65\% | 191190 | 130465 | 66\% | -3\% | $3 \%$ |
| African | Female | 242291 | 149661 | 62\% | 221639 | 143039 | 62\% | -3\% | 2\% |
| Coloured | Male | 16421 | 12787 | 78\% | 14267 | 11593 | 79\% | -4\% | -3\% |
| Coloured | Female | 21922 | 17251 | 79\% | 18070 | 14786 | 80\% | -6\% | -5\% |
| Indian/ <br> Asian | Male | 6433 | 5902 | 92\% | 5046 | 4618 | 91\% | -14\% | -13\% |
| Indian/ <br> Asian | Female | 7408 | 7035 | 95\% | 5118 | 4787 | 92\% | -16\% | -15\% |
| White | Male | 20092 | 19536 | 97\% | 19305 | 18971 | 97\% | -3\% | -4\% |
| White | Female | 20499 | 20188 | 98\% | 19206 | 19093 | 99\% | -4\% | -5\% |
| Not known |  | 1043 | 715 | 69\% | 249 | 230 | 86\% | - | - |



Figure 35: Number of candidates writing and passing the NSC, by race and gender, 2008-2011


Figure 36: Percentage of candidates writing and passing the NSC, by race and gender, 2008-2011

If the Bachelors-level pass category is treated as an indicator of higher quality passes, it is clear that there have been improvements in the education system, especially for the African population group. A point of concern is that the growth in Bachelors-level passes for the African population group took place primarily in a single year: 2009/2010. While the jump from about $13 \%$ average Bachelors-level passes for Africans to about $20 \%$ is ultimately to be expected (and indeed should continue to improve), as the schooling system for African learners began with the lowest base of quality, such a large movement in a single year is difficult to explain.

It is also interesting to note that the Indian, White and Coloured population group figures have decreased at a steady rate every year, and an explanatory assumption could be that many of these learners will have moved into schools that do not write DBE examinations, and thus they are missing from this dataset. While this hypothesis is plausible, additional research is required in order to explain the migration patterns of learners within both of these racial groups.

Table 44: Number of candidates writing, passing with a Bachelors-level pass, percentage Bachelors-level pass rate and average annual growth rate, by race and gender 2008-2011

|  |  | 2008 |  |  | 2009 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | Gender | Cand | Pass | \% pass rate | Cand | Pass | \% pass rate |
| African | Male | 212219 | 28279 | 13\% | 210261 | 29655 | 14\% |
| African | Female | 250170 | 34498 | 14\% | 253595 | 34751 | 14\% |
| Coloured | Male | 16258 | 3475 | $21 \%$ | 16661 | 3361 | 20\% |
| Coloured | Female | 22137 | 5683 | 26\% | 22128 | 5777 | 26\% |
| Indian/Asian | Male | 7767 | 3652 | 47\% | 7007 | 3243 | 46\% |
| Indian/Asian | Female | 8625 | 5224 | 61\% | 7794 | 4896 | 63\% |
| White | Male | 21447 | 13737 | 64\% | 20970 | 12838 | 61\% |
| White | Female | 21938 | 16761 | 76\% | 21449 | 16312 | 76\% |
| Not known |  | 745 | 422 | 57\% | 568 | 51 | 9\% |

Table 45: Number of candidates writing, passing with a Bachelors-level pass, percentage Bachelors-level pass rate and average annual growth rate, by race and gender, 2008-2011, cont.

|  |  | 2010 |  |  | 2011 |  |  | Avg. ann. growth rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | Gender | Cand | Pass | \% pass rate | Cand | Pass | \% <br> pass <br> rate | Cand | Passes |
| African | Male | 190263 | 37349 | 20\% | 191190 | 37338 | 19\% | -3\% | $3 \%$ |
| African | Female | 231790 | 44194 | 19\% | 221639 | 41562 | 18\% | -3\% | 2\% |
| Coloured | Male | 15452 | 3510 | 23\% | 14267 | 3631 | 25\% | -4\% | -3\% |
| Coloured | Female | 20691 | 5762 | 28\% | 18070 | 5699 | 31\% | -6\% | -5\% |
| Indian/ <br> Asian | Male | 6372 | 3227 | 51\% | 5046 | 2536 | 50\% | -14\% | -13\% |
| Indian/ <br> Asian | Female | 7439 | 4763 | 64\% | 5118 | 3262 | 63\% | -16\% | -15\% |
| White | Male | 20016 | 12050 | 60\% | 19305 | 11960 | 61\% | -3\% | -4\% |
| White | Female | 20567 | 14857 | 72\% | 19206 | 14612 | 75\% | -4\% | -5\% |
| Not known |  | 835 | 323 | 39\% | 249 | 145 | 54\% | - | - |



Figure 37: Number of candidates passing the NSC with a Bachelors-level pass, by race and gender, 2008-2011


Figure 38: The percentage of Bachelors-level passes, by race and gender, 2008-2011

### 2.2.1 Main findings

The main findings in the preceding section are as follows:

- The improvements in the pass rate by race are dramatic in the African population group, with the rate of Bachelors-level passes obtained in this population group increasing at an annual rate of $9 \%$.
- The gender dynamics at play in the NSC are complex. Female learners are more likely to stay in school than their male counterparts are, and thus the pass rate for female learners is slightly less than that of males. Much of this could be accounted for by the fact that weaker male learners are more likely to have dropped out of the system before attempting the NSC.
- At the upper level of the results spectrum, there are 13000 more females than males who obtain the Bachelors-level pass.
- While there is some evidence to suggest that the standard of the examinations has not remained completely consistent over the period under review, the fluctuations seem to be relatively minor, and it is likely that the improved results year-on-year can be attributed at least in part to systemic improvements.


### 2.3 Participation and performance in the NSC, by province and quintile, 2008 and 2012

The previous section focused on race and gender as factors that explain the differential performance profiles of NSC candidates. It is clear that while race continues to be a significant factor in terms of performance, this is so primarily because it serves as a proxy for measuring socio-economic status. Thus, this section focuses closely on indicators of economic status, and the following indicator reports on NSC Performance by Quintile.

This section looks at the participation and performance of candidates in the NSC, by quintile, in 2008 and 2012. The first two tables give the number of candidates per quintile, with Quintile 1 being the schools that are in the most deprived areas with the fewest school resources. In terms of schools that fall into Quintile 1, the Free State, Limpopo and Mpumalanga have the highest proportion of learners in Quintile 1 schools.

Independent schools and those schools that have changed their school number are included under the category 'None' in the tables in this section.

The number of candidates by quintile is somewhat uneven, with Quintile 1 having $18 \%$ of candidates, Quintile 2 having $15 \%$ and Quintile 3 having $22 \%$. It is not possible to hypothesize why this may be the case without further analysis. It is quite possible, however, that most Quintile 1 and 2 schools are the smaller rural schools.

The relationship between poverty and achievement is evident in the pass rates in 2008, of $47 \%$ and $49 \%$ in Quintiles 1 and 2 respectively, and $55 \%, 67 \%$ and $87 \%$ in Quintiles 3,4 and 5 . The same pattern is evident with the percentage of candidates gaining a Bachelors-level pass by quintile: the percentage Bachelors-level pass ranges from $8 \%$ to $46 \%$ from Quintiles 1 to 5 .

> Schools with better funding and that serve communities of higher socio-economic status produce the best results.

Ultimately, this data provides a clear indication that schools with better funding and that serve communities of higher socio-economic status produce the best results. While perhaps the larger socio-economic issues are outside of the scope of interventions that education role-players can attempt, important lessons can be learned from Quintile 5 schools about the features present that have a direct impact on educational attainment.

Clearly, additional funding by itself offers insufficient explanation for the better results observed; rather, such performance must be related to the specific systems in place in Quintile 5 schools that influence quality. If section 1 of this report is consulted, it is clear that per capita spending on learners is broadly equal across provinces, and indeed the poorest provinces have accelerated spending beyond that of the richer and better-performing provinces, such as Gauteng and the Western Cape. This being the case, it is clear that spending alone, while necessary, is not sufficient for school and systemic improvements to take place. Further research on schools that perform well is required to inform how such features might be developed in more poorly performing schools.

Table 46: Number of candidates, candidates passing, and passing with a Bachelor, by quintile, 2008

|  | Cand | None | $\%$ | $\mathbf{1}$ | $\%$ | $\mathbf{2}$ | $\%$ | $\mathbf{3}$ | $\%$ | $\mathbf{4}$ | $\%$ | $\mathbf{5}$ | $\%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cand (\% <br> of total <br> shown) | 561306 | 34224 | $6 \%$ | 99269 | $18 \%$ | 83206 | $15 \%$ | 125646 | $22 \%$ | 106817 | $19 \%$ | 112144 | $20 \%$ |
| Passes (\% <br> pass rate) | 350962 | 24092 | $70 \%$ | 46699 | $47 \%$ | 40843 | $49 \%$ | 69717 | $55 \%$ | 71916 | $67 \%$ | 97695 | $87 \%$ |
| Bach-level <br> pass (\% <br> bach rate) | 111731 | 9937 | $29 \%$ | 7710 | $8 \%$ | 7511 | $9 \%$ | 14227 | $11 \%$ | 20340 | $19 \%$ | 52006 | $46 \%$ |



Figure 39: Number of candidates, candidates passing, and passing with a Bachelor, by quintile, 2008


Figure 40: Pass rates and percentage of candidates passing with a Bachelor, by quintile, 2008

A similar pattern to 2008 pertains for 2012 enrolments and passes by quintiles. ${ }^{10}$ The improvement in the pass and Bachelor rate in 2012 was also seen in a marked improvement in the performance of the Quintile 1, 2 and 3 schools. However, these pass rates still lag behind the national average pass rate in 2012, of $74 \%$. Similarly, with the Bachelor passes, Quintiles $1-3$ lag behind the national Bachelor rate, of $27 \%$.

When the figures in the table and graph below are compared with those of 2008 , it becomes clear that there has been an overall improvement in results in all school categories. The fact that the improvements have been most dramatic in the poorer schools is deeply encouraging. While the improvements in Quintile 4 and 5 schools are clear, it can be assumed that the majority of these schools are well established and have a tradition of quality. Quintile $1-3$ schools, on the other hand, while coming from a low base, have improved at a rapid rate - and it is clear that such improvements indicate a system-wide enhancement of quality.

Table 47: Number of candidates, by province and quintile, 2012

| Province | Cand | None | \% | 1 | \% | 2 | \% | 3 | \% | 4 | \% | 5 | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cand (\% of tołal shown) | 511724 | 39131 | 8\% | 88199 | 17\% | 107838 | 21\% | 103629 | 20\% | 70341 | 14\% | 102586 | 20\% |
| Passes (\% pass rate) | 378103 | 29744 | 76\% | 57913 | 66\% | 73266 | 68\% | 70802 | 68\% | 53845 | 77\% | 92533 | 90\% |
| Bach-level pass (\% bach rate) | 136251 | 12497 | 32\% | 14582 | 17\% | 19796 | 18\% | 21104 | 20\% | 18410 | 26\% | 49862 | 49\% |

[^16]

Figure 41: Number of candidates, candidates passing and passing with a Bachelor, by quintile, 2012


Figure 42: Pass rates and percentage of candidates passing with a Bachelors, by quintile, 2012

### 2.3.1 Main findings

The main findings in the preceding section are as follows:

- There is a continuing strong association between the quintile of the school and the level of achievement of learners. On average, the more well resourced a school is, the better the learners perform.
- It is clear that there have been marked improvements in performance in Quintile 1 and 2 schools in the period between 2008 and 2012. This result should be treated with caution, however, as it is not possible with the current data to directly link schools across this period.


### 2.4 Participation and performance as a percentage of 18 -yearolds, by race, gender and province, 2011

This section of the report looks at the number of candidates, candidates passing and candidates obtaining a Bachelors-level pass as a percentage of the population of 18 -yearolds, by province, race and gender. As in Section 1.1, which looks at the enrolment of each grade as a percentage of the appropriate age for that grade, it is important to look at the proportional enrolment and achievement by province, race and gender. This indicator is broadly understood as Performance of 18 -year-olds, and is designed to capture the outputs of the system for learners who are of the expected age to be writing the NSC. The most recent year for which it was possible to obtain statistically robust population data disaggregated by province, race and gender for 18 -year-olds is the 2011 Census; as a result, only the 2011 NSC candidates were analysed in this manner.

In total, $33 \%$ of male, and $36 \%$ of female 18-year-olds achieved an NSC pass.
As with the analysis in Section 1.1, which gave an enrolment ratio for Grade 12
in 2011 of $48 \%$ for male learners and $56 \%$ for female learners, these enrolment ratios are an important reflection of the relative proportion of our youth who are accessing the NSC.

In total $33 \%$ of male, and $36 \%$ of female 18 -year-olds achieved an NSC pass; $11 \%$ of male 18 -year-olds, and $13 \%$ of female 18 -year-olds achieved a Bachelors-level NSC pass.

The racial disaggregation of the proportions of 18 -year-olds writing, passing and achieving a Bachelors-level pass indicates on first impression a surprisingly low proportion of White candidates as a percentage of 18 -year-olds. With reference to the analysis of the educational attainment of adults in Section 1.4, of those between the age of 20 and 24 who had completed secondary schooling, $35 \%$ were Africans, $40 \%$ were Coloureds, $64 \%$ Indians, and $63 \%$ were Whites. Apart from the Indian proportion (which may be the result of a sample error), these percentages very closely reflect the proportion of candidates passing as a percentage of the 18 -year-old population.

An additional factor that needs to be taken into consideration is the number of candidates registered for the IEB examination. The table below gives the number of candidates, by race, who wrote the IEB examination in 2011. This is included to provide a more complete picture of enrolment percentages.

The impact of including those candidates enrolled for the IEB examination is most profound on the White population, with the percentage of candidates to 18 -year-olds being at $76 \%$ after inclusion. The total percentage of Indian candidates to 18 -year-olds was 54\%; Coloureds, 37\%; and Africans, 50\%.

Appendix 2 presents a table of the full breakdown by province, race and gender of the NSC candidates as a percentage of 18-year-olds. Of note are the relatively low enrolment percentages of African and Coloured candidates in the Western Cape; African candidates in Gauteng; and African male candidates in the Eastern Cape and the North West.

Table 48: Number of candidates writing the NSC examination as a percentage of the population of 18 -year-olds, by race and gender, 2011

| Race | Gender | Population | Cand | \% of population | Total pass | \% of population | Bach | \% of population |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| African | Male | 414765 | 196369 | 47\% | 130465 | 31\% | 37338 | 9\% |
|  | Female | 417389 | 230795 | 55\% | 143039 | 34\% | 41562 | 10\% |
| Coloured | Male | 43200 | 14661 | 34\% | 11593 | 27\% | 3631 | 8\% |
|  | Female | 43921 | 18579 | 42\% | 14786 | 34\% | 5699 | 13\% |
| Indian/ <br> Asian | Male | 10078 | 5096 | $51 \%$ | 4618 | 46\% | 2536 | 25\% |
|  | Female | 9731 | 5180 | 53\% | 4787 | 49\% | 3262 | 34\% |
| White | Male | 29692 | 19511 | 66\% | 18971 | 64\% | 11960 | 40\% |
|  | Female | 28423 | 19382 | 68\% | 19093 | 67\% | 14612 | 51\% |
| Tołal | Male | 497735 | 235637 | 47\% | 165647 | 33\% | 55465 | 11\% |
|  | Female | 499464 | 273936 | 55\% | 181705 | 36\% | 65135 | 13\% |

Population data from StatSA Census 2011

Table 49: Number of candidates writing the IEB examination, by race and gender, 2011

| Race | Cand |
| :--- | ---: |
| African | 2228 |
| Coloured | 321 |
| Indian/Asian | 511 |
| White | 5761 |
| Total | 8821 |



Figure 43: Number of candidates writing, passing and attaining a Bachelors-level pass in the NSC examination, as a percentage of the population of 18 -year-olds, by race and gender, 2011

### 2.4.1 Main findings

The main findings of the preceding section are as follows:

- There is a very low enrolment of Coloured learners in the NSC, and this trend is most pronounced in Coloured male learners, of whom just $34 \%$ enrolled to write the NSC in 2011.
- There is a very large drop between the number of African learners who enrol for the NSC and the pass rate for this group. Much of the evidence in this report points to the effects of lingering socio-economic hardships in this race group, and it is likely that this observed pattern in pass rates is largely a reflection of the socio-economic situation that African learners face.


### 2.5 NSC subject performance

Previous indicators have examined performance in the NSC as a qualification, but clearly this does not yet suffice because performance, and enrolment for the NSC differ markedly between subjects. Thus, this indicator provides a detailed look at subject performance, and is constructed around the central principle of NSC Performance by Subject. Those subjects with 80000 or more candidates are examined in some detail under this indicator. In this regard, the number of candidates passing with $30 \%$ or more, $50 \%$ or more, and $80 \%$ or more is examined for all these subjects.

Doing this makes it possible to analyse trends in performance in terms of the

The two subjects that have seen an increase are Maths Literacy and Tourism.
quality of NSC passes, using results as an indicator of that quality. It can be said that a learner who has achieved an $80 \%+$ pass has achieved a higher quality pass than a learner who has achieved a pass at $30 \%$ - the minimum level. It should be noted that all learners who have achieved $50 \%+$ and $80 \%+$ will also be represented within the $30 \%+$ group - and similarly the $80 \%+$ group will be represented within the $50 \%+$ group. This means that the categories cannot be added together, as many learners would be counted multiple times if that were the case. These figures allow us to gauge the rate at which performance drops off below the basic pass of $30 \%$, and how much of the learner cohort is achieving moderate- or high-quality passes (50\%+ and $80 \%+$ respectively).

The table below shows enrolment for the most subscribed subjects. Accountancy, Mathematics and Physical Science have seen the greatest decreases in enrolment, with an average annual decrease of between $6 \%$ and $8 \%$. The other subjects that have seen a decrease have generally done so by the same average annual percentage as the decrease for subjects overall.

Table 50: Number of candidates enrolled for selected subjects, and average annual growth, 2008-2013

| 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | Average <br> annual |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Accountancy | 174901 | 172085 | 159046 | 137736 | 133622 | 144732 | $-5 \%$ |
| growth |  |  |  |  |  |  |  |$|$

[^17]

Figure 44: Number of candidates enrolled for selected subjects, 2008-2013
Source: Umalusi NSC database

### 2.5.1 Total number of candidates taking, passing with over $30 \%$, passing with over $50 \%$ and passing with over $80 \%, 2008-2013$

The following tables and graphs show the number of candidates enrolled for each subject, and passing with $30 \%$ or more, $50 \%$ or more and $80 \%$ or more. In terms of the methodology, the number of candidates gaining $30 \%$ or more includes those gaining $50 \%$ and over, and $80 \%$ and over. Similarly those candidates gaining $50 \%$ and over includes the number of candidates gaining $80 \%$ and over. The main pattern emerging is one of decreases in the candidates enrolled for Accountancy, Mathematics and Physical Science, as previously noted in this report, and increases in enrolment for most of the other subjects.

For all subjects, the most significant growth has been in the number of

There is still a lack of quality performance at the top end of the learner mark spectrum. candidates passing with over $50 \%$. While there have been systematic increases in the number of candidates gaining over $80 \%$, these are off a low base, and very few subjects exceed $2 \%$ of candidates obtaining over $80 \%$. This indicates that while the system is improving, and tends towards an 'average' rate of learner success, there is still a lack of quality performance at the very top end of the learner mark spectrum. Below, selected subjects are analysed individually, and the trends highlighted.

For all figures in these tables, it should be noted that the category of candidates scoring above $30 \%$ will by definition include those who scored above $50 \%$ and $80 \%$. Thus, the figures in each category cannot be added, as many candidates will then be counted multiple times.

### 2.5.1.1 Accountancy

The following table and graph show the number of candidates enrolled for, and having passed Accountancy with $30 \%$ and over, $50 \%$ and over and $80 \%$ and over. Overall, there has been an average annual decrease of $5 \%$ in the number of candidates enrolled; however, the number of candidates increased again in 2013. While there is an overall decrease in

The picture is one of a subject that is beginning to stabilise. the number of candidates passing with $30 \%$ or more and $50 \%$ or more until
2011, these figures begin to rise after 2012. The picture is one of a subject that is beginning to stabilise, although top performers are still rare in this subject. It is encouraging, however, that a steady rate of increase was achieved in the $80 \%$ category from 2009 onwards.

Table 51: Accountancy: Candidates and results 2008-2013

| Accountancy |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  |  |
|  | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Average annual growth |
| Total | 174901 |  | 172085 |  | 159046 |  | 137736 |  | 133622 |  | 144732 |  | -5\% |
| $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | 108193 | 62\% | 106485 | 62\% | 100345 | 63\% | 84918 | 62\% | 86346 | 65\% | 93111 | 64\% | -4\% |
| $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | 31272 | 18\% | 31887 | 19\% | 29495 | 19\% | 27345 | 20\% | 35281 | 26\% | 37662 | 26\% | $3 \%$ |
| $\begin{aligned} & \text { Over } \\ & 80 \% \end{aligned}$ | 4201 | $2 \%$ | 3904 | $2 \%$ | 4114 | 3\% | 5149 | 4\% | 6559 | 5\% | 7785 | 5\% | 14\% |

Source: Umalusi NSC database


Figure 45: Accountancy: Candidates and results 2008-2013
Source: Umalusi NSC database

### 2.5.1.2 Agriculture

The following table and graph show the number of candidates enrolled for and passing Agriculture with $30 \%$ and over, $50 \%$ and over and $80 \%$ and over. There has been an average annual decrease of $2 \%$ in the number of candidates enrolled; however, the number of candidates increased in 2013. There was an average annual increase of $7 \%$ in the number of candidates passing with $30 \%$ or more and an average annual increase of $32 \%$ in candidates passing with $50 \%$ or more. This pattern indicates that while the profile of this subject is improving, top performing learners do not generally enrol for this subject or see it as an option. The average annual growth of $49 \%$ at the $80 \%$ pass is misleading in this case, since the base of top performers is so low that the figure alone is not a useful indicator of improvement. It is somewhat anomalous that in 2008 some $53 \%$ of candidates achieved some form of pass in this subject, while in 2013 the pass rate had moved to $80 \%$. This suggests a fairly rapid change in the standard of the examinations in this subject.

