



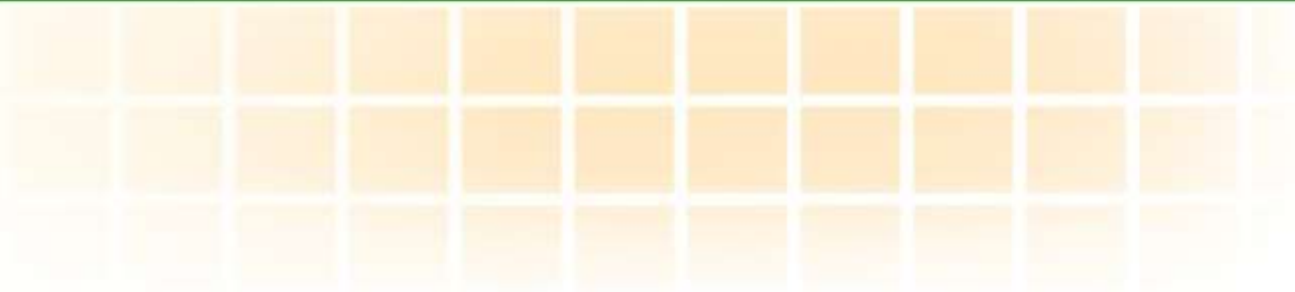
**economic development
& tourism**

MPUMALANGA PROVINCE
REPUBLIC OF SOUTH AFRICA



Analysis of 2016 Grade 12 results in Mpumalanga

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KEY FINDINGS

- The drop-out rate between grades 10 and 12 in Mpumalanga decreased/improved from 45.1 per cent in 2015 to 38.8 per cent in 2016.
- The throughput rate in Mpumalanga increased/improved from 59.5 per cent in 2010 to 61.2 per cent in 2016.
- The non-progressed learner through-put rate increased/improved from 51.7 per cent in 2015 to 53.9 per cent in 2016.
- Mpumalanga's Grade 12 pass rate declined for the second consecutive year from 78.6 per cent in 2015 to 77.1 per cent in 2016.
- Mpumalanga improved from the province with the 3rd lowest pass rate in 2011 to the province with the 4th lowest pass rate in 2016.
- The pass rate for non-progressed learners declined from 82.1 per cent in 2015 to 81.3 per cent in 2016 and that for progressed learners increased from 45.0 per cent in 2015 to 54.6 per cent in 2016.
- Mpumalanga's female Grade 12 learners registered a lower pass rates than their male counterparts. The pass rate of females was 74.8 per cent and that of males 79.8 per cent.
- Mpumalanga recorded no schools with a 0 per cent pass rate in 2016 and 22 schools with a 100 per cent pass rate. However, only 4.0 per cent of schools in Mpumalanga achieved a 100 per cent pass rate compared with the 8.0 per cent countrywide.
- The majority of schools in Mpumalanga (51.4 per cent) were in the 80 to 100 per cent category.
- In 2016, Mpumalanga recorded the 7th highest/3rd lowest share of Grade 12 learners that obtained admission to bachelor studies (22.9 per cent).
- When compared with the national average in the 9 most popular non-language subjects nationally, Grade 12 learners in Mpumalanga registered a higher pass rate in six of the nine subjects.
- Between 2014 and 2016, the Mathematics pass rate in South Africa and Mpumalanga declined to 51.1 per cent and 53.6 per cent, respectively.
- Between 2014 and 2016, the Physical Sciences pass rate in South Africa and Mpumalanga increased to 62.0 per cent and 63.6 per cent, respectively.
- Ehlanzeni¹ and Nkangala, jointly, recorded the highest Grade 12 pass rate of 79.5 per cent and Bohlabela² (72.3 per cent) the lowest.
- Gert Sibande was the only district that registered an improvement from 72.6 per cent in 2015 to 75.9 per cent in 2016.
- In 2016, schools in Thaba Chweu (88.8 per cent) achieved the highest Grade 12 pass rate among the local municipal areas and Dr Pixley Ka Isaka Seme (64.5 per cent) the lowest.
- In 2016, North West (0.83) recorded the highest value for money index value in terms of total Grade 12 expenditure and Eastern Cape (0.31) the lowest. Mpumalanga (0.75) recorded the 2nd highest index value which was also higher than the national level.
- Mpumalanga extracted the 5th highest/lowest value from expenditure on Grade 12 Mathematics, and the 2nd highest from expenditure on Grade 12 Physical Sciences.