Table 52: Agriculture: Candidates and results 2008-2013

| Agriculture |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  |  |
|  | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Average annual growth |
| Total | 85166 |  | 88667 |  | 84331 |  | 77624 |  | 77198 |  | 83064 |  | -2\% |
| $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | 44914 | 53\% | 46269 | 52\% | 52975 | 63\% | 55340 | 71\% | 55982 | 73\% | 66138 | 80\% | 7\% |
| $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | 3281 | 4\% | 6970 | 8\% | 10630 | 13\% | 12772 | 16\% | 13810 | 18\% | 19870 | 24\% | 32\% |
| $\begin{aligned} & \hline \text { Over } \\ & 80 \% \end{aligned}$ | 31 | 0\% | 51 | 0\% | 115 | 0\% | 118 | 0\% | 178 | 0\% | 442 | 1\% | 49\% |

Source: Umalusi NSC database


Figure 46: Agriculture: Candidates and results 2008-2013
Source: Umalusi NSC database

### 2.5.1.3 Business studies

The following table and graph show the number of candidates enrolled for and passing Business Studies with $30 \%$ and over, $50 \%$ and over, and $80 \%$ and over. While there has not been an appreciable increase in the number of candidates enrolled, there has been an average annual increase of $2 \%$ in the number of candidates passing with $30 \%$ or more and an average annual increase of $8 \%$ in candidates passing with $50 \%$ or more. This subject is clearly stabilising, and indeed is beginning to attract top learners into the field. The average annual growth rate of $18 \%$ at the top end ( $80 \%$ ) attests to a subject that is being relatively well taught and is being studied by learners who will often go on to tertiary studies. It must be noted that the percentage of top performers overall (3\%) is still quite low - but signs are positive that if the annual growth in the category continues, there will be a substantial number of 'A Candidates' produced in this subject.

Table 53: Business Studies: Candidates and results 2008-2013

| Business Studies |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  |  |
|  | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Average annual growth |
| Total | 202715 |  | 203862 |  | 198141 |  | 187440 |  | 193520 |  | 217473 |  | 0\% |
| $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | 151146 | 75\% | 147436 | 72\% | 141505 | 71\% | 147433 | 79\% | 147976 | 76\% | 176080 | 81\% | 2\% |
| $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | 50733 | 25\% | 53855 | 26\% | 50451 | 25\% | 63173 | 34\% | 61529 | 32\% | 79939 | 37\% | 8\% |
| $\begin{aligned} & \text { Over } \\ & 80 \% \end{aligned}$ | 3040 | 1\% | 2649 | 1\% | 2602 | 1\% | 4648 | 2\% | 4528 | 2\% | 6777 | $3 \%$ | 18\% |

Source: Umalusi NSC database


Figure 47: Business Studies: Candidates and results 2008-2013
Source: Umalusi NSC database

### 2.5.1.4 Economics

The following table and graph show the number of candidates enrolled for and passing Economics with $30 \%$ and over, $50 \%$ and over, and $80 \%$ and over. There has been an overall average annual decrease of $2 \%$ in the number of candidates enrolled; however, the number of candidates increased in 2013. While there is an overall decrease in the number of candidates passing with $30 \%$ or more, there was an average annual increase of $11 \%$ in the number of candidates gaining $50 \%$ or more. This

> This subject is clearly still somewhat unstable in terms of learner enrolment and pass rates. subject is clearly still somewhat unstable in terms of learner enrolment and pass rates. While middle- and top-end learners are able to cope with the demands of the subject, there is a fluctuating majority of learners who are able to pass at the minimum $30 \%$ level, with a rapid drop-off before the $50 \%+$ level is reached. Again, the top-end growth rate of $21 \%$ must be understood in terms of the very low base of learners who achieve at the $80 \%$ level in this subject.

Table 54: Economics: Candidates and results 2008-2013

| Economics |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  |  |
|  | Cand | \% of <br> total | Cand | \% of <br> total | Cand | \% of total | Cand | \% of <br> total | Cand | \% of <br> total | Cand | \% of <br> total | Average annual growth |
| Total | 152382 |  | 151367 |  | 145035 |  | 133184 |  | 132685 |  | 149219 |  | -2\% |
| $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | 119414 | 78\% | 109092 | 72\% | 109715 | 76\% | 85335 | 64\% | 95041 | 72\% | 108049 | 72\% | -3\% |
| $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | 22276 | 15\% | 18296 | 12\% | 34268 | 24\% | 19238 | 14\% | 33547 | 25\% | 36573 | 25\% | 11\% |
| $\begin{aligned} & \hline \text { Over } \\ & 80 \% \\ & \hline \end{aligned}$ | 1079 | 1\% | 764 | 1\% | 1891 | 1\% | 1058 | 1\% | 2289 | $2 \%$ | 2680 | 2\% | 21\% |

Source: Umalusi NSC database


Figure 48: Economics: Candidates and results 2008-2013

[^18]
### 2.5.1.5 Geography

The following table and graph show the number of candidates enrolled for, and having passed geography with $30 \%$ and over, $50 \%$ and over and $80 \%$ and over. There has been an average annual increase of $2 \%$ in the number of candidates enrolled. While there was a small increase in the number of candidates passing with $30 \%$ or more, those passing with $50 \%$ or more increased by an average annual rate of $12 \%$. This rapid increase at the $50 \%$ pass may indicate that teachers and learners are becoming more familiar with the Geography curriculum, and thus, the quality of learning and teaching is increasing for this subject.

The increase in the pass rate, especially at the 50\% and 80\% levels was disproportionately high in the year 2013. It is also possible, however, that the examinations have become easier at the top end of the spectrum over time, allowing a similar proportion of candidates to pass overall while increasing scores in the mid and upper ranges of the performance profile. This possibility is also supported by the fact that the increase in the pass rate, especially at the $50 \%$ and $80 \%$ levels was disproportionately high in the year 2013, suggesting that the examination in that year was of a different standard to those of previous years.

Table 55: Geography: Candidates and results 2008-2013

| Geography |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  |  |
|  | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Average annual growth |
| Total | 211394 |  | 211660 |  | 207182 |  | 199118 |  | 211254 |  | 238367 |  | $2 \%$ |
| $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | 170780 | 81\% | 153885 | 73\% | 143873 | 69\% | 139377 | 70\% | 157710 | 75\% | 187568 | 79\% | 1\% |
| $\begin{aligned} & \hline \text { Over } \\ & 50 \% \end{aligned}$ | 38351 | 18\% | 39399 | 19\% | 41013 | 20\% | 42739 | 21\% | 51982 | 25\% | 73512 | 31\% | 12\% |
| $\begin{aligned} & \text { Over } \\ & 80 \% \end{aligned}$ | 2727 | 1\% | 2272 | 1\% | 2491 | 1\% | 2237 | 1\% | 2969 | 1\% | 4135 | 2\% | 8\% |

Source: Umalusi NSC database


Figure 49: Geography: Candidates and results 2008-2013
Source: Umalusi NSC database

### 2.5.1.6 History

The following table and graph show the number of candidates who enrolled for, and passed history with $30 \%$ and over, $50 \%$ and over, and $80 \%$ and over. After a decrease in candidates in 2011, the number of candidates increased in 2013. The number of candidates passing with $30 \%$ or more and $50 \%$ or more increased annually at an average of $5 \%$ and $16 \%$ respectively. The large jump in pass rates at the $30 \%$ and $50 \%$ levels in 2012 may indicate improvements in the system, but may also indicate a change in the standard of the examinations in this subject for this and the subsequent year. It is unlikely that any intervention in the system would have caused such a marked improvement from one year to the next.

Table 56: History: Candidates and results 2008-2013

| History |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  |  |
|  | Cand | \% of <br> total | Cand | \% of <br> total | Cand | \% of <br> total | Cand | \% of total | Cand | \% of <br> total | Cand | \% of <br> total | Average annual growth |
| Total | 92356 |  | 88491 |  | 86396 |  | 85844 |  | 93308 |  | 108441 |  | 0\% |
| Over $30 \%$ | 63900 | 69\% | 64278 | 73\% | 65671 | 76\% | 65188 | 76\% | 79950 | 86\% | 93869 | 87\% | 5\% |
| Over $50 \%$ | 18766 | 20\% | 23462 | 27\% | 26805 | 31\% | 27047 | 32\% | 38990 | 42\% | 47537 | 44\% | 16\% |
| Over $80 \%$ | 1804 | 2\% | 2017 | $2 \%$ | 2154 | 2\% | 2420 | $3 \%$ | 3281 | 4\% | 3554 | $3 \%$ | 14\% |

[^19]

Figure 50: History: Candidates and results 2008-2013
Source: Umalusi NSC database

### 2.5.1.7 Life Sciences

The following table and graph show the number of candidates who enrolled for, and passed Life Science with $30 \%$ and over, $50 \%$ and over, and $80 \%$ and over. After a decrease in candidates to 2011, the number of candidates increased to 2013. The number of candidates passing with $30 \%$ or more did not grow, and those passing with $50 \%$ or more increased annually at an average of $3 \%$. In 2010 the overall pass rate jumped to $75 \%$ from $66 \%$ in

From 2011 onwards, the figures for performance in Life Sciences at each level seem to have stabilised. 2009, but this seems to have been a correction, bringing the results back in line with the 2008 figure, as the 2009 examination seems to have produced poor results for learners at all levels. From 2011 onwards the figures for performance in Life Sciences at each level seem to have stabilised, and an overall steady improvement in learner outcomes in the $50 \%$ and $80 \%$ categories can be observed.

Table 57: Life Sciences: Candidates and results 2008-2013

| Life Science |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  |  |
|  | Cand | \% of <br> total | Cand | \% of <br> total | Cand | \% of total | Cand | \% of <br> total | Cand | \% of <br> total | Cand | \% of total | Average annual growth |
| Total | 295237 |  | 294422 |  | 281823 |  | 264604 |  | 275553 |  | 300152 |  | -1\% |
| $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | 209824 | 71\% | 194070 | 66\% | 210920 | 75\% | 193856 | 73\% | 189407 | 69\% | 218584 | 73\% | 0\% |
| $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | 67119 | 23\% | 66213 | 22\% | 88904 | 32\% | 66202 | 25\% | 68933 | 25\% | 83624 | 28\% | 3\% |
| $\begin{aligned} & \text { Over } \\ & 80 \% \end{aligned}$ | 6725 | $2 \%$ | 4534 | $2 \%$ | 7356 | $3 \%$ | 5893 | $2 \%$ | 6228 | 2\% | 7586 | 3\% | 4\% |

[^20]

Figure 51 Life Sciences: Candidates and results 2008-2013
Source: Umalusi NSC database

### 2.5.1.8 Life Orientation

The following table and graph show the number of candidates enrolled for, and passing Life Orientation with $30 \%$ and over, $50 \%$ and over, and $80 \%$ and over. Since this is a compulsory subject for all candidates, the number of candidates writing and passing follows the same pattern as the overall growth in the number NSC candidates. Life orientation is a subject that does not have a final examination, and its principal aim is to develop a balanced and confident learner who can contribute to a just and democratic society.

Table 58: Life Orientation: Candidates and results 2008-2013

| Life Orientation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  |  |
|  | Cand | \% of total | Cand | \% of total | Cand | \% of <br> total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Average annual growth |
| Total | 561298 |  | 560433 |  | 536549 |  | 505444 |  | 511705 |  | 562198 |  | -1\% |
| $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | 559733 | 100\% | 559505 | 100\% | 535748 | 100\% | 503294 | 100\% | 511201 | 100\% | 561850 | 100\% | -1\% |
| $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | 476416 | 85\% | 512883 | 92\% | 498554 | 93\% | 467729 | 93\% | 468877 | 92\% | 515022 | 92\% | 0\% |
| $\begin{aligned} & \hline \text { Over } \\ & 80 \% \end{aligned}$ | 45725 | 8\% | 57322 | 10\% | 68535 | 13\% | 60772 | 12\% | 56346 | 11\% | 66905 | 12\% | 5\% |

[^21]

Figure 52: Life Orientation: Candidates and results 2008-2013
Source: Umalusi NSC database

### 2.5.1.9 Mathematics

The following table and graph show the number of candidates enrolled for and passing Mathematics with $30 \%$ and over, $50 \%$ and over and $80 \%$ and over. There has been an average annual decrease of $6 \%$ in the number of candidates enrolled; however, the number of candidates increased in 2013. While there was an overall decrease in the number

> Many learners have migrated to Mathematical Literacy in lieu of Mathematics. of candidates passing until 2011, this began to rise from 2012. There have been overall reductions in candidate numbers and in all categories of pass in Mathematics since 2008, and it is likely that many learners have migrated to Mathematical Literacy in lieu of Mathematics. Mathematical Literacy is intended as an alternative for learners who in all likelihood would not have passed Mathematics, but are still in need of a firm grounding in numerical concepts and usage. Mathematics results in South Africa are generally poor, however, and it is clear that these poor results are carried through from very early Grades, as demonstrated earlier in this report.

Table 59: Mathematics: Candidates and results 2008-2013

| Mathematics |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  |  |
|  | Cand | \% of <br> total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Average annual growth |
| Total | 297848 |  | 286836 |  | 260209 |  | 224339 |  | 223513 |  | 240475 |  | -6\% |
| $\begin{aligned} & \hline \text { Over } \\ & 30 \% \end{aligned}$ | 136952 | 46\% | 132922 | 46\% | 124050 | 48\% | 103995 | 46\% | 119284 | 53\% | 139936 | 58\% | -1\% |
| $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | 63401 | $21 \%$ | 52597 | 18\% | 49993 | 19\% | 41571 | 19\% | 51159 | 23\% | 63052 | 26\% | -1\% |
| Over <br> 80\% | 12997 | 4\% | 8681 | 3\% | 9499 | 4\% | 5666 | 3\% | 6600 | 3\% | 8210 | $3 \%$ | -10\% |

[^22]

Figure 53: Mathematics: Candidates and results 2008-2013
Source: Umalusi NSC database

### 2.5.1.10 Maths Literacy

The following table and graph show the number of candidates enrolled for, and passing Maths Literacy with $30 \%$ and over, $50 \%$ and over, and $80 \%$ and over. There has been an average annual increase of $3 \%$ in the number of candidates enrolled. There has also been an average annual increase in the number of candidates passing with $30 \%$ or more and in those passing with $50 \%$ or more, of $6 \%$ and $4 \%$ respectively. A similar trend to that observed in Physical and Life Sciences is displayed in these results, in that the 2009 results were lower than expected and were followed by a correction (or perhaps over-correction) the following year. The results for this subject have now stabilised since 2010, and they provide fairly good discrimination among candidates at different skill levels. While it appears as though the examinations have become somewhat more difficult over the period 2010-2013, much of this difficulty seems to have been at the top end of the examinations, as indicated by the reduction in the numbers of $80 \%$ learners, while the overall pass rate has remained stable, and in the face of steadily increasing candidate numbers.

Table 60: Maths Literacy: Candidates and results 2008-2013

| Maths Literacy |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  |  |
|  | Cand | \% of <br> total | Cand | \% of <br> total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Cand | \% of total | Average annual growth |
| Total | 263401 |  | 273577 |  | 276234 |  | 275027 |  | 288152 |  | 321679 |  | $3 \%$ |
| $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | 208212 | 79\% | 206585 | 76\% | 238263 | 86\% | 236319 | 86\% | 250031 | 87\% | 277649 | 86\% | 6\% |
| $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | 99724 | 38\% | 85423 | 31\% | 112933 | 41\% | 111796 | 41\% | 103685 | 36\% | 114646 | 36\% | 4\% |
| $\begin{aligned} & \text { Over } \\ & 80 \% \end{aligned}$ | 16831 | 6\% | 8432 | 3\% | 9718 | 4\% | 7412 | 3\% | 7186 | 2\% | 5951 | $2 \%$ | -17\% |

[^23]

Figure 54: Maths Literacy: Candidates and results 2008-2013
Source: Umalusi NSC database

### 2.5.1.11 Physical Science

The following table and graph show the number of candidates enrolled for, and passing Physical Science with $30 \%$ and over, $50 \%$ and over and $80 \%$ and over. There has been an average annual decrease of $4 \%$ in the number of candidates enrolled. There is also an overall average annual increase in the number of candidates passing with $30 \%$ or more and $50 \%$ or more, of $2 \%$ and $10 \%$ respectively. It is clear that there was a dramatic and unwarranted change in the standard of the examinations in this subject in 2009, followed by a correction in 2010 and onwards. The results in this subject seem to have now stabilised, albeit at a level that is lower than would be ideal. Given that the subject relies heavily on mathematical skills, it is not surprising that the pattern of scores in Physical Science is similar to that displayed in Mathematics. Again, the problems in mathematical skills have been shown to stem from the early years of schooling, and generally persist throughout a learner's school career.

Table 61: Physical Science: Candidates and results 2008-2013

| Physical Science |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  |  |
|  | Cand | \% of total | Cand | \% of total | Cand | \% of <br> total | Cand | \% of <br> total | Cand | \% of total | Cand | \% of total | Average annual growth |
| Total | 216111 |  | 218105 |  | 203129 |  | 180413 |  | 177366 |  | 183593 |  | -4\% |
| $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | 120261 | 56\% | 81078 | 37\% | 97703 | 48\% | 96422 | 53\% | 106197 | 60\% | 120659 | 66\% | 2\% |
| $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | 33777 | 16\% | 22235 | 10\% | 37715 | 19\% | 37094 | 21\% | 43553 | 25\% | 46968 | 26\% | 10\% |
| $\begin{aligned} & \hline \text { Over } \\ & 80 \% \end{aligned}$ | 2736 | 1\% | 990 | 0\% | 5944 | 3\% | 5648 | 3\% | 5658 | $3 \%$ | 5612 | 3\% | 25\% |

Source: Umalusi NSC database


Figure 55: Physical Science: Candidates and results 2008-2013
Source: Umalusi NSC database

### 2.5.1.12 Tourism

The following table and graph show the number of candidates enrolled for, and passing Tourism with $30 \%$ and over, $50 \%$ and over and $80 \%$ and over. There has been an average annual increase of $9 \%$ in the number of candidates enrolled. There has also been an average annual increase in the number of candidates passing with $30 \%$ or more and in those passing with $50 \%$ or more, of $12 \%$ and $13 \%$ respectively. The overwhelming majority of candidates who write this subject achieve a pass, and the $50 \%$ level of pass accounts for almost half of the candidate pool. When the top end is examined, only a very small percentage of learners achieve at the $80 \%$ level and above, and this may indicate that this subject is not attracting top-performing learners.

Table 62: Tourism: Candidates and results 2008-2013

| Tourism |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | Average annual growth |
|  | Cand | \% of <br> total | Cand | \% of <br> total | Cand | \% of <br> total | Cand | \% of <br> total | Cand | \% of total | Cand | \% of total |  |
| Total | 69248 |  | 73325 |  | 73231 |  | 84207 |  | 92471 |  | 109674 |  | 9\% |
| $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | 63826 | 92\% | 68049 | 93\% | 69586 | 95\% | 81960 | 97\% | 90159 | 97\% | 105485 | 96\% | 12\% |
| $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | 22511 | 33\% | 31059 | 42\% | 35267 | 48\% | 43327 | 51\% | 50477 | 55\% | 51881 | 47\% | 13\% |
| $\begin{aligned} & \text { Over } \\ & 80 \% \end{aligned}$ | 905 | 1\% | 1351 | $2 \%$ | 1636 | 2\% | 1915 | $2 \%$ | 2280 | 2\% | 1346 | 1\% | -4\% |

Source: Umalusi NSC database


Figure 56: Tourism: Candidates and results 2008-2013
Source: Umalusi NSC database

### 2.5.2 Main findings

The main findings in the preceding section are as follows:

- There have been substantial decreases in the number of candidates enrolling for Accountancy, Mathematics and Physical Sciences.
- In all subjects there are very few learners (rarely more than $2 \%$ ) who pass at the $80 \%$ level and above. While this is a low figure, it also indicates that the examinations discriminate at the top-end of performance.
- The results for both Life Sciences and Physical Sciences were abnormally low in 2009, and it is clear that there were problems with the standard of the examinations in this year. These results have since stabilised at a higher, more normal level.
- A surprisingly low proportion of candidates (just 4\%) performed at the $50 \%$ or greater level in Agriculture in 2008. This proportion grew steadily each year until 2013, when some $24 \%$ of candidates passed at this level or above. It is clear that this subject has stabilised over time.


### 2.6 Detailed subject analysis

This section in many ways falls under the previous indicator, but it was felt that for specific subjects greater detail needed to be provided. As such, this section follows on from the indicator identified in Section 2.5, but simply examines specific subjects in more detail. The following section looks at Accountancy, Mathematics, Maths Literacy and Physical Science. These subjects were chosen partly due to their being the most 'difficult' subjects and due to their having the greatest decrease in the number of candidates enrolling for them. While Maths Literacy does not fall into this category, it provides an essential part of our understanding of the dynamics of Mathematics participation and performance.

Each subsection shows the number of candidates in 2008 and 2012, and gives a breakdown of the marks on the $20^{\text {th }}, 50^{\text {th }}, 90^{\text {th }}$ and $95^{\text {th }}$ percentiles. A distribution graphs the number of candidates by mark obtained in order to discern more easily patterns of performance in each subject. A table of number of candidates scoring over $30 \%$, over $50 \%$, and over $80 \%$, by province, race and gender is also available so that exact numbers can be shown. The majority of the data is from 2011, which was the last year in which the Umalusi database had, at the time of writing, reliable data disaggregated by race.

The figures for all subjects reveal, among other things, a distinct racial dimension in performance, in favour of socio-economically advantaged groups.

### 2.6.1 Accountancy

The following table shows the total number of accountancy candidates, the mean mark and the mark at the $20^{\text {th }}, 50^{\text {th }}$ and $95^{\text {th }}$ percentiles in 2008 and 2012.
$50 \%$ of candidates scored $32 \%$ or less in 2008 , and $36 \%$ or less in 2012.

There was a reduction of approximately 40000 candidates enrolled for accountancy between 2008 and 2012. The mean mark increased from $35 \%$ to $40 \%$, and there was an increase in the mark on all $20^{\text {th }}$ and $50^{\text {th }}$ percentiles, as well as a 10 percentagepoint increase in the mark on the $90^{\text {th }}$ and $95^{\text {th }}$ percentiles. This means that the lower $20 \%$ of candidates scored $21 \%$ or less in 2008 , and $23 \%$ or less in 2012 . The lower $50 \%$ of candidates scored $32 \%$ or less in 2008 , and $36 \%$ or less in 2012 . Similarly, $90 \%$ of candidates scored $58 \%$ or less in 2008 and $68 \%$ in 2012, that is, the top $10 \%$ of candidates scored $59 \%$ or more in 2008 and $69 \%$ or more in 2012. Likewise, the top $5 \%$ of candidates scored $70 \%$ or more in 2008 and $80 \%$ or more in 2009. This tallies with the tables above, which indicate that $5 \%$ of candidates scored over $80 \%$ in 2012.

This increase in the mark on the $90^{\text {th }}$ and $95^{\text {th }}$ percentiles is accounted for primarily by the decrease in the number of candidates writing the exam. As can be seen on the graph, the difference between the mark distribution in 2008 and 2012 indicates that the majority of candidates 'missing' would most likely have scored under $40 \%$.

Table 63: Accountancy: total number of candidates, mean and the mark at the 20th, 50th, 90th and 95th percentiles, 2008 and 2012 (\%)

| No. of cand | Mean mark | 20th <br> percentile | 50th <br> percentile | 90th <br> percentile | 95th <br> percentile |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 2008 | 174901 | $35 \%$ | $21 \%$ | $32 \%$ | $58 \%$ | $69 \%$ |
| 2012 | 133622 | $40 \%$ | $23 \%$ | $36 \%$ | $68 \%$ | $79 \%$ |

Source: Umalusi NSC database
The graph below shows the mark distribution for Accountancy in 2008 and 2012. There has been a decrease in the number of students who would have scored below 40\%, which accounts for both the increase in the mean mark and the mark on the $90^{\text {th }}$ and $95^{\text {th }}$ percentiles. In general, as more learners drop out of a subject, it can be assumed that they would have been the weaker performers in that subject. Thus, while the overall percentage pass rate will increase, it represents fewer learners overall.


Figure 57: Accountancy: distribution of the number of candidates by mark obtained, 2008 and 2012
Source: Umalusi NSC database

The following table and graph show the number of candidates writing and passing Accountancy with over $30 \%$ and with over $50 \%$, by province, in 2008 and 2011 . (As noted above, 2011 was chosen as the last year of comparison for which the Umalusi database, at the time of writing, had reliable race and gender data.)

Table 64: Accountancy: number of candidates taking, passing with over 30\%, passing with over 50\%, by province, 2008 and 2011

|  | 2008 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Province | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | $\begin{aligned} & \text { \% } \\ & \text { over } \\ & 30 \% \end{aligned}$ | Over 50\% | $\begin{aligned} & \text { \% } \\ & \text { over } \\ & 50 \% \end{aligned}$ | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | $\begin{aligned} & \hline \text { \% over } \\ & 30 \% \end{aligned}$ | $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | $\begin{aligned} & \text { \% } \\ & \text { over } \\ & 50 \% \end{aligned}$ |
| Eastern Cape | 17631 | 10024 | 57\% | 2578 | 15\% | 18027 | 11070 | 61\% | 3398 | 19\% |
| Free State | 10465 | 6856 | 66\% | 1790 | 17\% | 8065 | 4897 | 61\% | 1700 | 21\% |
| Gauteng | 32751 | 23162 | 71\% | 8205 | 25\% | 25667 | 16991 | 66\% | 7233 | 28\% |
| KwaZuluNatal | 49996 | 30990 | 62\% | 9236 | 18\% | 41226 | 26179 | 64\% | 8617 | 21\% |
| Limpopo | 24038 | 12680 | 53\% | 2123 | 9\% | 17744 | 10255 | 58\% | 2448 | 14\% |
| Mpumalanga | 14941 | 7291 | 49\% | 1412 | 9\% | 12274 | 6184 | 50\% | 1721 | 14\% |
| North West | 9156 | 4980 | 54\% | 1153 | 13\% | 6110 | 4005 | 66\% | 1310 | 21\% |
| Northern Cape | 2945 | 2001 | 68\% | 566 | 19\% | 2274 | 1350 | 59\% | 455 | 20\% |
| Western Cape | 13000 | 10209 | 79\% | 4209 | 32\% | 9168 | 6806 | 74\% | 3282 | 36\% |

Source: Umalusi NSC database


Figure 58: Accountancy: percentage of candidates passing with over $30 \%$ and passing with over $50 \%$, by province, 2008 and 2011
Source: Umalusi NSC database

The following table and graph show the number of candidates writing and passing Accountancy with over $30 \%$ and with over $50 \%$, by race, in 2008 and 2011 . While there has been a decrease in candidates writing Accountancy, the percentage decrease was highest for Indian candidates, followed by White and Coloured candidates. Since 2011 was the lowest enrolment of Grade 12s, due to the implementation of the Age Requirements for Admission to Any Ordinary Public Government School

There has been a decrease in candidates writing accountancy, the percentage decrease was highest for Indian candidates, followed by those of White and Coloured candidates. (DoE 1998), it is likely that there will be an increase in the number of Indian, White and Coloured candidates. Unfortunately, at present it is not possible to disaggregate either the 2012 or 2013 data by race, and it cannot be ascertained whether this is in fact the case.

Table 65: Accountancy: number of candidates taking; passing with over 30\%, passing with over 50\%, by race, 2008 and 2011

|  | 2008 |  |  |  | 2011 |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Race | No. of <br> cand | Over <br> $30 \%$ | $\%$ <br> over <br> $30 \%$ | Over <br> $50 \%$ | $\%$ <br> over <br> $\mathbf{5 0 \%}$ | No. of <br> cand | Over <br> $30 \%$ | $\%$ over <br> $30 \%$ | Over <br> $50 \%$ | $\%$ <br> over <br> $50 \%$ |
| African | 144778 | 80902 | $56 \%$ | 14446 | $10 \%$ | 122120 | 71720 | $59 \%$ | 19728 | $16 \%$ |
| Coloured | 11661 | 9296 | $80 \%$ | 2802 | $24 \%$ | 7010 | 5057 | $72 \%$ | 1991 | $28 \%$ |
| Indian | 8192 | 7763 | $95 \%$ | 5403 | $66 \%$ | 4113 | 3835 | $93 \%$ | 2770 | $67 \%$ |
| White | 10122 | 10072 | $100 \%$ | 8525 | $84 \%$ | 7266 | 7085 | $98 \%$ | 5651 | $78 \%$ |
| Unknown | 170 | 160 | $94 \%$ | 96 | $56 \%$ | 46 | 40 | $87 \%$ | 24 | $52 \%$ |

Source: Umalusi NSC database


Figure 59: Accountancy: percentage of candidates passing with over $30 \%$, passing with over $50 \%$, by race, 2008 and 2011

[^24]The following table and graph show the number of candidates writing and passing Accountancy with over $30 \%$ and with over $50 \%$, by gender, in 2008 and 201 . Approximately 40000 more female than male candidates wrote Accountancy in 2008, dropping to approximately 27000 more enrolled in 2011. The percentage of female candidates passing with $30 \%$ or more is slightly higher than that of male candidates, and almost the same as that of male candidates

In terms of actual numbers, some $55 \%$ more female candidates than male candidates write accountancy. passing with $50 \%$ or more. Overall, while the percentage pass rates are very similar between females and males, in terms of actual numbers, some $55 \%$ more female candidates than male candidates write Accountancy.

Table 66: Accountancy: number of candidates taking, passing with over 30\%, passing with over 50\%, by gender, 2008 and 2011

|  | 2008 |  |  |  |  | 2011 |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | No. of <br> cand | Over <br> $30 \%$ | $\%$ <br> over <br> $30 \%$ | Over $50 \%$ | $\%$ <br> over <br> $50 \%$ | No. of <br> cand | Over <br> $30 \%$ | \% <br> over <br> $30 \%$ | Over <br> $50 \%$ | $\%$ <br> over <br> $\mathbf{5 0 \%}$ |
| Male | 68453 | 41517 | $61 \%$ | 12569 | $18 \%$ | 56815 | 34977 | $62 \%$ | 12537 | $22 \%$ |
| Female | 106470 | 66676 | $63 \%$ | 18703 | $18 \%$ | 83740 | 52760 | $63 \%$ | 17627 | $21 \%$ |

Source: Umalusi NSC database

The table above and the graph below indicate that there has been a slight upward trend in performance in this subject, which is similar across both genders. This upward trend may be accounted for by the decrease in the number of candidates writing Accountancy in 2011, when compared with 2008 . It is unlikely that this tells the full story, however, as the reduction in the number of candidates does not quite match the rate of increase in performance, and it is possible that a stabilisation of the system and familiarity with teaching the subject matter has allowed for incremental improvements in teaching and learning in this subject.

A stabilisation of the system and familiarity with teaching the subject matter has allowed for incremental improvements in teaching and learning.


Figure 60: Accountancy: number of candidates taking, passing with over 30\%, and with over 50\%, by gender, 2008 and 2011
Source: Umalusi NSC database

### 2.6.2 Mathematics

The following table shows the total number of Mathematics candidates, the mean mark, and the mark at the $20^{\text {th }}, 50^{\text {th }}$, and $95^{\text {th }}$ percentiles in 2008 and 2012.

There was a reduction of approximately 74000 candidates enrolled for Mathematics between 2008 and 2012. The mean mark increased from $31 \%$ to $35 \%$, and there was an increase in the mark on all $20^{\text {th }}$ and $50^{\text {th }}$ percentiles and a decrease in the mark on the $90^{\text {th }}$ and $95^{\text {th }}$ percentiles. This means that the lower $20 \%$ of candidate scored $11 \%$ or less in 2008 and $16 \%$ or less in 2012 . The lower $50 \%$ of candidates scored $25 \%$ or less in 2008 and $31 \%$ or less in 2012 . Similarly, $90 \%$ of candidates scored $67 \%$ or less in 2008 , and $65 \%$ in 2012; that is, the top $10 \%$ of candidates scored $67 \%$ or more in 2008 and $65 \%$ or more in 2012. Likewise, the top $5 \%$ of candidates scored $78 \%$ or more in 2008 and $74 \%$ or more in 2009.

Table 67: Mathematics: total number of candidates, mean and the mark at the 20th, 50th, 90 th and 95th percentiles, 2008 and 2012 (\%)

| No. of cand | Mean <br> mark | 20th <br> percentile | 50th <br> percentile | 90th <br> percentile | 95th <br> percentile |  |
| :--- | ---: | :---: | ---: | ---: | ---: | ---: |
| 2008 | 297848 | 31 | 11 | 25 | 67 | 78 |
| 2012 | 223513 | 35 | 16 | 31 | 65 | 74 |

[^25]The graph below shows the mark distribution of Mathematics in 2008 and 2012. There has been a decrease in the number of students who would have scored below the $20^{\text {th }}$ and $50^{\text {th }}$ percentiles. However, it appears as though the number of candidates scoring over $60 \%$ decreased, which accounts for the decreases in the mark on both the $90^{\text {th }}$ and $95^{\text {th }}$ percentiles.


Figure 61: Mathematics: distribution of the number of candidates, by mark obtained, 2008 and 2012

Source: Umalusi NSC database

The following table and graph show the number of candidates writing and passing Mathematics with over $30 \%$ and with over $50 \%$, by province, in 2008 and 2011. The decrease in the number of Mathematics candidates is matched by a proportional increase in the number of candidates writing Maths Literacy. Given that the weakest $50 \%$ of candidates scored $25 \%$ or less in 2008 (approximately 150000 candidates) and $31 \%$ or less in 2012 (approximately 110000 candidates), this move from Mathematics to Maths Literacy is perhaps a positive step.

Table 68: Mathematics: number of candidates taking; passing with over $30 \%$, passing with over 50\%, by province, 2008 and 2011

| Maths | 2008 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Province | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | \% over $30 \%$ | Over 50\% | $\begin{gathered} \text { \% } \\ \text { over } \\ 50 \% \\ \hline \end{gathered}$ | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | \% <br> over <br> 30\% | $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | \% over 50\% |
| Eastern Cape | 36453 | 13772 | 38\% | 5348 | 15\% | 39208 | 14018 | 36\% | 5427 | 14\% |
| Free State | 14609 | 7964 | 55\% | 3615 | 25\% | 10076 | 5475 | 54\% | 2165 | 21\% |
| Gauteng | 50321 | 27518 | 55\% | 15327 | 30\% | 33039 | 20404 | 62\% | 10431 | 32\% |
| KwaZulu- <br> Natal | 80924 | 35958 | 44\% | 14962 | 18\% | 63381 | 26256 | 41\% | 9842 | 16\% |
| Limpopo | 49473 | 18555 | 38\% | 7293 | 15\% | 35360 | 15862 | 45\% | 5690 | 16\% |
| Mpumalanga | 25601 | 10296 | 40\% | 4325 | 17\% | 20124 | 9451 | 47\% | 3804 | 19\% |
| North West | 16921 | 8022 | 47\% | 3610 | $21 \%$ | 9914 | 5383 | 54\% | 2143 | 22\% |
| Northern Cape | 3826 | 1921 | 50\% | 899 | 23\% | 3304 | 1686 | 51\% | 661 | 20\% |
| Western Cape | 19747 | 12946 | 66\% | 8022 | 41\% | 14454 | 9981 | 69\% | 5929 | 41\% |

Source: Umalusi NSC database


Figure 62: Mathematics: percentage of candidates passing with over 30\%; passing with over 50\%, by province, 2008 and 2011
Source: Umalusi NSC database

The following table and graph show the number of candidates writing and passing Mathematics with over $30 \%$ and with over $50 \%$, by race, in 2008 and 2011 . As mentioned above the decrease in the number of Maths candidates is matched by a proportional increase in the number of candidates writing Maths Literacy.

Table 69: Mathematics: number of candidates taking; passing with over 30\%; passing with over 50\%, by race, 2008 and 2011

|  | 2008 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | \% over $30 \%$ | Over 50\% | \% over 50\% | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | \% over 30\% | Over 50\% | \% over 50\% |
| African | 253931 | 100170 | 39\% | 36058 | 36\% | 195406 | 80895 | 41\% | 28500 | 35\% |
| Coloured | 13340 | 8026 | 60\% | 3726 | 46\% | 8554 | 5227 | 61\% | 2209 | 42\% |
| Indian/ Asian | 9642 | 8207 | 85\% | 6105 | 74\% | 6033 | 4893 | 81\% | 3270 | 67\% |
| Not known | 473 | 419 | 89\% | 288 | 69\% | 133 | 109 | 82\% | 76 | 70\% |
| White | 20489 | 20130 | 98\% | 17224 | 86\% | 18734 | 17392 | 93\% | 12037 | 69\% |

Source: Umalusi NSC database


Figure 63: Mathematics: number of candidates passing with over 30\%; passing with over $50 \%$, by race, 2008 and 2011
Source: Umalusi NSC database

The following table and graph show the number of candidates writing and passing Mathematics with over $30 \%$ and with over 50\%, by gender, in 2008 and 2011. Approximately 22000 more female than male candidates wrote Mathematics in 2008 , dropping to approximately 16 000 females more enrolled in 2011. The percentage of female candidates passing with $30 \%$ or more was lower than that for male candidates, by 8 percentage points; and lower than that for male candidates passing with $50 \%$ or more, by 5 percentage points.

Table 70: Mathematics: number of candidates taking; passing with over 30\%; passing with over 50\%, by gender, 2008 and 2011

|  | 2008 |  |  |  |  | 2011 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | No. of <br> cand | Over <br> $30 \%$ | $\%$ <br> over <br> $30 \%$ | Over <br> $50 \%$ | $\%$ <br> over <br> $50 \%$ | No. of <br> cand | Over <br> $30 \%$ | $\%$ <br> over <br> $30 \%$ | Over <br> $50 \%$ | $\%$ <br> over <br> $\mathbf{5 0 \%}$ |
| Male | 137838 | 68963 | $50 \%$ | 32980 | $24 \%$ | 106348 | 55343 | $52 \%$ | 24424 | $23 \%$ |
| Female | 160037 | 67989 | $42 \%$ | 30421 | $19 \%$ | 122512 | 53173 | $43 \%$ | 21668 | $18 \%$ |

Source: Umalusi NSC database


Figure 64: Mathematics: number of candidates passing with over 30\%; passing with over $50 \%$, by gender, 2008 and 2011
Source: Umalusi NSC database

### 2.6.3 Maths Literacy

The following table shows the total number of Mathematical Literacy candidates, the mean mark, and the mark at the $20^{\text {th }}, 50^{\text {th }}$, and $95^{\text {th }}$ percentiles in 2008 and 2012. The graph below shows the distribution of the Maths Literacy marks for 2008 and 2012.

There was an increase of approximately 25000 candidates enrolled for Maths Literacy between 2008 and 2012, although it should be noted that 2008 was the first year this subject was examined; thus the number of candidates writing Maths Literacy before that date was 0 . The mean mark increased from $45 \%$ to $46 \%$, and there was an increase in the mark on all $20^{\text {th }}$ and $50^{\text {th }}$ percentiles, as well as a decrease in the mark on the $90^{\text {th }}$ and $95^{\text {th }}$ percentiles. This means that the lower $20 \%$ of candidates scored $27 \%$ or less in 2008 and $33 \%$ or less in 2012. The lower $50 \%$ of candidates
scored $42 \%$ or less in 2008 and $44 \%$ or less in 2012 . Similarly, $90 \%$ of candidates scored $74 \%$ or less in 2008 and $67 \%$ in 2012: that is, the top $10 \%$ of candidates scored $82 \%$ or more in 2008, and $74 \%$ (a B symbol) or more in 2012. Likewise, the top $5 \%$ of candidates scored $78 \%$ or more in 2008 and $74 \%$ or more in 2009.

Table 71: Maths Literacy: total number of candidates, mean, standard deviation and mark at the 20th, 50th, 90th and 95th percentiles, 2008 and 2012 (\%)

|  | No. of cand | Mean <br> mark | 20th <br> percentile | 50th <br> percentile | 90th <br> percentile | 95th <br> percentile |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 2008 | 263401 | 45 | 27 | 42 | 74 | 82 |
| 2012 | 288152 | 46 | 33 | 44 | 67 | 74 |

Source: Umalusi NSC database


Figure 65: Maths literacy: distribution of the number of candidates, by mark obtained, 2008 and 2012
Source: Umalusi NSC database

The following table and graph show the number of candidates taking and passing Maths Literacy with $30 \%$ and over and $50 \%$ and over, by province, race and gender in 2008 and 2011. It is clear that Maths Literacy displays extremely high pass rates, which have risen from a low of $66 \%$ in Mpumalanga in 2008 to a minimum pass rate of $80 \%+$ nationally in 2011 .

This dramatic rise in the pass rate, coupled with only minimal increases in top-end (50\%+) performance, suggests

Maths Literacy displays extremely high pass rates, which have risen from a low of 66\% in Mpumalanga in 2008 to a minimum pass rate of $80 \%+$ nationally in 2011.
that the Maths Literacy examinations
have changed in standard, in order to accommodate learners at the low performance levels, while retaining similar levels of discrimination for top-end performance.