¹ The Ehlanzeni education district includes schools in City of Mbombela (Mbombela and Umjindi) and Nkomazi

² The Bohlabela education district includes schools in Bushbuckridge and Thaba Chweu

Salient features of 2016 Grade 12 results in Mpumalanga

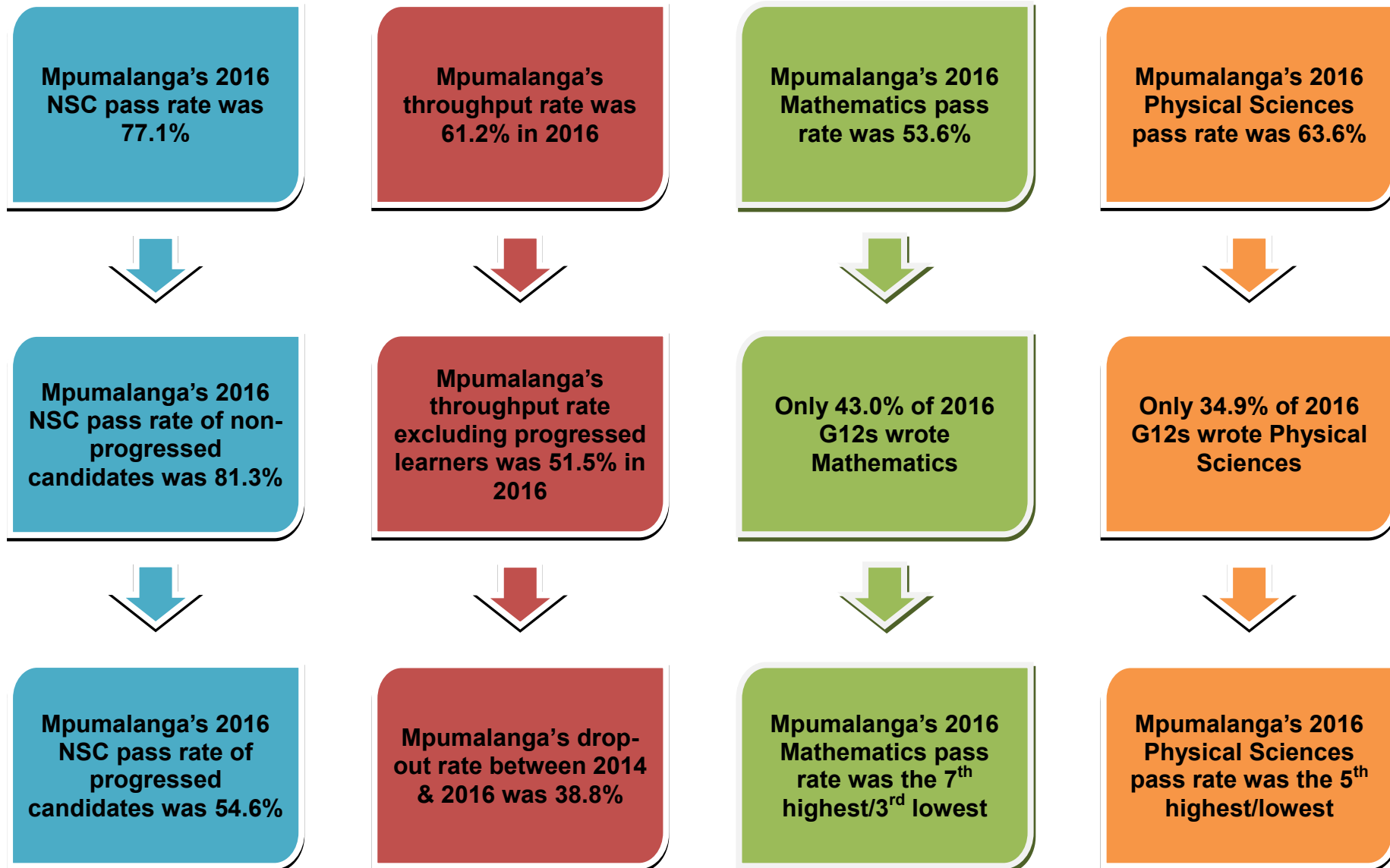


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1. INTRODUCTION

It is widely reported that South Africa's schooling system performs well below its potential and that improving basic education outcomes is a prerequisite for South Africa's long-term development goals. Children need to be better prepared by their schools to read, write, think critically and solve problems to increase throughput rates and pass rates at all levels. These skills are also the foundation on which further studies, job satisfaction, productivity and meaningful citizenship are based.