Table 72: Maths literacy: number of candidates taking; passing with over 30\%; passing with over 50\%, by province, 2008 and 2011

|  | 2008 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Province | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | $\%$ <br> over $30 \%$ | $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | \% over 50\% | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | \% over 30\% | $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | $\begin{gathered} \hline \% \text { over } \\ 50 \% \end{gathered}$ |
| Eastern Cape | 24167 | 17472 | 72\% | 7876 | 33\% | 28615 | 22815 | 80\% | 9350 | 33\% |
| Free State | 15684 | 14368 | 92\% | 8432 | 54\% | 16303 | 15302 | 94\% | 8450 | 52\% |
| Gauteng | 45846 | 41028 | 89\% | 24989 | 55\% | 54529 | 51437 | 94\% | 32783 | 60\% |
| KwaZuluNałal | 62620 | 46829 | 75\% | 19402 | 31\% | 63415 | 51707 | 82\% | 21589 | 34\% |
| Limpopo | 39394 | 28115 | $71 \%$ | 8694 | 22\% | 39287 | 31237 | 80\% | 10343 | 26\% |
| Mpumalanga | 28914 | 18968 | 66\% | 7016 | 24\% | 29049 | 23514 | 81\% | 9949 | 34\% |
| North West | 16353 | 13657 | 84\% | 6363 | 39\% | 15984 | 14896 | 93\% | 7624 | 48\% |
| Northern Cape | 6241 | 5621 | 90\% | 3028 | 49\% | 7097 | 6405 | 90\% | 2960 | 42\% |
| Western Cape | 24193 | 22154 | 92\% | 13924 | 58\% | 26680 | 24938 | 93\% | 14680 | 55\% |

Source: Umalusi NSC database


Figure 66: Maths literacy: number of candidates taking; passing with over 30\%; passing with over 50\%, by province, 2008 and 2011

Source: Umalusi NSC database

The statistics below indicate that there are differences in the racial patterns of performance. The African group of learners is the largest by several orders of magnitude, but the socioeconomic status of the learners in this group will likely be more varied than that of learners in other groups. It is understandable in this context then, that the learners in the White population group (historically the most socio-economically advantaged group) achieved a $100 \%$ pass rate in this subject, while African learners (historically the most socio-economically disadvantaged) achieved an $84 \%$ pass rate.

Table 73: Maths literacy: number of candidates taking; passing with over 30\%; passing with over 50\%, by race, 2008 and 2011

|  | 2008 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | No. of cand | Over $30 \%$ | $\begin{gathered} \hline \% \\ \text { over } \\ 30 \% \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | $\%$ <br> over <br> $50 \%$ | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | $\begin{gathered} \hline \% \\ \text { over } \\ 30 \% \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | $\begin{gathered} \hline \% \\ \text { over } \\ 50 \% \end{gathered}$ |
| African | 208453 | 155656 | 75\% | 59370 | 38\% | 231753 | 194751 | 84\% | 82291 | 42\% |
| Coloured | 25054 | 23112 | 92\% | 13437 | 58\% | 24682 | 23099 | 94\% | 13079 | 57\% |
| Indian/ <br> Asian | 6749 | 6312 | 94\% | 4818 | 76\% | 4243 | 4150 | 98\% | 3255 | 78\% |
| Not known | 271 | 264 | 97\% | 223 | 84\% | 134 | 131 | 98\% | 107 | 82\% |
| White | 22885 | 22868 | 100\% | 21876 | 96\% | 20147 | 20120 | 100\% | 18996 | 94\% |

Source: Umalusi NSC database


Figure 67: Maths literacy: number of candidates taking; passing with over 30\%; passing with over $50 \%$, by race, 2008 and 2011
Source: Umalusi NSC database

Unlike in many other subjects, the numbers of female and male learners writing and passing this subject are fairly comparable. This is true for both the bare pass $(30 \%+$ ) category and the moderate performance category (50\%+).

The numbers of female and male learners writing and passing this subject are fairly comparable.

Table 74: Maths literacy: number of candidates taking; passing with over 30\%; passing with over $50 \%$, by gender, 2008 and 2011

|  | 2008 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | \% over 30\% | $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | \% over 50\% | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | \% over $30 \%$ | $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | \% over 50\% |
| Male | 120200 | 96353 | 80\% | 48529 | 40\% | 129427 | 113162 | 87\% | 58265 | 45\% |
| Female | 143212 | 111859 | 78\% | 51195 | 36\% | 151532 | 129089 | 85\% | 59463 | 39\% |

Source: Umalusi NSC database


Figure 68: Maths Literacy: number of candidates taking; passing with over 30\%; passing with over 50\%, by gender, 2008 and 2011
Source: Umalusi NSC database

### 2.6.4 Physical Science

The following table shows the total number of Physical Science candidates, the mean mark and the mark at the $20^{\text {th }}, 50^{\text {th }}$, and $95^{\text {th }}$ percentiles in 2008 and 2012.

There was a reduction of approximately 39000 candidates enrolled for Physical Science between 2008 and 2012. The mean mark increased from $33 \%$ to $35 \%$, and there was an increase in the mark on all $20^{\text {th }} 50^{\text {th }} 90^{\text {th }}$ and $95^{\text {th }}$ percentiles.

> There was a reduction of approximately 39000 candidates enrolled for Physical Science between 2008 and 2012.

This means that the lower $20 \%$ of candidate scored $20 \%$ or less in 2008 and $21 \%$ or less in 2012 . The lower $50 \%$ of candidates scored $30 \%$ or less in 2008 and $34 \%$ or less in 2012 . Similarly, $90 \%$ of candidates scored $57 \%$ or less in 2008 and $66 \%$ or less in 2012 . To look at those figures another way, the top $10 \%$ of candidates scored $57 \%$ or more in 2008 and $66 \%$ or more in 2012. Likewise, the top $5 \%$ of candidates scored $66 \%$ or more in 2008 and $75 \%$ or more in 2009.

Table 75: Physical Science: total number of candidates, and mean mark at the 20th, 50th, 90th and 95th percentiles, 2008 and 2012 (\%)

|  | No. of cand | Mean <br> mark | 20th <br> percentile | 50th <br> percentile | 90th <br> percentile | 95th <br> percentile |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 2008 | 216111 | 33 | 20 | 30 | 57 | 66 |
| 2012 | 177366 | 38 | 21 | 34 | 66 | 75 |

Source: Umalusi NSC database

The graph below shows the mark distribution for Physical Science in 2008 and 2012. There has been a decrease in the number of students who would have scored below the $20^{\text {th }}$ and $50^{\text {th }}$ percentiles, and an increase in the number of candidates scoring over $60 \%$. In all likelihood this can be attributed to the weaker learners migrating out of this subject towards subjects for which they are more likely to achieve a passing grade. This should not be interpreted as an explicitly negative trend; indeed, it is likely that it is far better for learners with limited aptitude in a given subject to apply themselves to a subject for which they can achieve a passing grade.


Figure 69: Physical Science: distribution of the number of candidates, by mark obtained, 2008 and 2012
Source: Umalusi NSC database

The following table and graph show the number of candidates taking and passing Physical Science with $30 \%$ and over, and $50 \%$ and over, by province, race and gender in 2008 and 2011. Across the years in question, the top-performing province in Physical Science was the Western Cape, followed by Gauteng.

The top performing province in Physical Science was the Western Cape, followed by Gauteng.

Table 76: Physical Science: number of candidates taking; passing with over 30\%; passing with over 50\%, by province, 2008 and 2011

|  | 2008 |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Province | No. of <br> cand | Over <br> $30 \%$ | $\%$ <br> over <br> $30 \%$ | Over <br> $50 \%$ | $\%$ <br> over <br> $50 \%$ | No. of <br> cand | Over <br> $30 \%$ | $\%$ over <br> $30 \%$ | Over <br> $50 \%$ | $\%$ <br> $50 \%$ |
| Eastern <br> Cape | 25170 | 11082 | $44 \%$ | 2564 | $10 \%$ | 27101 | 12932 | $48 \%$ | 4576 | $17 \%$ |
| Free State | 12368 | 7845 | $63 \%$ | 2064 | $17 \%$ | 9985 | 5552 | $56 \%$ | 2141 | $21 \%$ |
| Gauteng | 39841 | 25984 | $65 \%$ | 8821 | $22 \%$ | 28942 | 17408 | $60 \%$ | 8668 | $30 \%$ |
| KwaZulu- <br> Natal | 53521 | 26905 | $50 \%$ | 7215 | $13 \%$ | 46574 | 24802 | $53 \%$ | 9097 | $20 \%$ |
| Limpopo | 34805 | 18082 | $52 \%$ | 3817 | $11 \%$ | 31126 | 16314 | $52 \%$ | 5416 | $17 \%$ |
| Mpuma- <br> langa | 20409 | 10069 | $49 \%$ | 2325 | $11 \%$ | 17489 | 9258 | $53 \%$ | 3719 | $21 \%$ |
| North West | 13562 | 8726 | $64 \%$ | 2104 | $16 \%$ | 8724 | 4957 | $57 \%$ | 1964 | $23 \%$ |
| Northern <br> Cape | 3011 | 1910 | $63 \%$ | 520 | $17 \%$ | 2685 | 1196 | $45 \%$ | 476 | $18 \%$ |
| Western <br> Cape | 13459 | 9658 | $72 \%$ | 4347 | $32 \%$ | 11069 | 7285 | $66 \%$ | 4319 | $39 \%$ |

[^26]

Figure 70: Physical Science: number of candidates taking; passing with over 30\%; passing with over 50\%, by province, 2008 and 2011
Source: Umalusi NSC database

The racial disparities in performance in Physical Science are pronounced. This is a clear indicator that in the poorer or more rural areas, there is insufficient teaching and learning taking place. It is still possible, in an aggregate sense, to use race as an indicator of socioeconomic status in South Africa, and it is clear that Africans are still receiving the poorest education in the country. The stark disparities in performance across the race groups indicate deep inequalities in terms of socio-economic status, but also show that insufficient attention is being paid to schooling

## ... a clear indicator that in the

 poorer or more rural areas, there is insufficient teaching and learning taking place. for poor or rural people. Urgent and sustained interventions are required, particularly in poor and rural areas. It is unsustainable for educational outcomes to be racially and socio-economically bound in the fashion revealed below, in which just 8 out of every 100 White learners failed Physical Science in 2011 , while there were 50 failures for every 100 African learners.Table 77: Physical Science: number of candidates taking; passing with over 30\%; passing with over 50\%, by race, 2008 and 2011

|  | 2008 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | $\begin{gathered} \text { \% } \\ \text { over } \end{gathered}$ $30 \%$ | $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | $\begin{aligned} & \text { \% } \\ & \text { over } \\ & 50 \% \end{aligned}$ | No. of cand | $\begin{aligned} & \text { Over } \\ & 30 \% \end{aligned}$ | $\begin{gathered} \hline \% \text { over } \\ 30 \% \end{gathered}$ | $\begin{aligned} & \text { Over } \\ & 50 \% \end{aligned}$ | $\begin{gathered} \text { \% over } \\ 50 \% \end{gathered}$ |
| African | 183388 | 91616 | 50\% | 17350 | 19\% | 159789 | 79825 | 50\% | 26989 | 34\% |
| Coloured | 9313 | 6501 | 70\% | 1796 | 28\% | 6329 | 3840 | 61\% | 1694 | 44\% |
| Indian/ Asian | 6735 | 6157 | 91\% | 3869 | 63\% | 4313 | 3817 | 88\% | 2733 | 72\% |
| Not known | 324 | 297 | 92\% | 184 | 62\% | 88 | 77 | 88\% | 52 | 68\% |
| White | 16386 | 15690 | 96\% | 10578 | 67\% | 13176 | 12145 | 92\% | 8908 | 73\% |

[^27]

Figure 71: Physical Science: number of candidates taking; passing with over 30\%; passing with over 50\%, by race, 2008 and 2011
Source: Umalusi NSC database
Table 78: Physical Science: number of candidates taking; passing with over 30\%; passing with over 50\%, by gender, 2008 and 2011

|  | 2008 |  |  |  |  | 2011 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | No. of <br> cand | Over <br> $30 \%$ | $\%$ <br> over <br> $\mathbf{3 0 \%}$ | Over <br> $50 \%$ | $\%$ <br> over <br> $\mathbf{5 0 \%}$ | No. of <br> cand | Over <br> $30 \%$ | $\%$ <br> over <br> $30 \%$ | Over <br> $\mathbf{5 0 \%}$ | \% <br> over <br> $\mathbf{5 0 \%}$ |
| Male | 107423 | 62276 | $58 \%$ | 18042 | $17 \%$ | 88649 | 50875 | $57 \%$ | 21745 | $25 \%$ |
| Female | 108723 | 57985 | $53 \%$ | 15735 | $14 \%$ | 95046 | 48829 | $51 \%$ | 18631 | $20 \%$ |

Source: Umalusi NSC database


Figure 72: Physical Science: number of candidates taking; passing with over 30\%; passing with over 50\%, by gender, 2008 and 2011
Source: Umalusi NSC database

### 2.6.5 Main findings

The main findings in the preceding section are listed below, and are organised by subject:

- Accountancy seems to have stabilised generally over the 2008-2012 period, and there has been a general upward trend in results.
- The upward trend in results in Accountancy is slight, however, and can largely be accounted for by the reduction in the number of candidates who offer the subject over the period.
- Mathematics has seen a dramatic reduction in the number of candidates over the 2008-2012 period, with some 70000 fewer learners enrolling for the subject.
- While the mean mark of Mathematics has increased marginally over the period, this is not reflected at the top end of the performance spectrum. Rather, the performance profile indicates that the candidates who no longer offer the subject were generally the weakest learners, and their absence has increased the average performance at the bottom end of the marks spectrum.
- Mathematical Literacy was first introduced as a subject in 2008, as an alternative to Mathematics. By 2012 almost 300000 learners offered this subject as part of their NSC.
- It is clear that the standard of the Mathematical Literacy examinations changed over the 2008-2012 period, in order to accommodate weaker learners. However, the examinations seem to have retained a similar level of discrimination at the top end of the marks spectrum, and thus, this change in standard should be considered a correction.
- Physical Science is another subject in which the average level of performance has increased, but this is largely accounted for by the migration of weaker learners out of the subject.
- It is clear that the racial disparities in performance are pronounced in Physical Science, and this most likely indicates that there are too few teaching and learning resources available in historically disadvantaged areas. Urgent intervention is required on the part of education officials in order to deploy adequate resources to these specific target areas.


## 3 School performance in the NSC

The bulk of this report has concerned itself with the performance of learners in the NSC, and looked at inputs into the system, including schools as an input factor. This does not yet adequately capture the fact, however, that schools are also 'performers' within this system, and so Umalusi felt that it was important to construct an indicator that analyses schools' performance in their own right, rather than only as an aspect of learner performance. As with learner outcomes, the broader educational and socio-economic environment in which schools are located has a substantial impact on their performance in the NSC. The home environment of the learners, facilities available in schools and the quality of teaching are among the factors that affect school outcomes. In this regard,

> The broader educational and socio-economic environment in which schools are located has a substantial impact on their performance. school performance by province and by quintile mirrors that of learner performance: the large, rural provinces of the Eastern Cape, KwaZulu-Natal, Limpopo and Mpumalanga have the highest proportion of underperforming schools, with $50 \%$ or more schools in the province attaining a $50 \%$ pass rate or less in 2008. Similarly, schools in the lower quintiles account for the highest proportion of underperforming schools. In Quintile 1, $60 \%$ of schools had a pass rate of $50 \%$ or less, and half of the Quintile 2 schools had a pass rate of $50 \%$ or less in 2008 . Needless to say, the majority of Quintile 1 and 2 schools occur in the large, rural provinces.

This section looks at school performance in the NSC in 2008 and 2012, by analysing the number of schools in terms of the following pass-rate categories:

- 0 candidates passing;
- less than $20 \%$ of candidates passing;
- between $21 \%$ and $50 \%$ of candidates passing;
- between $51 \%$ and $80 \%$ of candidates passing; and
- more than $80 \%$ of candidates passing and gaining a Bachelors-level pass.

It was decided to look at 2008 and 2012 only, for two reasons. The first is that the quintile ranking of each school was last conducted by the Department of Basic Education in 2010, and the discrepancy in identifying and linking schools by quintile became a problem in 2013. Several schools have closed, are new schools in the dataset or have changed their names, and therefore, the number of schools that do not have, or cannot be linked to a quintile became too large for meaningful analysis.

### 3.1 School performance, by province

Since the socio-economic factors within provinces are fairly well understood and are already broadly detailed earlier in this report, the indicator of school performance was constructed as School Performance in the NSC by Province. The following tables show school performance in the NSC in 2008 and 2012, in terms of schools scoring 0 , less than $20 \%, 21 \%-50 \%, 51 \%-80 \%$ and more than $80 \%$ of candidates passing, and passing with a Bachelors-level pass, by province. It also looks at the number of schools by percentage of candidates gaining a $30 \%$ pass and a $50 \%$ pass in Mathematics and Maths Literacy.

The increasing number of candidates passing and gaining a Bachelors-level pass impacts positively on overall school performance. There is also a substantial reduction in the number of schools that achieved less than a $20 \%$ pass rate and in the schools that achieved between a $21 \%$ and $50 \%$ pass rate from 2008 and 2012. In 2008, in the Eastern Cape $59 \%$ of schools achieved a pass rate of $50 \%$ or less; in KwaZulu-Natal, Limpopo and Mpumalanga, just fewer than $50 \%$ of the schools in the province achieved pass rates of $50 \%$ or less.

Table 79: Number and percentage of schools with less than $20 \%, 21 \%-50 \%, 51 \%-80 \%$, and more than $80 \%$ of candidates passing, by province, 2008

| Province | <=20\% pass |  | 21-50\% pass |  | 51\%-80\% |  | >80\% |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 177 | 20\% | 354 | 39\% | 218 | 24\% | 155 | 17\% | 904 |
| Free State |  | 0\% | 49 | 16\% | 124 | 39\% | 143 | 45\% | 316 |
| Gauteng | 9 | 1\% | 97 | 14\% | 238 | 33\% | 367 | 52\% | 711 |
| KwaZulu- <br> Nałal | 158 | 10\% | 630 | 38\% | 524 | 32\% | 344 | 21\% | 1656 |
| Limpopo | 138 | 10\% | 526 | 38\% | 469 | 34\% | 261 | 19\% | 1394 |
| Mpumalanga | 51 | 10\% | 191 | 37\% | 190 | 37\% | 86 | 17\% | 518 |
| North West | 8 | $2 \%$ | 77 | 21\% | 161 | 43\% | 126 | 34\% | 372 |
| Northern Cape | 3 | $2 \%$ | 20 | 16\% | 39 | 30\% | 67 | 52\% | 129 |
| Western Cape | 1 | 0\% | 39 | 10\% | 122 | 30\% | 243 | 60\% | 405 |
| Total | 545 | 9\% | 1983 | $31 \%$ | 2085 | 33\% | 1792 | 28\% | 6405 |

Source: Umalusi NSC database

In 2012 the increasing number of candidates passing and gaining a Bachelors-level pass impacted positively on overall school performance.

The percentage of schools gaining between a $51 \%$ and $80 \%$ pass rate increased from 33\% of all schools in 2008 to $45 \%$ of all schools in 2012 . Similarly, the percentage of schools with over $80 \%$ of candidates passing increased from $28 \%$ of all schools in 2008 to $40 \%$ of all schools in 2012.

The gains in pass rates are commendable between the years analysed, but it should be noted that an increase in pass rates is not necessarily associated with a rise in the quality of teaching and learning. It is possible that the standard of the examinations has also been set to allow for weaker learners to achieve the minimum $30 \%$ required to pass. It should also be noted that the top-end performance ( $80 \%+$ pass rate) in relatively well-performing provinces, such as the Western Cape and Gauteng, has not shown dramatic increases.

Table 80: Number and percentage of schools with less than $20 \%, 21 \%-50 \%, 51 \%-80 \%$, and more than $80 \%$ of candidates passing, by province, 2012

| Province | <=20\% pass |  | 21-50\% pass |  | 51\%-80\% |  | >80\% |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 47 | 5\% | 307 | 34\% | 360 | 40\% | 195 | 21\% | 909 |
| Free State |  | 0\% | 15 | 5\% | 115 | 35\% | 196 | 60\% | 326 |
| Gauteng | 6 | 1\% | 31 | 4\% | 283 | 35\% | 482 | 60\% | 802 |
| KwaZuluNatal | 33 | 2\% | 247 | 14\% | 801 | 47\% | 632 | 37\% | 1713 |
| Limpopo | 40 | $3 \%$ | 307 | 22\% | 711 | 50\% | 361 | 25\% | 1419 |
| Mpumalanga | 5 | 1\% | 84 | 16\% | 278 | 52\% | 166 | 31\% | 533 |
| North West |  | 0\% | 20 | 5\% | 161 | 42\% | 203 | 53\% | 384 |
| Northern Cape |  | 0\% | 10 | 7\% | 57 | 42\% | 70 | 51\% | 137 |
| Western Cape |  | 0\% | 12 | $3 \%$ | 151 | 35\% | 274 | 63\% | 437 |
| Tołal | 131 | 2\% | 1033 | 16\% | 2917 | 46\% | 2579 | 40\% | 6660 |

Source: Umalusi NSC database


Figure 73: Percentage of schools that have $20 \%$ or fewer candidates passing, by province, 2008 and 2012
Source: Umalusi NSC database

A brief overview of the distribution of independent schools is given in the tables below. The total number of independent schools has increased from 405 in 2008 to 519 in 2012 . There is a great difference in independent schools' performance among provinces: Gauteng accounted for $21 \%$ of independent schools with a $50 \%$ pass rate or lower, and the Western Cape accounted for $82 \%$ of independent schools with over an $80 \%$ pass rate.

Table 81: Number and percentage of independent schools with less than $20 \%, 21 \%-50 \%, 51 \%$ $80 \%$, and more than $80 \%$ of candidates passing, by province, 2008

| Province | <=20\% pass |  | 21-50\% pass |  | 51\%-80\% |  | >80\% |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 4 | 11\% | 9 | 24\% | 12 | 32\% | 13 | 34\% | 38 |
| Free State |  | 0\% | 1 | 8\% | 3 | 25\% | 8 | 67\% | 12 |
| Gauteng | 7 | 4\% | 27 | 17\% | 30 | 18\% | 99 | 61\% | 163 |
| KwaZuluNatal | 1 | $2 \%$ | 6 | 10\% | 7 | 12\% | 46 | 77\% | 60 |
| Limpopo | 5 | 10\% | 7 | 14\% | 19 | 37\% | 20 | 39\% | 51 |
| Mpumalanga | 1 | 5\% | 2 | 10\% | 10 | 50\% | 7 | 35\% | 20 |
| North West |  | 0\% | 1 | 7\% | 2 | 14\% | 11 | 79\% | 14 |
| Northern Cape |  | 0\% |  | 0\% |  | 0\% | 2 | 100\% | 2 |
| Western Cape |  | 0\% | 1 | 2\% | 7 | 16\% | 37 | 82\% | 45 |
| Total | 18 | $4 \%$ | 54 | 13\% | 90 | 22\% | 243 | 60\% | 405 |

Source: Umalusi NSC database

Table 82: Number and percentage of independent schools with less than $20 \%, 21 \%-50 \%, 51 \%$ $80 \%$ and more than $80 \%$ of candidates passing by province, 2012

| Province | <=20\% pass |  | 21-50\% pass |  | 51\%-80\% |  | >80\% |  | Tołal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 1 | 2\% | 13 | 30\% | 13 | 30\% | 16 | 37\% | 43 |
| Free state |  | 0\% | 3 | 15\% | 6 | 30\% | 11 | 55\% | 20 |
| Gauteng | 4 | 2\% | 19 | 9\% | 48 | 23\% | 137 | 66\% | 208 |
| KwaZulu- <br> Natal | 1 | 1\% | 7 | 10\% | 13 | 19\% | 46 | 69\% | 67 |
| Limpopo | 3 | 5\% | 8 | 14\% | 22 | 37\% | 26 | 44\% | 59 |
| Mpumalanga |  | 0\% | 6 | 19\% | 17 | 53\% | 9 | 28\% | 32 |
| North West |  | 0\% |  | 0\% | 3 | 14\% | 18 | 86\% | 21 |
| Northern Cape |  | 0\% |  | 0\% | 1 | 20\% | 4 | 80\% | 5 |
| Western Cape |  | 0\% | 3 | 5\% | 10 | 16\% | 51 | 80\% | 64 |
| Total | 9 | 2\% | 59 | 11\% | 133 | 26\% | 318 | 61\% | 519 |

Source: Umalusi NSC database

The following tables show the number and percentage of schools that obtained Bachelorslevel passes, by category. In total, there are 804 schools ( $13 \%$ of schools in the country) that achieved no Bachelors-level passes in 2008: this decreased to $6 \%$ of all schools in 2012. Limpopo (with $18 \%$ of schools in the province) and the Eastern Cape (with $25 \%$ of schools in the province) had the highest percentage of schools that achieved no Bachelors-level passes. Only 630 schools ( $11 \%$ of schools in the country) achieved more than $50 \%$ bachelor passes.

Table 83: Number and percentage of schools with less than $20 \%, 21 \%-50 \%, 51 \%-80 \%$, and more than $80 \%$ of candidates gaining a Bachelors-level pass, by province, 2008

| Province | 0 Bachelorslevel pass |  | <=20\% pass |  | $\begin{gathered} 21-50 \% \\ \text { pass } \end{gathered}$ |  | 51\%-80\% |  | >80\% Bach |  | Total schools |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 228 | 25\% | 541 | 80\% | 83 | 12\% | 41 | 6\% | 11 | $2 \%$ | 904 |
| Free state | 4 | 1\% | 198 | 63\% | 74 | 24\% | 31 | 10\% | 9 | $3 \%$ | 316 |
| Gaułeng | 18 | $3 \%$ | 350 | 51\% | 185 | 27\% | 96 | 14\% | 62 | 9\% | 711 |
| KwaZuluNatal | 220 | 13\% | 1086 | 76\% | 211 | 15\% | 85 | 6\% | 54 | 4\% | 1656 |
| Limpopo | 255 | 18\% | 944 | 83\% | 154 | 14\% | 38 | $3 \%$ | 3 | 0\% | 1394 |
| Mpumalanga | 51 | 10\% | 387 | 83\% | 52 | 11\% | 24 | 5\% | 4 | 1\% | 518 |
| North <br> West | 19 | 5\% | 250 | $71 \%$ | 65 | 18\% | 30 | 8\% | 8 | $2 \%$ | 372 |
| Northern Cape | 3 | 2\% | 78 | 62\% | 32 | 25\% | 15 | 12\% | 1 | 1\% | 129 |
| Western Cape | 6 | 1\% | 200 | 50\% | 81 | 20\% | 74 | 19\% | 44 | 11\% | 405 |
| Tołal | 804 | 13\% | 4034 | 72\% | 937 | 17\% | 434 | 8\% | 196 | $3 \%$ | 6405 |

Source: Umalusi NSC database

These proportions changed in 2012, with $6 \%$ of schools achieving no Bachelorslevel passes, $56 \%$ achieving less than $20 \%$ Bachelors-level passes, and the biggest increase being from $17 \%$ of schools achieving between $21 \%$ and $50 \%$ Bachelors-level passes.

The quality of the examinations in terms of discrimination at the top end of the marks spectrum has remained stable.

It should be noted that the number of schools achieving more than $51 \%$ of candidates achieving a Bachelors-level pass remained the same. These trends confirm the above data, which suggest that top-end performance in the NSC has remained constant, indicating that the quality of the examinations in terms of discrimination at the top end of the marks spectrum has remained relatively stable.

Table 84: Number and percentage of schools with less than $20 \%, 21 \%-50 \%, 51 \%-80 \%$, and more than $80 \%$ of candidates gaining a Bachelors-level pass, by province, 2012

| Province | 0 Bachelorslevel pass |  | <=20\% pass |  | $\begin{gathered} 21-50 \% \\ \text { pass } \end{gathered}$ |  | 51\%-80\% |  | >80\% Bach |  | Total schools |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 122 | 13\% | 713 | 78\% | 151 | 17\% | 36 | 4\% | 9 | 1\% | 909 |
| Free state | 5 | 2\% | 143 | 44\% | 138 | 42\% | 36 | 11\% | 9 | $3 \%$ | 326 |
| Gauteng | 24 | $3 \%$ | 228 | 28\% | 423 | 53\% | 107 | 13\% | 44 | 5\% | 802 |
| KwaZuluNatal | 65 | 4\% | 900 | 53\% | 661 | 39\% | 116 | 7\% | 36 | 2\% | 1713 |
| Limpopo | 118 | 8\% | 978 | 69\% | 389 | 27\% | 45 | $3 \%$ | 7 | 0\% | 1419 |
| Mpumalanga | 13 | 2\% | 354 | 66\% | 152 | 29\% | 25 | 5\% | 2 | 0\% | 533 |
| North West | 13 | $3 \%$ | 164 | 43\% | 186 | 48\% | 29 | 8\% | 5 | $1 \%$ | 384 |
| Northern Cape | 3 | $2 \%$ | 71 | 52\% | 51 | 37\% | 13 | 9\% | 2 | 1\% | 137 |
| Western Cape | 10 | 2\% | 174 | 40\% | 149 | 34\% | 73 | 17\% | 41 | 9\% | 437 |
| Total | 373 | 6\% | 3725 | 56\% | 2300 | $35 \%$ | 480 | 7\% | 155 | $3 \%$ | 6660 |

Source: Umalusi NSC database


Figure 74: Number and percentage of schools with less than $20 \%$ and $21 \%-50 \%$ of candidates gaining a Bachelors-level pass, by province, 2008 and 2012

[^28]The tables below provide information on independent school performance between 2008 and 2012. The picture is one of relative stability, and where large fluctuations in the marks profile have occurred, such as in the Northern Cape, it is attributable to additional schools having been created, rather than dramatic shifts in the performance of the schools between 2008 and 2012.

Table 85: Number of independent schools with less than $20 \%, 21 \%-50 \%, 51 \%-80 \%$, and more than $80 \%$ of candidates gaining a Bachelors-level pass, by province, 2008

| Province | < $=20 \%$ pass |  | 21-50\% pass |  | 51\%-80\% |  | >80\% |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 26 | 68\% | 10 | 26\% | 1 | 3\% | 1 | 3\% | 38 |
| Free state | 6 | 50\% | 3 | 25\% | 2 | 17\% | 1 | 8\% | 12 |
| Gauteng | 62 | 38\% | 48 | 29\% | 22 | 13\% | 31 | 19\% | 163 |
| KwaZuluNałal | 12 | 20\% | 10 | 17\% | 15 | 25\% | 23 | 38\% | 60 |
| Limpopo | 27 | 53\% | 15 | 29\% | 7 | 14\% | 2 | 4\% | 51 |
| Mpumalanga | 13 | 65\% | 4 | 20\% | 2 | 10\% | 1 | 5\% | 20 |
| North West | 6 | 43\% | 5 | 36\% | 1 | 7\% | 2 | 14\% | 14 |
| Northern Cape |  | 0\% | 2 | 100\% |  | 0\% |  | 0\% | 2 |
| Western Cape | 13 | 29\% | 5 | 11\% | 16 | 36\% | 11 | 24\% | 45 |
| Total | 165 | 41\% | 102 | 25\% | 66 | 16\% | 72 | 18\% | 405 |

Source: Umalusi NSC database

Table 86: Number of Independent schools with less than $20 \%, 21 \%-50 \%, 51 \%-80 \%$, and more than $80 \%$ of candidates gaining a Bachelors-level pass, by province, 2012

| Province | <=20\% pass |  | 21-50\% pass |  | 51\%-80\% |  | >80\% |  | Tołal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 28 | 65\% | 12 | 28\% | 2 | 5\% | 1 | 2\% | 43 |
| Free state | 10 | 50\% | 5 | 25\% | 3 | 15\% | 2 | 10\% | 20 |
| Gauteng | 65 | 31\% | 77 | 37\% | 37 | 18\% | 29 | 14\% | 208 |
| KwaZuluNafal | 15 | 22\% | 19 | 28\% | 16 | 24\% | 17 | 25\% | 67 |
| Limpopo | 23 | 39\% | 21 | 36\% | 10 | 17\% | 5 | 8\% | 59 |
| Mpumalanga | 19 | 59\% | 8 | 25\% | 4 | 13\% | 1 | 3\% | 32 |
| North West | 8 | 38\% | 8 | 38\% | 5 | 24\% |  | 0\% | 21 |
| Northern Cape | 1 | 20\% | 2 | 40\% | 2 | 40\% |  | 0\% | 5 |
| Western Cape | 15 | 23\% | 17 | 27\% | 16 | 25\% | 16 | 25\% | 64 |
| Total | 184 | 35\% | 169 | $33 \%$ | 95 | 18\% | 71 | 14\% | 519 |

Source: Umalusi NSC database

### 3.1.1 Main findings

The main findings in the preceding section are as follows:

- The performance profile across the provinces has generally improved, while performance at the top end of the marks spectrum has remained stable over the period covered. This suggests that the examinations have retained their discrimination function for top-end learners. It is likely that improvements in teaching and learning have been coupled with a correction in the standard of the examinations to accommodate weaker learners.
- The provinces with the weakest marks profile, on average, are Mpumalanga, Limpopo, and the Eastern Cape, followed closely by KwaZulu-Natal. This coincides with other findings in this report that show that educational outcomes closely track socio-economic trends.
- The results profile of independent schools that write the NSC examinations has remained stable over the period under review.


### 3.2 Quintiles

This final indicator continues to concentrate on the performance of schools, but subdivides schools by economic quintiles in order to provide a better picture of the effect that socioeconomic factors have on school performance. Thus, this indicator is termed School Performance on the NSC by Quintile. To a large extent, categorisation by quintile is one of the few reliable indicators of the socio-economic status of the community that the school serves, and the quality of the facilities available at the school. In this regard, the quality of schooling attainment by the poorest communities is an important indicator of the extent to which the poor are able to benefit from the provision of social services and poverty alleviation strategies.

The following tables show the distribution of schools in each province by quintile. While the analysis of pass rates, Bachelors-level passes and Mathematics achievement is analysed by quintile, it is important to reflect the relative share of these in schools by quintile and province.

The distribution of secondary schools across quintiles is as follows:

- $23 \%$ of in Quintile 1
- $24 \%$ in Quintile 2
- $19 \%$ in Quintile 3
- $\quad 11$ in Quintile 4
- $13 \%$ in Quintile 5

The provincial variation in the distribution tends towards a higher distribution of Quintile 1 schools in the Free State, KwaZulu-Natal and Limpopo, with approximately $50 \%$ of schools in the Free State and KwaZulu-Natal in Quintiles 1 and 2 . Over $74 \%$ of schools in Mpumalanga and Limpopo are in Quintiles 1 and 2. The Eastern Cape has a higher proportion of schools in Quintiles 2 and 3.

Note that of the schools with no data recorded for quintiles, 405 schools in 2008 and 519 schools in 2012 were Independent schools. The national quintiles published by the DBE in 2010 were used for the analysis. The slight variation in the number of schools by quintile between 2008 and 2012 is due to a small number of schools closing or opening during that period.

Table 87: Distribution of schools by province and quintile, and percentage of schools in each province, by quintile, 2008

| Province | No Quintile |  | Quintile 1 |  | Quintile 2 |  | Quintile 3 |  | Quintile 4 |  | Quintile 5 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 75 | 8\% | 130 | 14\% | 169 | 19\% | 281 | 31\% | 115 | 13\% | 134 | 15\% | 904 | 100\% |
| Free state | 16 | 5\% | 97 | 31\% | 63 | 20\% | 66 | $21 \%$ | 25 | 8\% | 49 | 16\% | 316 | 100\% |
| Gauteng | 194 | 27\% | 41 | 6\% | 73 | 10\% | 108 | 15\% | 124 | 17\% | 171 | 24\% | 711 | 100\% |
| KwaZuluNatal | 121 | 7\% | 400 | 24\% | 410 | 25\% | 349 | 21\% | 193 | 12\% | 183 | 11\% | 1656 | 100\% |
| Limpopo | 68 | $5 \%$ | 521 | 37\% | 559 | 40\% | 216 | 15\% | 9 | 1\% | 21 | $2 \%$ | 1394 | 100\% |
| Mpumalanga | 25 | 5\% | 195 | 38\% | 186 | 36\% | 43 | 8\% | 39 | 8\% | 30 | 6\% | 518 | 100\% |
| North <br> West | 68 | 18\% | 44 | 12\% | 42 | 11\% | 92 | 25\% | 80 | 22\% | 46 | 12\% | 372 | 100\% |
| Northern Cape | 22 | 17\% | 17 | 13\% | 26 | 20\% | 21 | 16\% | 9 | 7\% | 34 | 26\% | 129 | 100\% |
| Western Cape | 63 | 16\% | 19 | $5 \%$ | 28 | 7\% | 59 | 15\% | 81 | 20\% | 155 | 38\% | 405 | 100\% |
| Tołal | 652 | 10\% | 1464 | 23\% | 1556 | 24\% | 1235 | $19 \%$ | 675 | 11\% | 823 | 13\% | 6405 | 100\% |

Source: Umalusi NSC database

Table 88: Distribution of schools by province and quintile, and percentage of schools in each province, by quintile, 2012

| Province | No Quintile |  | Quintile 1 |  | Quintile 2 |  | Quintile 3 |  | Quintile 4 |  | Quintile 5 |  | Tołal |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 71 | 8\% | 130 | 14\% | 178 | 20\% | 287 | 32\% | 110 | 12\% | 133 | 15\% | 909 | 100\% |
| Free state | 25 | 8\% | 96 | $29 \%$ | 65 | 20\% | 66 | 20\% | 25 | 8\% | 49 | 15\% | 326 | 100\% |
| Gaułeng | 246 | $31 \%$ | 48 | 6\% | 81 | 10\% | 123 | 15\% | 131 | 16\% | 173 | 22\% | 802 | 100\% |
| KwaZulu- <br> Natal | 139 | 8\% | 410 | 24\% | 431 | 25\% | 355 | 21\% | 194 | 11\% | 184 | 11\% | 1713 | 100\% |
| Limpopo | 72 | 5\% | 535 | 38\% | 562 | 40\% | 220 | 16\% | 9 | 1\% | 21 | 1\% | 1419 | 100\% |
| Mpumalanga | 53 | 10\% | 194 | 36\% | 179 | 34\% | 41 | 8\% | 38 | 7\% | 28 | $5 \%$ | 533 | 100\% |
| North West | 69 | 18\% | 45 | 12\% | 43 | 11\% | 97 | 25\% | 83 | 22\% | 47 | 12\% | 384 | 100\% |
| Northern Cape | 27 | 20\% | 18 | 13\% | 27 | 20\% | 22 | 16\% | 9 | 7\% | 34 | 25\% | 137 | 100\% |
| Western Cape | 89 | 20\% | 19 | 4\% | 28 | 6\% | 62 | 14\% | 82 | 19\% | 157 | 36\% | 437 | 100\% |
| Total | 791 | 12\% | 1495 | 22\% | 1594 | 24\% | 1273 | 19\% | 681 | 10\% | 826 | 12\% | 6660 | 100\% |

Source: Umalusi NSC database

The provincial tables above, and the graph below illustrate the differences between the provinces, and demonstrate that each province faces unique challenges in its provincial schooling system. In much of the results analyses previously in this report, the Western Cape has been a frontrunner. This section demonstrates that much of that efficiency is because the province is dominated by Quintile 4 and 5 schools, which make up some $55 \%$ of all schools in the Western Cape. It is clear that top performance in terms of results is closely associated with socio-economic status, and the general economic environment of a province is something over which education officials will have little direct influence. A similar, albeit less pronounced trend, is observable in Gauteng, the only other province where Quintile 4 and 5 schools represent some $38 \%$ of all schools.

Limpopo and Mpumalanga are the provinces with the poorest profile of schools, followed by the Eastern Cape. Unfortunately, it is also clear that there has only been minimal change in these figures over the five-year period under review.


Figure 75: Distribution of schools by province and quintile, and percentage of schools in each province, by quintile, 2012
Source: Umalusi NSC database

Where the data above measures the extent to which certain types of schools are represented in each province, the data below re-examines these figures by showing nationally how many of each quintile are represented in each province. It emerges that $27 \%$ and $36 \%$ of all Quintile 1 , and $26 \%$ and $36 \%$ of all Quintile 2 schools are in KwaZulu-Natal and Limpopo respectively. However,

## A disproportionate number of Quintile 1 schools fall within

 Limpopo. in terms of the relative proportion of schools in each of these provinces $(26 \%$of all schools are in KwaZulu-Natal and $22 \%$ of all schools are in Limpopo), a disproportionate number of Quintile 1 schools are in Limpopo, with some $36 \%$ of all Quintile 1 schools in South Africa being in this province. Gauteng and the Western Cape, on the other hand, are home to some $40 \%$ of all Quintile 5 schools in the nation.

Table 89: Distribution of schools by quintile and province, and percentage of schools in each quintile, by province, 2008

| Province | No Quintile |  | Quintile 1 |  | Quintile 2 |  | Quintile 3 |  | Quintile 4 |  | Quintile 5 |  | Tołal |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eastern Cape | 75 | 12\% | 130 | 9\% | 169 | 11\% | 281 | 23\% | 115 | 17\% | 134 | 16\% | 904 | 14\% |
| Free state | 16 | 2\% | 97 | 7\% | 63 | 4\% | 66 | 5\% | 25 | 4\% | 49 | 6\% | 316 | 5\% |
| Gaułeng | 194 | 30\% | 41 | 3\% | 73 | 5\% | 108 | 9\% | 124 | 18\% | 171 | $21 \%$ | 711 | 11\% |
| KwaZuluNatal | 121 | 19\% | 400 | 27\% | 410 | 26\% | 349 | 28\% | 193 | 29\% | 183 | 22\% | 1656 | 26\% |
| Limpopo | 68 | 10\% | 521 | 36\% | 559 | 36\% | 216 | 17\% | 9 | 1\% | 21 | 3\% | 1394 | 22\% |
| Mpumalanga | 25 | 4\% | 195 | 13\% | 186 | 12\% | 43 | 3\% | 39 | 6\% | 30 | $4 \%$ | 518 | 8\% |
| North West | 68 | 10\% | 44 | 3\% | 42 | 3\% | 92 | 7\% | 80 | 12\% | 46 | 6\% | 372 | 6\% |
| Northern Cape | 22 | $3 \%$ | 17 | 1\% | 26 | 2\% | 21 | $2 \%$ | 9 | 1\% | 34 | 4\% | 129 | 2\% |
| Western Cape | 63 | 10\% | 19 | 1\% | 28 | 2\% | 59 | 5\% | 81 | 12\% | 155 | 19\% | 405 | 6\% |
| Tołal | 652 | 100\% | 1464 | 100\% | 1556 | 100\% | 1235 | 100\% | 675 | 100\% | 823 | 100\% | 6405 | 100\% |

[^29]Table 90: Distribution of schools by quintile and province, and percentage of schools in each quintile, by province, 2008

| Province | No <br> Quintile | Quintile 1 | Quintile 2 | Quintile 3 | Quintile 4 | Quintile 5 | Total |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Eastern <br> Cape | 71 | $9 \%$ | 130 | $9 \%$ | 178 | $11 \%$ | 287 | $23 \%$ | 110 | $16 \%$ | 133 | $16 \%$ | 909 | $14 \%$ |
| Free state | 25 | $3 \%$ | 96 | $6 \%$ | 65 | $4 \%$ | 66 | $5 \%$ | 25 | $4 \%$ | 49 | $6 \%$ | 326 | $5 \%$ |
| Gauteng | 246 | $31 \%$ | 48 | $3 \%$ | 81 | $5 \%$ | 123 | $10 \%$ | 131 | $19 \%$ | 173 | $21 \%$ | 802 | $12 \%$ |
| KwaZulu- <br> Natal | 139 | $18 \%$ | 410 | $27 \%$ | 431 | $27 \%$ | 355 | $28 \%$ | 194 | $28 \%$ | 184 | $22 \%$ | 1713 | $26 \%$ |
| Limpopo | 72 | $9 \%$ | 535 | $36 \%$ | 562 | $35 \%$ | 220 | $17 \%$ | 9 | $1 \%$ | 21 | $3 \%$ | 1419 | $21 \%$ |
| Mpuma- <br> langa | 53 | $7 \%$ | 194 | $13 \%$ | 179 | $11 \%$ | 41 | $3 \%$ | 38 | $6 \%$ | 28 | $3 \%$ | 533 | $8 \%$ |
| North <br> West | 69 | $9 \%$ | 45 | $3 \%$ | 43 | $3 \%$ | 97 | $8 \%$ | 83 | $12 \%$ | 47 | $6 \%$ | 384 | $6 \%$ |
| Northern <br> Cape | 27 | $3 \%$ | 18 | $1 \%$ | 27 | $2 \%$ | 22 | $2 \%$ | 9 | $1 \%$ | 34 | $4 \%$ | 137 | $2 \%$ |
| Western <br> Cape | 89 | $11 \%$ | 19 | $1 \%$ | 28 | $2 \%$ | 62 | $5 \%$ | 82 | $12 \%$ | 157 | $19 \%$ | 437 | $7 \%$ |
| Total | 791 | $100 \%$ | 1495 | $100 \%$ | 1 | 594 | $100 \%$ | 1 | 273 | $100 \%$ | 681 | $100 \%$ | 826 | $100 \%$ |

Source: Umalusi NSC database


Figure 76: Distribution of schools by quintile and province, and percentage of schools in each quintile, by province, 2008
Source: Umalusi NSC database

The following tables and graphs show school performance in the NSC in 2008, in terms of schools scoring $0 \%, 1 \%-20 \%, 21 \%-50 \%, 51 \%-80 \%$, and more than $80 \%$ of candidates passing, and passing with a Bachelors-level pass, by quintile. They also show the number of schools by percentage of candidates gaining a $30 \%$ and a $50 \%$ passes in Mathematics, by quintile.