The focus of the Mpumalanga Department of Education is on improving the outcomes of education in general, improving the quality of teaching, promoting universal access and ensuring that teachers are in class, teaching. In order to render these services to the citizens of the province, the Department annually received a budget allocation, for the years 2013/14 to 2016/17, of approximately 43 per cent of the total provincial budget.

In light of the Department of Education's focus and budget allocation it is important to reflect, as a provincial government, on the Grade 12 or National Senior Certificate (NSC) results of 2016. Despite the fact that Grade 12 learners constitute approximately 5 per cent of total learners in the province, Grade 12 is the culmination of 12 years of public money invested in the lives of learners. Therefore, this report analyses the Grade 12 results of Mpumalanga, the education districts as well as the local municipal areas and attempts to calculate and quantify value for money spent on education. The main data sources were the National Department of Basic Education, National Treasury and the Mpumalanga Department of Education.

2. PROVINCIAL GRADE 12 RESULTS

The National Development Plan 2030 (NDP) is very clear on the target set for the level of Grade 12 results that must be achieved by 2030. Between 80 and 90 per cent of all learners should complete 12 years of education with at least 80 per cent successfully passing the exit exams. The target is thus to improve the throughput³ rate of learners to at least 80 per cent by 2030 with at least 80 per cent of those learners passing the exit exams.

Drop-out rate

It is evident from Table 1 that there is a high drop-out rate between Grade 10 and Grade 12 in Mpumalanga. This is supported by research by the Department of Basic Education on progression that in the South African schooling system many Grade 10 learners never progress to Grade 12 and fall out after repeated failure. Over the last six years the drop-out rate in Mpumalanga fluctuated between 39 per cent and 48 per cent.

Table 1: Mpumalanga's drop-out rate, 2011-2016

| Indicators | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-----------------------------------|--------|--------|--------|--------|---------|--------|
| Grade 12 learners - wrote | 48 135 | 47 889 | 50 053 | 45 081 | 54 980 | 54 251 |
| Grade 10 learners 2 years earlier | 81 793 | 85 282 | 92 012 | 86 562 | 100 107 | 88 619 |
| Drop-out rate | 41.2% | 43.8% | 45.6% | 47.9% | 45.1% | 38.8% |

Sources: *Department of Basic Education – Education Realities, 1999-2016*
Department of Basic Education - National Senior Certificate (NSC) Examination Report 2016

³ The throughput rate is calculated by dividing the number of Grade 12 learners in a specific year by the number of registered Grade 1 learners 12 years earlier.

After much consideration and having considered the international practice in countries like Finland, Sweden, Denmark, Japan, Korea, Kenya and the United Kingdom, the Minister in 2013, approved a policy that allows learners that have failed a grade for the second time to be promoted to the next grade, provided he/she meets the following criteria which are indicators that he/she has the potential of coping with the next grade, with the necessary support:

- (a) the learner must have passed the Language of Learning and Teaching and another three of the seven subjects offered in Grade 11;
- (b) the learner must have attended school on a regular basis; absenteeism in excess of 20 days, without a valid reason, would disqualify the learner from being progressed; and
- (c) the learner must have complied with the prescribed requirements for that academic year.

Throughput rate

When Mpumalanga's throughput rate for 2016 is calculated, it is evident that the learners writing Grade 12 examinations in 2016 were equal to only 61.2 per cent of the Grade 1 class of 2004. The 61.2 per cent throughput rate of the 2016 Grade 12 learners in Mpumalanga was not close to the NDP target of 80 per cent. However, the throughput rate was higher in 2016 than in 2015 and increased for the second consecutive year. Mpumalanga's throughput rate was also the 3rd highest/best among the nine provinces. Table 2 displays the throughput rate in Mpumalanga since 2011, based on the number of Grade 12 learners writing examinations in a specific year and the number of Grade 1 learners of twelve years earlier.

Table 2: Mpumalanga's throughput rate, 2011-2016

| Indicators | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|-----------------------------------|--------|--------|--------|--------|---------|--------|
| Grade 12 learners - wrote | 48 135 | 47 889 | 50 053 | 45 081 | 54 980 | 54 251 |
| Grade 1 learners 12 years earlier | 81 793 | 85 282 | 92 012 | 86 562 | 100 107 | 88 619 |
| Throughput rate | 58.8% | 56.2% | 54.4% | 50.3% | 54.9% | 61.2% |

Sources: *Department of Basic Education – Education Realities, 1999-2016*
Department of Basic Education - NSC Examination Report 2016

There were 98 676 Grade 1 learners enrolled in 2016. Twelve years onward, in 2028, close on 80 per cent of them must write Grade 12 examinations according to the NDP target. If that happens, there should be approximately 78 941 Grade 12 learners in Mpumalanga by 2028, with at least 80 per cent (or 63 100) of them passing the year-end exit exam. Should this transpire the Grade 12 class of 2028 will be approximately 45 per cent larger than the 2016 class, bringing with it infrastructure, personnel and operational challenges that must be addressed.