The number of schools with 0 candidate passes has decreased from 26 to 9 , with those with $20 \%$ or fewer candidate passes decreasing from 519 to 122 . There were $59 \%$ of Quintile 1 schools in 2008 that had pass rates of $20 \%$ or less,

> Examinations seem to have changed in standard to allow for more learners to pass at the bottom end of the results spectrum, while maintaining a steady level of difficulty at the top end of the marks profile. and in 2012 this had dropped to $24 \%$. In 2008 only $11 \%, 12 \%$ and $17 \%$ of Quintile 1,2 and 3 schools respectively had a pass rate of over $80 \%$, and in 2012 this had increased to $25 \%, 30 \%$ and $27 \%$ respectively. This demonstrates a rapid improvement in low-income schools, and it is clear that interventions in this slice of South African schools are starting to bear fruit. It should be borne in mind, however, that statistics earlier in this report suggest that examinations seem to have changed in standard to allow for more learners to pass at the bottom end of the results spectrum while maintaining a steady level of difficulty at the top end of the marks profile. It is likely, then, that while this data represents real progress in uplifting the standard of poor schools, some of the perceived improvement suggested by the results in the NSC may not have been as rapid as it appears.

Table 91: Number of schools, by pass rate, category and quintile, 2008

| Quintile | 0\% |  | $\begin{gathered} 1 \%-20 \% \\ \text { pass } \end{gathered}$ |  | $\begin{gathered} 21 \%-50 \% \\ \text { pass } \end{gathered}$ |  | 51\% - 80\% |  | >80\% |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| None | 10 | 2\% | 43 | 7\% | 128 | 20\% | 147 | 23\% | 324 | 50\% | 652 |
| 1 | 5 | 0\% | 213 | 15\% | 642 | 44\% | 447 | 31\% | 157 | 11\% | 1464 |
| 2 | 7 | 0\% | 148 | 10\% | 620 | 40\% | 591 | 38\% | 190 | 12\% | 1556 |
| 3 | 3 | 0\% | 93 | 8\% | 405 | 33\% | 519 | 42\% | 215 | 17\% | 1235 |
| 4 |  | 0\% | 18 | 3\% | 153 | 23\% | 256 | 38\% | 248 | 37\% | 675 |
| 5 | 1 | 0\% | 4 | 0\% | 35 | 4\% | 125 | 15\% | 658 | 80\% | 823 |
| Total | 26 | 0\% | 519 | 8\% | 1983 | 31\% | 2085 | 33\% | 1792 | 28\% | 6405 |

Source: Umalusi NSC database

Table 92: Number of schools, by pass rate, category and quintile, 2012

| Quinile | 0\% |  | $\begin{gathered} 1 \%-20 \% \\ \text { pass } \end{gathered}$ |  | $\begin{gathered} 21 \%-50 \% \\ \text { pass } \end{gathered}$ |  | 51\% - 80\% |  | >80\% |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| None | 5 | 1\% | 8 | 1\% | 100 | 13\% | 238 | 30\% | 440 | 56\% | 791 |
| 1 | 3 | 0\% | 41 | $3 \%$ | 318 | 21\% | 753 | 50\% | 380 | 25\% | 1495 |
| 2 | 1 | 0\% | 38 | $2 \%$ | 287 | 18\% | 792 | 50\% | 476 | 30\% | 1594 |
| 3 |  | 0\% | 33 | 3\% | 238 | 19\% | 661 | 52\% | 341 | 27\% | 1273 |
| 4 |  | 0\% | 1 | 0\% | 61 | 9\% | 321 | 47\% | 298 | 44\% | 681 |
| 5 |  | 0\% | 1 | 0\% | 29 | 4\% | 152 | 18\% | 644 | 78\% | 826 |
| Total | 9 | 0\% | 122 | 2\% | 1033 | 16\% | 2917 | 44\% | 2579 | 39\% | 6660 |

[^30]

Figure 77: Percentage of schools, by pass rate, category and quintile, 2008 and 2012
Source: Umalusi NSC database

In terms of the percentage of candidates who gained a Bachelors-level pass, 22\%,14\% and $11 \%$ of Quintile 1,2 and 3 schools had no Bachelors-level passes in 2008. In 2012 this was $8 \%, 6 \%$ and $6 \%$ respectively. The total number of schools with no Bachelorslevel passes decreased from 804 schools in 2008 to 373 schools in 2012 . It is this data, in addition to the foregoing results showing that fewer learners are failing, which begins to paint a picture of improvement in South African schools. The number of schools achieving no bachelor passes has dropped from 804 in 2008 to just 373 in 2012 - this is a very encouraging sign as it suggests

> It is likely that, as the National Curriculum Statement had time to 'bed down' over the five-year period under review, learners and teachers became more experienced at working with the curriculum and the type of examinations that it produces. that the interventions taking place in the schooling system are showing real improvements in learning and teaching. It is also likely that as the National Curriculum Statement had time to 'bed down' over the five-year period under review, learners and teachers became more experienced at working with the curriculum and the type of examinations that it produces.

The major gain between 2008 and 2012 was in the category of schools with between $21 \%$ and $50 \%$ of candidates who achieved Bachelors-level passes. In 2008, $63 \%$ of schools were in the $1 \%-20 \%$ category of Bachelor passes and $15 \%$ of schools were in the $21 \%-50 \%$ category. By $2012,50 \%$ of schools achieved between $1 \%$ and $20 \%$ Bachelors-level passes, and $35 \%$ achieved between $21 \%$ and $50 \%$ Bachelors-level passes.

Table 93: Number of schools with candidates passing with Bachelors-level pass, by category and quintile, 2008

| Quintile | 0\% |  | $\begin{gathered} 1 \%-20 \% \\ \text { pass } \end{gathered}$ |  | $\begin{gathered} 21 \%-50 \% \\ \text { pass } \end{gathered}$ |  | 51\%-80\% |  | >80\% |  | Tołal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| None | 91 | 14\% | 252 | 39\% | 146 | 22\% | 81 | 12\% | 82 | 13\% | 652 |
| 1 | 316 | 22\% | 1052 | 72\% | 93 | 6\% | 3 | 0\% |  | 0\% | 1464 |
| 2 | 225 | 14\% | 1183 | 76\% | 139 | 9\% | 9 | 1\% |  | 0\% | 1556 |
| 3 | 136 | 11\% | 927 | 75\% | 149 | 12\% | 20 | 2\% | 3 | 0\% | 1235 |
| 4 | 25 | 4\% | 444 | 66\% | 154 | 23\% | 47 | 7\% | 5 | 1\% | 675 |
| 5 | 11 | 1\% | 176 | 21\% | 256 | 31\% | 274 | 33\% | 106 | 13\% | 823 |
| Total | 804 | 13\% | 4034 | 63\% | 937 | 15\% | 434 | 7\% | 196 | $3 \%$ | 6405 |

Source: Umalusi NSC database
Table 94: Number of schools passing with Bachelors-level pass, by category and quintile, 2012

| Quintile | 0\% |  | $\begin{gathered} 1 \%-20 \% \\ \text { pass } \end{gathered}$ |  | $\begin{gathered} 21 \%-50 \% \\ \text { pass } \end{gathered}$ |  | 51\%-80\% |  | >80\% |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| None | 75 | 9\% | 269 | 34\% | 263 | 33\% | 112 | 14\% | 72 | 9\% | 791 |
| 1 | 116 | 8\% | 954 | 64\% | 407 | 27\% | 17 | 1\% | 1 | 0\% | 1495 |
| 2 | 88 | 6\% | 964 | 60\% | 507 | 32\% | 31 | $2 \%$ | 4 | 0\% | 1594 |
| 3 | 81 | 6\% | 700 | 55\% | 464 | 36\% | 27 | $2 \%$ | 1 | 0\% | 1273 |
| 4 | 7 | 1\% | 306 | 45\% | 320 | 47\% | 43 | 6\% | 5 | 1\% | 681 |
| 5 | 6 | 1\% | 159 | 19\% | 339 | 41\% | 250 | 30\% | 72 | 9\% | 826 |
| Total | 373 | 6\% | 3352 | 50\% | 2300 | 35\% | 480 | 7\% | 155 | 2\% | 6660 |

Source: Umalusi NSC database


Figure 78: Percentage of schools passing with Bachelors-level pass, by category and quintile, 2008 and 2012
Source: Umalusi NSC database

### 3.2.1 Main findings

The main findings in the preceding section of the report are as follows:

- As has been noted throughout this report, educational outcomes closely track socioeconomic conditions. This has been demonstrated in almost every section of this report, and it is clear that inequality in educational outcomes is closely associated with inequalities within the South African socio-economic landscape.
- While the expected pattern of Quintile 5 (least poor) schools and Quintile 1 (most poor) schools shows respectively the best and worst performance profiles, it is important to note that general improvements are evident in the lower quintile schools.
- An encouraging finding is that there have been substantial improvements in the rate of schools that have candidates achieving Bachelors-level passes. Since there is ample evidence to demonstrate that the examinations remained good discriminators at the top end of the performance spectrum, it can be inferred that real improvements in teaching and learning have taken place during the period under review.


## 4 Conclusion

Overall, this first indicators report reveals a system that has managed to achieve the requisite size to serve the population of South Africa, but is still struggling to achieve a uniform degree of quality. As always, socio-economics dominates the achievement profile and access to quality for South Africans, and poverty still carries with it a racial dimension. There have been commendable successes in terms of expanding the schooling system, but poor schools require focused effort in order to provide true quality education for South African learners, and indeed for the economy at large.

It is also clear that interventions must be targeted at poorer schools and across the levels of schooling. Intervening in Quintile 1 schools in the Senior or Further Education and Training phases is likely to meet with limited success unless such interventions have also been instituted in the Foundation and Intermediate phases of schooling. The National Senior Certificate is proof of achievement of 12 years of schooling - not just of Grade 12 - and learners can not hope to achieve top marks in Grade 12 unless they have had quality schooling throughout their learning career.

The quality of the examination system has generally stabilised. While it is clear that the abolishment of levels within a subject (higher grade, standard grade, etc.) has made a pass somewhat more achievable at the basic level, the stability in top-end performance suggests that the examinations remain a fair challenge for top-end learners. In this report there is a wealth of information - some of which has been commented on in the textual analysis - but a vast proportion remains for the interested reader who wishes to examine the fine detail of the system and its components. It is hoped that as the system grows and develops, subsequent releases of this report will chart any improvements or problems that may occur. As always, it is Umalusi's goal to be not just a watchdog in the system, but an active and critical actor in improving the education system and achieving a quality education for all.

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### 4.1 Appendix 1

Table 95: 2008 NSC results, full-time candidates writing 7 or more subjects

| Prov. | Race | Cander |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |


| MP | Coloured | Male | 99 | 20 | 39 | 19 |  | 21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MP | Coloured | Female | 146 | 56 | 42 | 24 |  | 24 |
| MP | Indian/Asian | Male | 301 | 71 | 64 | 56 |  | 110 |
| MP | Indian/Asian | Female | 419 | 90 | 61 | 54 | 1 | 213 |
| MP | Not known | Male | 3 |  | 1 |  |  | 2 |
| MP | Not known | Female | 7 |  | 1 | 2 |  | 4 |
| MP | White | Male | 1369 | 793 | 522 | 35 |  | 19 |
| MP | White | Female | 1407 | 982 | 394 | 24 |  | 7 |
| NW | African | Male | 13715 | 1829 | 3770 | 3301 |  | 4815 |
| NW | African | Female | 15758 | 2292 | 4008 | 3842 | 2 | 5614 |
| NW | Coloured | Male | 217 | 55 | 84 | 31 |  | 47 |
| NW | Coloured | Female | 297 | 68 | 94 | 70 |  | 65 |
| NW | Indian/Asian | Male | 79 | 61 | 14 |  |  | 4 |
| NW | Indian/Asian | Female | 71 | 55 | 8 | 3 |  | 5 |
| NW | Not known | Male | 2 |  |  | 2 |  |  |
| NW | Not known | Female | 3 | 2 |  |  |  | 1 |
| NW | White | Male | 1502 | 889 | 546 | 54 |  | 13 |
| NW | White | Female | 1630 | 1227 | 368 | 32 |  | 3 |
| NC | African | Male | 2327 | 305 | 649 | 600 |  | 773 |
| NC | African | Female | 2703 | 376 | 678 | 681 | 1 | 967 |
| NC | Coloured | Male | 1799 | 273 | 667 | 358 |  | 501 |
| NC | Coloured | Female | 2175 | 395 | 749 | 555 |  | 476 |
| NC | Indian/Asian | Male | 12 | 6 | 4 | 1 |  | 1 |
| NC | Indian/Asian | Female | 21 | 12 | 4 | 1 |  | 4 |
| NC | Not known | Male | 2 | 2 |  |  |  |  |
| NC | Not known | Female | 4 |  |  | 2 |  | 2 |
| NC | White | Male | 528 | 287 | 214 | 18 |  | 9 |
| NC | White | Female | 496 | 366 | 121 | 9 |  |  |
| WC | African | Male | 4643 | 779 | 1138 | 948 | 1 | 1777 |
| WC | African | Female | 7127 | 1068 | 1601 | 1517 | 2 | 2939 |
| WC | Coloured | Male | 9323 | 2032 | 3570 | 1795 | 1 | 1925 |
| WC | Coloured | Female | 13087 | 3225 | 4515 | 2768 |  | 2579 |
| WC | Indian/Asian | Male | 223 | 143 | 60 | 12 |  | 8 |
| WC | Indian/Asian | Female | 259 | 200 | 39 | 14 |  | 6 |
| WC | Not known | Male | 320 | 150 | 130 | 19 |  | 21 |
| WC | Not known | Female | 327 | 215 | 81 | 17 |  | 14 |
| WC | White | Male | 4304 | 3138 | 1057 | 86 |  | 23 |
| WC | White | Female | 4337 | 3622 | 665 | 40 |  | 10 |

Table 96: 2009 NSC results, full-time candidates writing 7 or more subjects

| Prov. | Race | Gender | Cand | Bach-level pass | Diploma pass | Higher Certificate pass | Senior Certificate pass | Fail |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EC | African | Male | 26369 | 2874 | 5202 | 4546 | 52 | 13695 |
| EC | African | Female | 34041 | 3457 | 6231 | 5962 | 58 | 18333 |
| EC | Coloured | Male | 1621 | 316 | 662 | 257 |  | 386 |
| EC | Coloured | Female | 2234 | 495 | 801 | 397 |  | 541 |
| EC | Indian/Asian | Male | 105 | 58 | 35 | 4 |  | 8 |
| EC | Indian/Asian | Female | 80 | 56 | 17 | 2 |  | 5 |
| EC | Not known |  | 74 | 3 | 5 | 4 |  | 62 |
| EC | Not known | Male | 7 | 4 |  | 2 |  | 1 |
| EC | Not known | Female | 6 | 3 | 2 | 1 |  |  |
| EC | White | Male | 1683 | 1021 | 575 | 53 | 1 | 33 |
| EC | White | Female | 1591 | 1207 | 360 | 14 |  | 10 |
| FS | African | Male | 12031 | 1640 | 3719 | 2639 | 28 | 4005 |
| FS | African | Female | 13790 | 1958 | 3825 | 3066 | 19 | 4922 |
| FS | Coloured | Male | 366 | 68 | 142 | 70 |  | 86 |
| FS | Coloured | Female | 415 | 111 | 147 | 74 |  | 83 |
| FS | Indian/Asian | Male | 34 | 18 | 13 | 2 |  | 1 |
| FS | Indian/Asian | Female | 42 | 29 | 11 | 1 |  | 1 |
| FS | Not known | Not known | 3 |  |  | 2 |  | 1 |
| FS | Not known | Female | 1 |  |  | 1 |  |  |
| FS | White | Male | 1537 | 969 | 517 | 37 |  | 14 |
| FS | White | Female | 1578 | 1237 | 317 | 20 |  | 4 |
| GT | African | Male | 33146 | 6248 | 9617 | 5666 | 10 | 11605 |
| GT | African | Female | 40901 | 8726 | 11215 | 6926 | 6 | 14028 |
| GT | Coloured | Male | 2053 | 485 | 737 | 306 |  | 525 |
| GT | Coloured | Female | 2693 | 831 | 770 | 428 | 1 | 663 |
| GT | Indian/Asian | Male | 1376 | 747 | 410 | 125 |  | 94 |
| GT | Indian/Asian | Female | 1429 | 1019 | 255 | 73 |  | 82 |
| GT | Not known |  | 12 |  | 1 |  |  | 11 |
| GT | Not known | Male | 3 | 1 | 1 | 1 |  |  |
| GT | Not known | Female | 2 | 2 |  |  |  |  |
| GT | White | Male | 7703 | 4464 | 2688 | 349 | 1 | 201 |
| GT | White | Female | 8074 | 5908 | 1982 | 114 | 1 | 69 |
| KZN | African | Male | 54208 | 8120 | 12822 | 9733 | 142 | 23391 |
| KZN | African | Female | 63321 | 9765 | 14581 | 11867 | 168 | 26940 |
| KZN | Coloured | Male | 704 | 182 | 246 | 150 |  | 126 |
| KZN | Coloured | Female | 910 | 356 | 295 | 140 |  | 119 |
| KZN | Indian/Asian | Male | 5049 | 2168 | 1696 | 610 |  | 575 |
| KZN | Indian/Asian | Female | 5793 | 3479 | 1487 | 473 |  | 354 |
| KZN | Not known |  | 118 | 18 | 16 | 9 |  | 75 |
| KZN | Not known | Male | 2 |  | 2 |  |  |  |
| KZN | White | Male | 1688 | 1180 | 434 | 43 | 2 | 29 |
| KZN | White | Female | 1591 | 1316 | 257 | 13 | 1 | 4 |
| LP | African | Male | 40413 | 5176 | 8318 | 7848 | 16 | 19055 |
| LP | African | Female | 48815 | 4806 | 7916 | 8816 | 21 | 27256 |
| LP | Coloured | Male | 57 | 10 | 21 | 9 |  | 17 |
| LP | Coloured | Female | 68 | 20 | 21 | 8 |  | 19 |
| LP | Indian/Asian | Male | 52 | 30 | 15 | 2 |  | 5 |
| LP | Indian/Asian | Female | 35 | 26 | 8 |  |  | 1 |
| LP | Not known |  | 62 |  | 6 | 5 |  | 51 |
| LP | Not known | Male | 3 |  | 1 |  |  | 2 |
| LP | Not known | Female | 3 |  | 2 |  |  | 1 |
| LP | White | Male | 671 | 381 | 249 | 25 |  | 16 |
| LP | White | Female | 784 | 520 | 233 | 19 |  | 12 |
| MP | African | Male | 23320 | 2468 | 4573 | 4281 | 16 | 11982 |


| MP | African | Female | 26761 | 2330 | 4399 | 4692 | 8 | 15332 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MP | Coloured | Male | 124 | 24 | 40 | 27 |  | 33 |
| MP | Coloured | Female | 134 | 32 | 48 | 25 |  | 29 |
| MP | Indian/Asian | Male | 79 | 43 | 27 | 3 |  | 6 |
| MP | Indian/Asian | Female | 87 | 52 | 20 | 4 |  | 11 |
| MP | Not known |  | 160 | 1 | 2 | 3 |  | 154 |
| MP | Not known | Male | 2 |  | 1 |  |  | 1 |
| MP | Not known | Female | 2 | 1 |  |  |  | 1 |
| MP | White | Male | 1412 | 699 | 605 | 56 |  | 52 |
| MP | White | Female | 1381 | 907 | 452 | 16 |  | 6 |
| NW | African | Male | 13059 | 2142 | 3655 | 2899 | 2 | 4361 |
| NW | African | Female | 15158 | 2341 | 3818 | 3224 |  | 5775 |
| NW | Coloured | Male | 207 | 45 | 83 | 40 |  | 39 |
| NW | Coloured | Female | 250 | 68 | 82 | 48 |  | 52 |
| NW | Indian/Asian | Male | 79 | 52 | 12 | 6 |  | 9 |
| NW | Indian/Asian | Female | 69 | 53 | 9 | 2 |  | 5 |
| NW | Not known | Male | 77 |  | 3 | 2 |  | 72 |
| NW | White | Male | 1465 | 829 | 520 | 77 |  | 39 |
| NW | White | Female | 1573 | 1156 | 382 | 25 |  | 10 |
| NC | African | Male | 2685 | 224 | 604 | 588 | 1 | 1268 |
| NC | African | Female | 3138 | 310 | 612 | 646 | 1 | 1569 |
| NC | Coloured | Male | 1714 | 241 | 580 | 323 |  | 570 |
| NC | Coloured | Female | 2025 | 373 | 583 | 409 |  | 660 |
| NC | Indian/Asian | Male | 6 | 1 | 3 |  |  | 2 |
| NC | Indian/Asian | Female | 11 | 10 |  |  |  | 1 |
| NC | Not known |  | 4 |  | 1 |  |  | 3 |
| NC | Not known | Male | 2 |  | 1 | 1 |  |  |
| NC | Not known | Female | 1 |  | 1 |  |  |  |
| NC | White | Male | 468 | 259 | 181 | 12 |  | 16 |
| NC | White | Female | 483 | 334 | 142 | 4 |  | 3 |
| WC | African | Male | 5030 | 763 | 1196 | 994 | 4 | 2073 |
| WC | African | Female | 7670 | 1058 | 1696 | 1545 | 1 | 3370 |
| WC | Coloured | Male | 9815 | 1990 | 3513 | 1920 | 6 | 2386 |
| WC | Coloured | Female | 13399 | 3491 | 4431 | 2423 | 1 | 3053 |
| WC | Indian/Asian | Male | 227 | 126 | 71 | 19 | 1 | 10 |
| WC | Indian/Asian | Female | 248 | 172 | 54 | 12 |  | 10 |
| WC | Not known | Male | 12 | 8 | 4 |  |  |  |
| WC | Not known | Female | 12 | 10 | 1 |  |  | 1 |
| WC | White | Male | 4343 | 3036 | 1168 | 93 | 4 | 42 |
| WC | White | Female | 4394 | 3727 | 613 | 43 | 1 | 10 |

Table 97: 2010 NSC results, full-time candidates writing 7 or more subjects

| Prov. | Race | Gender | Cand | Bach-level pass | Diploma pass | Higher Certificate pass | Fail |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EC | African | Male | 23993 | 3295 | 5777 | 4738 | 10183 |
| EC | African | Female | 31494 | 3973 | 6972 | 6195 | 14354 |
| EC | Coloured | Male | 1631 | 310 | 703 | 277 | 341 |
| EC | Coloured | Female | 2147 | 483 | 838 | 394 | 432 |
| EC | Indian/Asian | Male | 95 | 54 | 24 | 7 | 10 |
| EC | Indian/Asian | Female | 98 | 77 | 17 | 1 | 3 |
| EC | Not known | Male | 39 | 2 | 10 | 8 | 19 |
| EC | Not known | Female | 58 | 11 | 15 | 13 | 19 |
| EC | White | Male | 1552 | 878 | 556 | 50 | 68 |
| EC | White | Female | 1551 | 1124 | 357 | 23 | 47 |
| FS | African | Male | 10664 | 1714 | 3510 | 2479 | 2961 |
| FS | African | Female | 11740 | 1918 | 3512 | 2628 | 3682 |
| FS | Coloured | Male | 376 | 61 | 175 | 83 | 57 |
| FS | Coloured | Female | 421 | 117 | 145 | 85 | 74 |
| FS | Indian/Asian | Male | 45 | 34 | 10 | 1 |  |
| FS | Indian/Asian | Female | 34 | 23 | 6 | 4 | 1 |
| FS | Not known | Male | 4 | 2 | 1 |  | 1 |
| FS | Not known | Female | 2 | 2 |  |  |  |
| FS | White | Male | 1471 | 868 | 526 | 58 | 19 |
| FS | White | Female | 1470 | 1136 | 291 | 27 | 16 |
| GT | African | Male | 29141 | 7462 | 9865 | 5016 | 6798 |
| GT | African | Female | 37150 | 10898 | 11802 | 5969 | 8481 |
| GT | Coloured | Male | 1771 | 458 | 698 | 268 | 347 |
| GT | Coloured | Female | 2244 | 795 | 792 | 317 | 340 |
| GT | Indian/Asian | Male | 1315 | 778 | 378 | 102 | 57 |
| GT | Indian/Asian | Female | 1341 | 955 | 266 | 68 | 52 |
| GT | Not known | Male | 19 | 5 | 5 | 1 | 8 |
| GT | Not known | Female | 20 | 12 | 5 | 1 | 2 |
| GT | White | Male | 7589 | 4314 | 2770 | 343 | 162 |
| GT | White | Female | 8121 | 5624 | 2249 | 155 | 93 |
| KZN | African | Male | 48716 | 10596 | 14372 | 8753 | 14995 |
| KZN | African | Female | 58242 | 12412 | 16183 | 10259 | 19388 |
| KZN | Coloured | Male | 617 | 215 | 228 | 99 | 75 |
| KZN | Coloured | Female | 815 | 379 | 273 | 105 | 58 |
| KZN | Indian/Asian | Male | 4557 | 2144 | 1554 | 471 | 388 |
| KZN | Indian/Asian | Female | 5527 | 3391 | 1409 | 388 | 339 |
| KZN | Not known | Male | 19 | 3 | 3 | 3 | 10 |
| KZN | Not known | Female | 20 | 11 | 3 |  | 6 |
| KZN | White | Male | 1612 | 1126 | 414 | 42 | 30 |
| KZN | White | Female | 1464 | 1186 | 253 | 10 | 15 |
| LP | African | Male | 37742 | 7021 | 10514 | 8489 | 11718 |
| LP | African | Female | 44789 | 6863 | 10314 | 9909 | 17703 |
| LP | Coloured | Male | 53 | 9 | 27 | 8 | 9 |
| LP | Coloured | Female | 68 | 23 | 17 | 12 | 16 |
| LP | Indian/Asian | Male | 43 | 25 | 9 | 4 | 5 |
| LP | Indian/Asian | Female | 47 | 34 | 11 | 2 |  |
| LP | Not known | Male | 12 | 4 | 2 | 2 | 4 |
| LP | Not known | Female | 5 |  | 2 | 3 |  |
| LP | White | Male | 646 | 335 | 274 | 26 | 11 |
| LP | White | Female | 714 | 424 | 271 | 11 | 8 |
| MP | African | Male | 21386 | 3168 | 5380 | 4270 | 8568 |
| MP | African | Female | 24877 | 3287 | 5469 | 4791 | 11330 |
| MP | Coloured | Male | 121 | 18 | 58 | 24 | 21 |
| MP | Coloured | Female | 138 | 36 | 55 | 18 | 29 |


| MP | Indian/Asian | Male | 70 | 30 | 23 | 7 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MP | Indian/Asian | Female | 95 | 62 | 19 | 5 | 9 |
| MP | Not known | Male | 7 | 1 | 1 | 3 | 2 |
| MP | Not known | Female | 7 | 3 | 1 |  | 3 |
| MP | White | Male | 1262 | 696 | 496 | 36 | 34 |
| MP | White | Female | 1345 | 845 | 445 | 20 | 35 |
| NW | African | Male | 11276 | 2826 | 3933 | 2148 | 2369 |
| NW | African | Female | 13333 | 3221 | 4013 | 2626 | 3473 |
| NW | Coloured | Male | 188 | 43 | 86 | 34 | 25 |
| NW | Coloured | Female | 209 | 73 | 77 | 39 | 20 |
| NW | Indian/Asian | Male | 52 | 34 | 14 | 3 | 1 |
| NW | Indian/Asian | Female | 60 | 51 | 8 | 1 |  |
| NW | Not known | Male | 1 |  |  | 1 |  |
| NW | Not known | Female | 2 | 1 | 1 |  |  |
| NW | White | Male | 1307 | 768 | 478 | 48 | 13 |
| NW | White | Female | 1342 | 1003 | 317 | 13 | 9 |
| NC | African | Male | 2326 | 359 | 673 | 592 | 702 |
| NC | African | Female | 2781 | 404 | 760 | 716 | 901 |
| NC | Coloured | Male | 1558 | 318 | 581 | 379 | 280 |
| NC | Coloured | Female | 2009 | 458 | 698 | 510 | 343 |
| NC | Indian/Asian | Male | 10 | 5 | 5 |  |  |
| NC | Indian/Asian | Female | 9 | 4 | 5 |  |  |
| NC | Not known | Male | 2 |  | 2 |  |  |
| NC | Not known | Female | 2 |  | 1 |  | 1 |
| NC | White | Male | 435 | 278 | 145 | 8 | 4 |
| NC | White | Female | 455 | 325 | 126 | 2 | 2 |
| WC | African | Male | 5019 | 908 | 1389 | 982 | 1740 |
| WC | African | Female | 7384 | 1218 | 1861 | 1401 | 2904 |
| WC | Coloured | Male | 9137 | 2078 | 3716 | 1830 | 1513 |
| WC | Coloured | Female | 12640 | 3398 | 4571 | 2511 | 2160 |
| WC | Indian/Asian | Male | 185 | 123 | 41 | 15 | 6 |
| WC | Indian/Asian | Female | 228 | 166 | 41 | 15 | 6 |
| WC | Not known | Male | 287 | 110 | 142 | 16 | 19 |
| WC | Not known | Female | 329 | 156 | 118 | 29 | 26 |
| WC | White | Male | 4142 | 2787 | 1106 | 81 | 168 |
| WC | White | Female | 4105 | 3190 | 686 | 43 | 186 |

Table 98: 2011 NSC results, full-time candidates writing 7 or more subjects

| Prov. | Race | Gender | Cand | Fail | Bach-level pass | Diploma pass | Higher Certificate pass |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EC | African | Male | 25500 | 10707 | 3448 | 6245 | 5100 |
| EC | African | Female | 32576 | 15231 | 3949 | 7119 | 6277 |
| EC | Coloured | Male | 1491 | 364 | 272 | 576 | 279 |
| EC | Coloured | Female | 2109 | 520 | 504 | 742 | 343 |
| EC | Indian/Asian | Male | 89 | 7 | 51 | 27 | 4 |
| EC | Indian/Asian | Female | 80 | 5 | 58 | 14 | 3 |
| EC | Not known | Male | 1 |  |  |  | 1 |
| EC | Not known | Female | 2 |  | 1 | , |  |
| EC | White | Male | 1511 | 51 | 906 | 494 | 60 |
| EC | White | Female | 1438 | 9 | 1092 | 309 | 28 |
| FS | African | Male | 10471 | 2700 | 2125 | 3617 | 2029 |
| FS | African | Female | 11787 | 3496 | 2369 | 3701 | 2221 |
| FS | Coloured | Male | 311 | 41 | 74 | 147 | 49 |
| FS | Coloured | Female | 387 | 47 | 127 | 164 | 49 |
| FS | Indian/Asian | Male | 29 | 1 | 21 | 6 | 1 |
| FS | Indian/Asian | Female | 36 |  | 30 | 5 | 1 |


| FS | Not known | Male |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FS | Not known | Female |  |  |  |  |  |
| FS | White | Male | 1482 | 13 | 951 | 471 | 47 |
| FS | White | Female | 1398 | 2 | 1120 | 260 | 16 |
| GT | African | Male | 29577 | 6715 | 7586 | 10371 | 4905 |
| GT | African | Female | 35218 | 8447 | 10228 | 11154 | 5389 |
| GT | Coloured | Male | 1579 | 293 | 501 | 545 | 240 |
| GT | Coloured | Female | 2056 | 335 | 801 | 670 | 250 |
| GT | Indian/Asian | Male | 1151 | 72 | 686 | 289 | 104 |
| GT | Indian/Asian | Female | 1104 | 54 | 820 | 183 | 47 |
| GT | Not known | Male | 5 | 1 | 1 | 3 |  |
| GT | Not known | Female | 3 |  | 2 | 1 |  |
| GT | White | Male | 7257 | 154 | 4142 | 2632 | 329 |
| GT | White | Female | 7382 | 58 | 5269 | 1928 | 127 |
| KZN | African | Male | 53166 | 17660 | 10313 | 15409 | 9784 |
| KZN | African | Female | 57700 | 19823 | 11157 | 15997 | 10723 |
| KZN | Coloured | Male | 519 | 80 | 165 | 180 | 94 |
| KZN | Coloured | Female | 616 | 66 | 271 | 192 | 87 |
| KZN | Indian/Asian | Male | 3020 | 232 | 1426 | 1024 | 338 |
| KZN | Indian/Asian | Female | 3193 | 148 | 1997 | 809 | 239 |
| KZN | Not known | Male |  |  |  |  |  |
| KZN | Not known | Female |  |  |  |  |  |
| KZN | White | Male | 1476 | 29 | 1020 | 379 | 48 |
| KZN | White | Female | 1263 | 8 | 1046 | 195 | 14 |
| LP | African | Male | 33682 | 10953 | 6337 | 9354 | 7038 |
| LP | African | Female | 38569 | 15653 | 5768 | 8973 | 8175 |
| LP | Coloured | Male | 53 | 11 | 7 | 27 | 8 |
| LP | Coloured | Female | 51 | 9 | 20 | 19 | 3 |
| LP | Indian/Asian | Male | 27 | 1 | 15 | 9 | 2 |
| LP | Indian/Asian | Female | 24 |  | 20 | 4 |  |
| LP | Not known | Male |  |  |  |  |  |
| LP | Not known | Female |  |  |  |  |  |
| LP | White | Male | 646 | 19 | 367 | 245 | 15 |
| LP | White | Female | 662 | 5 | 412 | 236 | 9 |
| MP | African | Male | 20643 | 7189 | 3575 | 5776 | 4103 |
| MP | African | Female | 23749 | 9435 | 3438 | 6134 | 4742 |
| MP | Coloured | Male | 106 | 12 | 23 | 50 | 21 |
| MP | Coloured | Female | 153 | 25 | 55 | 59 | 14 |
| MP | Indian/Asian | Male | 418 | 102 | 131 | 117 | 68 |
| MP | Indian/Asian | Female | 431 | 122 | 129 | 110 | 70 |
| MP | Not known | Male |  |  |  |  |  |
| MP | Not known | Female |  |  |  |  |  |
| MP | White | Male | 1270 | 21 | 692 | 525 | 32 |
| MP | White | Female | 1274 | 10 | 822 | 423 | 19 |
| NW | African | Male | 10590 | 2439 | 2514 | 3712 | 1925 |
| NW | African | Female | 11591 | 3057 | 2682 | 3696 | 2156 |
| NW | Coloured | Male | 188 | 43 | 41 | 80 | 24 |
| NW | Coloured | Female | 236 | 37 | 89 | 82 | 28 |
| NW | Indian/Asian | Male | 62 | 2 | 43 | 17 |  |
| NW | Indian/Asian | Female | 49 | 1 | 40 | 8 |  |
| NW | Not known | Male |  |  |  |  |  |
| NW | Not known | Female |  |  |  |  |  |
| NW | White | Male | 1293 | 12 | 762 | 485 | 34 |
| NW | White | Female | 1323 | 4 | 1016 | 293 | 10 |
| NC | African | Male | 2386 | 949 | 287 | 627 | 523 |
| NC | African | Female | 2795 | 1202 | 385 | 641 | 567 |
| NC | Coloured | Male | 1809 | 462 | 327 | 595 | 425 |


| NC | Coloured | Female | 2235 | 520 | 439 | 733 | 543 |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| NC | Indian/Asian | Male | 13 |  | 9 | 3 | 1 |
| NC | Indian/Asian | Female | 10 | 1 | 6 | 2 | 1 |
| NC | Not known | Male |  |  |  |  |  |
| NC | Not known | Female |  |  |  |  |  |
| NC | White | Male | 397 | 9 | 219 | 161 | 8 |
| NC | White | Female | 452 | 1 | 340 | 107 | 4 |
| WC | African | Male | 5175 | 1413 | 1153 | 1632 | 977 |
| WC | African | Female | 7654 | 2256 | 1586 | 2339 | 1473 |
| WC | Coloured | Male | 8211 | 1368 | 2221 | 3322 | 1300 |
| WC | Coloured | Female | 10227 | 1725 | 3393 | 3474 | 1635 |
| WC | Indian/Asian | Male | 237 | 11 | 154 | 63 | 9 |
| WC | Indian/Asian | Female | 191 |  | 162 | 25 | 4 |
| WC | Not known | Male | 130 | 14 | 63 | 48 | 5 |
| WC | Not known | Female | 108 | 4 | 78 | 22 | 4 |
| WC | White | Male | 3973 | 26 | 2901 | 997 | 49 |
| WC | White | Female | 4014 | 16 | 3495 | 484 | 19 |

Table 99: 2011 NSC results, full-time candidates writing 7 or more subjects

| Prov. | Gender | Cand | Fail | Bach-level pass | Diploma pass | Higher Certificate pass |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EC |  | 7942 | 3798 | 852 | 1785 | 1507 |
| EC | Male | 24695 | 8517 | 4763 | 6723 | 4692 |
| EC | Female | 31349 | 12273 | 5631 | 7645 | 5800 |
| FS |  | 1860 | 594 | 285 | 554 | 427 |
| FS | Male | 10476 | 1653 | 3045 | 4043 | 1735 |
| FS | Female | 12009 | 2347 | 3633 | 4004 | 2025 |
| GT |  | 5210 | 1209 | 1575 | 1606 | 820 |
| GT | Male | 38018 | 5718 | 12975 | 13991 | 5334 |
| GT | Female | 46704 | 7565 | 17978 | 14932 | 6229 |
| KZN |  | 8826 | 3354 | 1475 | 2254 | 1743 |
| KZN | Male | 54769 | 13897 | 15085 | 16710 | 9077 |
| KZN | Female | 63768 | 17119 | 18243 | 17920 | 10486 |
| LP |  | 1070 | 455 | 153 | 231 | 231 |
| LP | Male | 35410 | 10214 | 7789 | 10095 | 7312 |
| LP | Female | 40877 | 14911 | 7405 | 9798 | 8763 |
| MP |  | 4405 | 1387 | 942 | 1223 | 853 |
| MP | Male | 19797 | 5410 | 4126 | 6313 | 3948 |
| MP | Female | 23733 | 7701 | 4440 | 6751 | 4841 |
| NW |  | 361 | 105 | 66 | 99 | 91 |
| NW | Male | 12643 | 2286 | 3546 | 4504 | 2307 |
| NW | Female | 14188 | 3153 | 3857 | 4560 | 2618 |
| NC |  | 141 | 44 | 17 | 48 | 32 |
| NC | Male | 4017 | 943 | 909 | 1373 | 792 |
| NC | Female | 4777 | 1276 | 1134 | 1372 | 995 |
| WC |  | 6323 | 1859 | 1305 | 1981 | 1178 |
| WC | Male | 16578 | 2292 | 6323 | 5963 | 2000 |
| WC | Female | 21778 | 3541 | 8699 | 6661 | 2877 |

### 4.2 Appendix 2

Table 100: Number of candidates as a percentage of the population of 18-year-olds, by province, race and gender, 2011

| Prov | Race | Gender | Population | Cand | \% of pop | Total pass | \% of pop | Bach | \% of pop |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EC | African | Male | 65011 | 26597 | 41\% | 14793 | 23\% | 3448 | 5\% |
|  |  | Female | 63629 | 34408 | 54\% | 17345 | 27\% | 3949 | 6\% |
|  | Coloured | Male | 5083 | 1527 | 30\% | 1127 | 22\% | 272 | 5\% |
|  |  | Female | 5357 | 2161 | 40\% | 1589 | 30\% | 504 | 9\% |
|  | Indian | Male | 250 | 90 | 36\% | 82 | 33\% | 51 | 20\% |
|  |  | Female | 221 | 80 | 36\% | 75 | 34\% | 58 | 26\% |
|  | White | Male | 2092 | 1516 | 72\% | 1460 | 70\% | 906 | 43\% |
|  |  | Female | 1927 | 1446 | 75\% | 1429 | 74\% | 1092 | 57\% |
| FS | African | Male | 24037 | 10634 | 44\% | 7771 | 32\% | 2125 | 9\% |
|  |  | Female | 24076 | 12074 | 50\% | 8291 | 34\% | 2369 | 10\% |
|  | Coloured | Male | 865 | 313 | 36\% | 270 | 31\% | 74 | 9\% |
|  |  | Female | 868 | 398 | 46\% | 340 | 39\% | 127 | 15\% |
|  | Indian | Male | 73 | 29 | 40\% | 28 | 38\% | 21 | 29\% |
|  |  | Female | 61 | 36 | 59\% | 36 | 59\% | 30 | 49\% |
|  | White | Male | 1686 | 1494 | 89\% | 1469 | 87\% | 951 | 56\% |
|  |  | Female | 1514 | 1401 | 93\% | 1396 | 92\% | 1120 | 74\% |
| GT | African | Male | 74514 | 30314 | 41\% | 22862 | $31 \%$ | 7586 | 10\% |
|  |  | Female | 78570 | 36378 | 46\% | 26771 | 34\% | 10228 | 13\% |
|  | Coloured | Male | 3693 | 1632 | 44\% | 1286 | 35\% | 501 | 14\% |
|  |  | Female | 3870 | 2110 | 55\% | 1721 | 44\% | 801 | 21\% |
|  | Indian | Male | 2613 | 1162 | 44\% | 1079 | 41\% | 686 | 26\% |
|  |  | Female | 2423 | 1119 | 46\% | 1050 | 43\% | 820 | 34\% |
|  | White | Male | 12360 | 7365 | 60\% | 7103 | 57\% | 4142 | 34\% |
|  |  | Female | 12112 | 7479 | 62\% | 7324 | 60\% | 5269 | 44\% |
| KZN | African | Male | 98618 | 55166 | 56\% | 35506 | 36\% | 10313 | 10\% |
|  |  | Female | 100777 | 61441 | 61\% | 37877 | 38\% | 11157 | 11\% |
|  | Coloured | Male | 1356 | 535 | 39\% | 439 | 32\% | 165 | 12\% |
|  |  | Female | 1450 | 628 | 43\% | 550 | 38\% | 271 | 19\% |
|  | Indian | Male | 6021 | 3048 | 51\% | 2788 | 46\% | 1426 | 24\% |
|  |  | Female | 6070 | 3220 | 53\% | 3045 | 50\% | 1997 | 33\% |
|  | White | Male | 2766 | 1487 | 54\% | 1447 | 52\% | 1020 | 37\% |
|  |  | Female | 2377 | 1275 | 54\% | 1255 | 53\% | 1046 | 44\% |
| LP | African | Male | 62615 | 33983 | 54\% | 22729 | 36\% | 6337 | 10\% |
|  |  | Female | 59606 | 39194 | 66\% | 22916 | 38\% | 5768 | 10\% |
|  | Coloured | Male | 131 | 54 | 41\% | 42 | 32\% | 7 | 5\% |
|  |  | Female | 126 | 51 | 40\% | 42 | 33\% | 20 | 16\% |
|  | Indian | Male | 138 | 27 | 20\% | 26 | 19\% | 15 | 11\% |
|  |  | Female | 99 | 24 | 24\% | 24 | 24\% | 20 | 20\% |
|  | White | Male | 993 | 647 | 65\% | 627 | 63\% | 367 | 37\% |
|  |  | Female | 822 | 667 | 81\% | 657 | 80\% | 412 | 50\% |
| MP | African | Male | 39614 | 21024 | 53\% | 13454 | 34\% | 3575 | 9\% |
|  |  | Female | 39701 | 24453 | 62\% | 14314 | 36\% | 3438 | 9\% |
|  | Coloured | Male | 357 | 110 | 31\% | 94 | 26\% | 23 | 6\% |
|  |  | Female | 371 | 154 | 42\% | 128 | 35\% | 55 | 15\% |
|  | Indian | Male | 249 | 427 | 171\% | 316 | 127\% | 131 | 53\% |
|  |  | Female | 198 | 449 | 227\% | 309 | 156\% | 129 | 65\% |
|  | White | Male | 2219 | 1277 | 58\% | 1249 | 56\% | 692 | 31\% |
|  |  | Female | 2097 | 1281 | 61\% | 1264 | 60\% | 822 | 39\% |
| NW | African | Male | 29499 | 10768 | 37\% | 8151 | 28\% | 2514 | 9\% |
|  |  | Female | 27985 | 11949 | 43\% | 8534 | 30\% | 2682 | 10\% |
|  | Coloured | Male | 663 | 191 | 29\% | 145 | 22\% | 41 | 6\% |
|  |  | Female | 675 | 243 | 36\% | 199 | 29\% | 89 | 13\% |


|  | Indian | Male | 128 | 63 | 49\% | 60 | 47\% | 43 | 34\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Female | 115 | 49 | 43\% | 48 | 42\% | 40 | 35\% |
|  | White | Male | 1938 | 1306 | 67\% | 1281 | 66\% | 762 | 39\% |
|  |  | Female | 1760 | 1330 | 76\% | 1319 | 75\% | 1016 | 58\% |
| NC | African | Male | 5596 | 2431 | 43\% | 1437 | 26\% | 287 | 5\% |
|  |  | Female | 5545 | 2909 | 52\% | 1593 | 29\% | 385 | 7\% |
|  | Coloured | Male | 4497 | 1870 | 42\% | 1347 | 30\% | 327 | 7\% |
|  |  | Female | 4393 | 2309 | 53\% | 1715 | 39\% | 439 | 10\% |
|  | Indian | Male | 54 | 13 | 24\% | 13 | 24\% | 9 | 17\% |
|  |  | Female | 55 | 10 | 18\% | 9 | 16\% | 6 | 11\% |
|  | White | Male | 487 | 401 | 82\% | 388 | 80\% | 219 | 45\% |
|  |  | Female | 524 | 458 | 87\% | 451 | 86\% | 340 | 65\% |
| WC | African | Male | 15261 | 5452 | 36\% | 3762 | 25\% | 1153 | 8\% |
|  |  | Female | 17500 | 7989 | 46\% | 5398 | 31\% | 1586 | 9\% |
|  | Coloured | Male | 26555 | 8429 | 32\% | 6843 | 26\% | 2221 | 8\% |
|  |  | Female | 26811 | 10525 | 39\% | 8502 | 32\% | 3393 | 13\% |
|  | Indian | Male | 552 | 237 | 43\% | 226 | 41\% | 154 | 28\% |
|  |  | Female | 489 | 193 | 39\% | 191 | 39\% | 162 | 33\% |
|  | White | Male | 5151 | 4018 | 78\% | 3947 | 77\% | 2901 | 56\% |
|  |  | Female | 5290 | 4045 | 76\% | 3998 | 76\% | 3495 | 66\% |
| Toł | African | Male | 414765 | 196369 | 47\% | 130465 | 31\% | 37338 | 9\% |
|  |  | Female | 417389 | 230795 | 55\% | 143039 | 34\% | 41562 | 10\% |
|  | Coloured | Male | 43200 | 14661 | 34\% | 11593 | 27\% | 3631 | 8\% |
|  |  | Female | 43921 | 18579 | 42\% | 14786 | 34\% | 5699 | 13\% |
|  | Indian | Male | 10078 | 5096 | 51\% | 4618 | 46\% | 2536 | 25\% |
|  |  | Female | 9731 | 5180 | 53\% | 4787 | 49\% | 3262 | 34\% |
|  | White | Male | 29692 | 19511 | 66\% | 18971 | 64\% | 11960 | 40\% |
|  |  | Female | 28423 | 19382 | 68\% | 19093 | 67\% | 14612 | 51\% |
| Toł | All | Male | 497735 | 235637 | 47\% | 165647 | 33\% | 55465 | 11\% |
|  |  | Female | 499464 | 273936 | 55\% | 181705 | 36\% | 65135 | 13\% |

### 4.3 Appendix 3

Table 101: Number of candidates, by province and quintile, 2008

| Pro | Cand | None | \% | 1 | \% | 2 | \% | 3 | \% | 4 | \% | 5 | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EC | 60621 | 3056 | 5\% | 8254 | 14\% | 10511 | 17\% | 16610 | 27\% | 10209 | 17\% | 11981 | 20 |
| FS | 30293 | 776 | 3\% | 7 | 25\% | 335 | 11 | 457 | 15\% | 6900 | 23\% | 7076 | 23\% |
| G | 96 | 9 | 10\% | 7 | 7\% | 6290 | 7\% | 21507 | 22\% | 26070 | 27\% | 4 | 26\% |
| KZN | 1435 | 5 | 4\% | 26 | 19 | 23 | 16 | 34 | 24 | 25 | 18\% | 27267 | 19\% |
| LP | 88 | 2 | $3 \%$ | 28 | 32 | 21 | 24 | 17943 | 20 | 9 | 11\% | 8500 | 10\% |
| M | 5 | 1510 | $3 \%$ | 13 | 24 | 9 | 18 | 12 | 2 | 10885 | \% | 4 | 12\% |
| NW | 33274 | 5968 | 18\% | 3102 | 9\% | 3538 | $11 \%$ | 8026 | 24\% | 7391 | 22\% | 5249 | 16\% |
| NC | 10067 | 1468 | 15\% | 13 | 14\% | 1400 | 14\% | 2237 | 22\% | 966 | 10\% | 2602 | 26\% |
| WC | 43950 | 2893 | 7\% | 3096 | 7\% | 3529 | 8\% | 7730 | 18\% | 9071 | 21\% | 17631 | 40\% |
| Total | 561306 | 34224 | 6\% | 99269 | 18\% | 83206 | 15\% | 125646 | 22\% | 106817 | 19\% | 112144 | 20\% |

Table 102: Number of candidates, by province and quintile, 2012

| Prov. | Cand | None | \% | 1 | \% | 2 | \% | 3 | \% | 4 | \% | 5 | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EC | 63986 | 4274 | 7\% | 9363 | 15\% | 12755 | 20\% | 17058 | 27\% | 8899 | 14\% | 11637 | 18\% |
| FS | 24345 | 887 | 4\% | 6564 | 27\% | 4720 | 19\% | 5507 | 23\% | 1780 | 7\% | 4887 | 20\% |
| GT | 89932 | 11330 | 13\% | 5257 | 6\% | 10336 | 11\% | 15779 | 18\% | 17794 | 20\% | 29436 | 33\% |
| KZN | 127363 | 6821 | 5\% | 21 | 17 | 26 | 21 | 28 | 22\% | 21824 | 17\% | 22882 | 18\% |
| LP | 77357 | 3504 | 5\% | 23725 | 31 | 27863 | 36 | 17 | 23\% | 1354 | 2\% | 2984 | 4\% |
| MP | 47935 | 4113 | 9\% | 15849 | 33 | 17627 | 37 | 2868 | 6\% | 4055 | 8\% | 3423 | 7\% |
| NW | 27192 | 3752 | 14\% | 2777 | 10\% | 2722 | 10\% | 6799 | 25\% | 6119 | 23\% | 5023 | 18\% |
| NC | 8935 | 1329 | 15\% | 1058 | 12\% | 1875 | 21\% | 1728 | 19\% | 689 | 8\% | 2256 | 25\% |
| WC | 44679 | 3121 | 7\% | 2095 | 5\% | 3773 | 8\% | 7805 | 17\% | 7827 | 18\% | 20058 | 45\% |
| Total | 511724 | 39131 | 8\% | 88199 | 17\% | 107838 | 21\% | 103629 | 20\% | 70341 | 14\% | 102586 | 20\% |

Table 103: Number of candidates passing and pass rate, by province and quintile, 2008

| Prov. | Cand | None | $\%$ pass | 1 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | 2 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | 3 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | 4 | $\%$ pass | 5 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EC | 30804 | 1806 | 59\% | 2809 | 34\% | 4137 | 39\% | 6842 | 41\% | 5777 | 57\% | 9433 | 79\% |
| FS | 21693 | 618 | 80\% | 4850 | 64\% | 2236 | 67\% | 3222 | 70\% | 4667 | 68\% | 6100 | 86\% |
| GT | 73478 | 7690 | 79\% | 4948 | 69\% | 3848 | 61\% | 13601 | 63\% | 19584 | 75\% | 23807 | 94\% |
| KZN | 83125 | 3522 | 59\% | 11523 | 43\% | 10820 | 46\% | 17771 | 52\% | 16343 | 64\% | 23146 | 85\% |
| LP | 48691 | 1966 | 70\% | 13468 | 47\% | 10453 | 49\% | 9991 | 56\% | 6176 | 64\% | 6637 | 78\% |
| MP | 28482 | 1043 | 69\% | 4664 | 36\% | 4362 | 45\% | 6774 | 52\% | 6684 | 61\% | 4955 | 77\% |
| NW | 22707 | 3942 | 66\% | 1742 | 56\% | 2023 | 57\% | 5074 | 63\% | 5301 | 72\% | 4625 | 88\% |
| NC | 7334 | 996 | 68\% | 838 | 60\% | 852 | 61\% | 1611 | 72\% | 686 | 71\% | 2351 | 90\% |
| WC | 34648 | 2509 | 87\% | 1857 | 60\% | 2112 | 60\% | 4831 | 62\% | 6698 | 74\% | 16641 | 94\% |
| Total | 350962 | 24092 | 70\% | 46699 | 47\% | 40843 | 49\% | 69717 | 55\% | 71916 | 67\% | 97695 | 87\% |

Table 104: Number of candidates passing and pass rate, by province and quintile, 2012

| Prov. | Cand | None | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | 1 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | 2 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | 3 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | 4 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | 5 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EC | 39398 | 2778 | 65\% | 5171 | 55\% | 7327 | 57\% | 9323 | 55\% | 5726 | 64\% | 9073 | \% |
| FS | 197 | 740 | 83\% | 5038 | 77\% | 3545 | 75\% | 4300 | 78\% | 1523 | 86\% | 4605 | 94\% |
| GT | 75 | 9417 | 83 | 4 | 80 | 8 | 78 | 11898 | 75\% | 14175 | \% | 27683 | 94\% |
| KZ | 92 | 4 | 70 | 14 | 68 | 17 | 68 | 18 | 67\% | 16367 | \% | 20288 | 89\% |
| LP | 51 | 256 | 73\% | 14 | 60 | 186 | 67 | 12 | 69 | 12 | 91\% | 2788 | 93\% |
| MP | 33437 | 287 | 70\% | 10327 | 65 | 1178 | 67\% | 2108 | 74\% | 3 | \% | 3154 | 92\% |
| N | 21648 | 293 | 78 | 210 | 76 | 2 | 78 | 5140 | 76\% | 4857 | 79\% | 4502 | 90\% |
| NC | 6672 | 930 | 70\% | 6 | 61 | 1290 | 69\% | 1175 | 68\% | 553 | 80\% | 2083 | 92\% |
| WC | 36987 | 2764 | 89\% | 1548 | 74\% | 2578 | 68\% | 5524 | $71 \%$ | 6216 | 79\% | 18357 | 92\% |
| Total | 378103 | 29744 | 76\% | 57913 | 66\% | 73266 | 68\% | 70802 | 68\% | 53845 | 77\% | 92533 | 90\% |

Table 105: Number of candidates passing with Bachelors-level pass and percentage
Bachelor rate, by province and quintile, 2008

| Prov. | Cand | None | $\%$ | 1 |  | 2 | $\begin{gathered} \% \\ \text { Bach } \end{gathered}$ | 3 |  | 4 | $\begin{gathered} \% \\ \text { Bach } \end{gathered}$ | 5 | $\begin{gathered} \% \\ \text { Bach } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EC | 8713 | 629 | 21\% | 410 | 5\% | 729 | 7\% | 1254 | 8\% | 1303 | 13\% | 4388 | \% |
| FS | 6344 | 21 | $28 \%$ | 984 | 13\% | 506 | 15\% | 617 | 13\% | 1079 | 16\% | 2944 | \% |
| GT | 29 | 35 | 36 | 1183 | 17\% | 888 | 14\% | 3 | 14\% | 6276 | \% | 14213 | 56\% |
| KZ | 263 | 1 | 28 | 1 | 7 | 1 | 8\% | 3 | 11\% | 5138 | \% | 1 | 44\% |
| LP | 11233 | 753 | 27 | 1917 | 7\% | 1913 | 9\% | 2 | 12\% | 1681 | \% | 2797 | 33\% |
| MP | 6921 | 370 | 25 | 67 | $5 \%$ | 737 | 8\% | 1159 | 9\% | 1807 | 17\% | 2177 | 34\% |
| NW | 6478 | 1060 | 18 | 268 | $9 \%$ | 31 | 9 | 964 | 12\% | 1535 | 21\% | 2335 | 44\% |
| NC | 202 | 19 | 13 | 94 | 7\% | 112 | 8\% | 330 | 15\% | 149 | 15\% | 1146 | 4\% |
| WC | 14572 | 1518 | 52 | 365 | 12\% | 395 | 11\% | 847 | 11\% | 1372 | 15\% | 10075 | 57\% |
| Tołal | 111731 | 9937 | 29\% | 7710 | 8\% | 7511 | 9\% | 14227 | 11\% | 20340 | 19\% | 52006 | 46\% |

Table 106: Number of candidates passing with Bachelors-level pass and percentage
Bachelor rate, by province and quintile, 2012

| Prov. | Cand | None | $\begin{gathered} \% \\ \text { Bach } \end{gathered}$ | 1 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | 2 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | 3 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | 4 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ | 5 | $\begin{gathered} \% \\ \text { pass } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EC | 11246 | 907 | 21\% | 1115 | 12\% | 1509 | 12\% | 2111 | 12\% | 1476 | 17\% | 4128 | 35\% |
| FS | 6963 | 259 | 29\% | 1522 | 23\% | 923 | 20\% | 1111 | 20\% | 590 | 33\% | 2558 | 52\% |
| GT | 32528 | 4570 | 40\% | 1429 | 27\% | 2729 | 26\% | 3953 | 25\% | 4774 | 27\% | 15073 | $51 \%$ |
| KZN | 34803 | 2024 | 30\% | 4050 | 19\% | 5198 | 20\% | 6073 | 22\% | 6155 | 28\% | 11303 | 49\% |
| LP | 15347 | 1087 | 31\% | 3025 | 13\% | 4949 | 18\% | 4037 | 23\% | 743 | 55\% | 1506 | 50\% |
| MP | 9508 | 883 | 21\% | 2308 | 15\% | 3031 | 17\% | 565 | 20\% | 1131 | 28\% | 1590 | 46\% |
| NW | 7469 | 979 | 26\% | 551 | 20\% | 570 | 21\% | 1525 | 22\% | 1713 | 28\% | 2131 | 42\% |
| NC | 2060 | 212 | 16\% | 132 | 12\% | 282 | 15\% | 274 | 16\% | 135 | 20\% | 1025 | 45\% |
| WC | 16327 | 1576 | 50\% | 450 | 21\% | 605 | 16\% | 1455 | 19\% | 1693 | 22\% | 10548 | 53\% |
| Total | 136251 | 12497 | 32\% | 14582 | 17\% | 19796 | 18\% | 21104 | 20\% | 18410 | 26\% | 49862 | 49\% |



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[^0]:    ${ }^{1}$ Note that public providers are expected to be 'deemed accredited' in terms of the GENFETQA Act, and thus Umalusi does not have the mandate to investigate their functioning.

[^1]:    ${ }^{2}$ The gross enrolment ratio is measured by dividing the total number of learners enrolled in primary school by the number of children in the population of the official primary school age (7-13).
    ${ }^{3}$ The net enrolment ratio is measured by dividing the number of learners of the official primary school age enrolled by the population of official primary school age (7-13).
    ${ }^{4}$ The age-specific enrolment ratio is calculated by dividing the total number of learners of a particular age by the population of that age, regardless of what grades they are in.

[^2]:    Source: DOE 2010, DBE 2011, 2011b, 2012, 2012b and 2013e

[^3]:    ${ }^{5}$ A phenomenon in which learners who are unlikely to pass the examinations are encouraged not to write, thus improving the overall proportion of learners who do pass, by removing potential failures from the sample.

[^4]:    ${ }^{6}$ The Gender Parity Index GPI is defined as GER for females divided by GER for males, and is used to indicate the level of access to education that females have, compared with the level of access that males have. For example, a GPI of more than 1 indicates that in proportion to the appropriate schoolage population, there are more females than males in the school system.

[^5]:    * Note: All average annual growth rates are calculated as the slope of natural logs over the intervals Source: Source: DOE 2010, DBE 2011, 2011 b, 2012, 2012b and 2013e

[^6]:    ${ }^{7}$ Thus the growth rate does not take into account the intermediate values of the series, nor does it correspond with the annual rate of change measured at a one-year interval.

[^7]:    Source: DBE School Realities 2012 in DBE (2013c: 67)

[^8]:    Source: DBE (2013a)

[^9]:    Source: Umalusi NSC database, 2008

[^10]:    Source: DBE (2012c:45)

[^11]:    Source: StatsSA Labour Force Survey, $3^{\text {rd }}$ Q 2011, own calculations

[^12]:    Source: StatsSA Labour Force Survey, $3^{\text {ra }}$ Q 2011 , own calculations

[^13]:    8 These numbers include all candidates meeting the minimum requirements for an NSC pass.

[^14]:    9 The 2012 database fields for race and gender are not complete, and too many of the race fields are missing to make the inclusion of 2012 data meaningful. The gender data, while also not complete, is sufficient to include in the analysis of gender only tables. However, for various technical reasons, it was not possible to add the 2013 gender data into this section.

[^15]:    * These average annual growth rates are calculated from 2008-2011 and differ from the previous growth rates, which are calculated from 2008 to 2013

[^16]:    10 Quintile ranking of each school was last conducted by the Department of Basic Education in 2010, and the discrepancy in identifying and linking schools by quintile began to become a problem in 2013. Several schools have closed, are new schools or have changed their names, and therefore, the number of schools that do not have, or cannot be linked to a quintile begins to become too large for meaningful analysis. As such, only information for 2012 and before is provided.

[^17]:    Source: Umalusi NSC database

[^18]:    Source: Umalusi NSC database

[^19]:    Source: Umalusi NSC database

[^20]:    Source: Umalusi NSC database

[^21]:    Source: Umalusi NSC database

[^22]:    Source: Umalusi NSC database

[^23]:    Source: Umalusi NSC database

[^24]:    Source: Umalusi NSC database

[^25]:    Source: Umalusi NSC database

[^26]:    Source: Umalusi NSC database

[^27]:    Source: Umalusi NSC database

[^28]:    Source: Umalusi NSC database

[^29]:    Source: Umalusi NSC database

[^30]:    Source: Umalusi NSC database