Throughput rate of non-progressed learners

Not all Grade 12 learners started school twelve years earlier as the policy of learner progression makes it possible for a learner in Grade 12 to have started school thirteen or even fourteen years earlier. When the Grade 12 learners that wrote in 2015 and 2016 are adjusted by subtracting the progressed learners the throughput rates falls accordingly (Table 3). In 2016, the non-progressed throughput rate was 51.5 per cent in Mpumalanga compared with the abovementioned 61.2 per cent throughput rate. The non-progressed throughput rate increased between 2015 and 2016, despite more progressed learners in 2016 than in 2015.

Table 3: Mpumalanga's throughput rate of non-progressed learners, 2015-2016

| Indicator | 2015 | 2016 |
|-------------------------------------|---------|--------|
| Grade 12 learners – wrote (A) | 54 980 | 54 251 |
| Grade 12 learners – progressed (B) | 5 091 | 8 604 |
| Grade 12 learners – A minus B | 49 889 | 45 647 |
| Grade 1 learners – 12 years earlier | 101 479 | 88 619 |
| Non-progressed throughput rate | 49.2% | 51.5% |

Sources: Department of Basic Education – Education Realities, 1999-2016
Department of Basic Education - NSC Examination Report 2016

Pass rate

In 2016, the average Grade 12 pass rate in South Africa improved for the first time in three years. It increased from 70.7 per cent in 2015 to 72.5 per cent in 2016. It was, however, still below the 2012 pass rate of 73.9 per cent. A comparison of provincial pass rates for the period 2009 to 2015 is presented in Table 4. Mpumalanga's Grade 12 pass rate declined for the second consecutive year from 78.6 per cent in 2015 to 77.1 per cent in 2016. It was slightly lower than the 2013 pass rate of 77.6 per cent, but comfortably above the 2012 pass rate of 70.0 per cent.

Limpopo and Mpumalanga were the only two provinces to record a decline between 2015 and 2016. Mpumalanga's ranking improved from the province with the 3rd lowest pass rate in 2011 to the province with the 4th lowest pass rate in 2016. Free State (88.2 per cent) recorded the highest Grade 12 pass rate in 2016 and Eastern Cape (59.3 per cent) the lowest. Mpumalanga's pass rate was 4.6 percentage points higher than the national pass rate in 2016, a vast improvement over the 5.4 percentage point deficit in 2011.

Table 4: Provincial comparison of Grade 12 pass rates, 2011-2016

| Province | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Eastern Cape | 58.1% | 61.6% | 64.9% | 65.4% | 56.8% | 59.3% |
| Free State | 75.7% | 81.1% | 87.4% | 82.8% | 81.6% | 88.2% |
| Gauteng | 81.1% | 83.9% | 87.0% | 84.7% | 84.2% | 85.1% |
| KwaZulu-Natal | 68.1% | 73.1% | 77.4% | 69.7% | 60.7% | 66.4% |
| Limpopo | 63.9% | 66.9% | 71.8% | 72.9% | 65.9% | 62.5% |
| Mpumalanga | 64.8% | 70.0% | 77.6% | 79.0% | 78.6% | 77.1% |
| North West | 77.8% | 79.5% | 87.2% | 84.6% | 81.5% | 82.5% |
| Northern Cape | 68.8% | 74.6% | 74.5% | 76.4% | 69.4% | 78.7% |
| Western Cape | 82.9% | 82.8% | 85.1% | 82.2% | 84.7% | 86.0% |
| National | 70.2% | 73.9% | 78.2% | 75.8% | 70.7% | 72.5% |

Source: Department of Basic Education - NSC Examination Report 2016

The number of Grade 12 learners in Mpumalanga that wrote final exams in 2016 (54 251), were slightly lower than in 2015 (Figure 1), but still the second highest since 2011. The number of Grade 12 learners in Mpumalanga that achieved a pass, decreased from 43 229 in 2015 to 41 801 in 2016, the second highest number over the past 5 years.

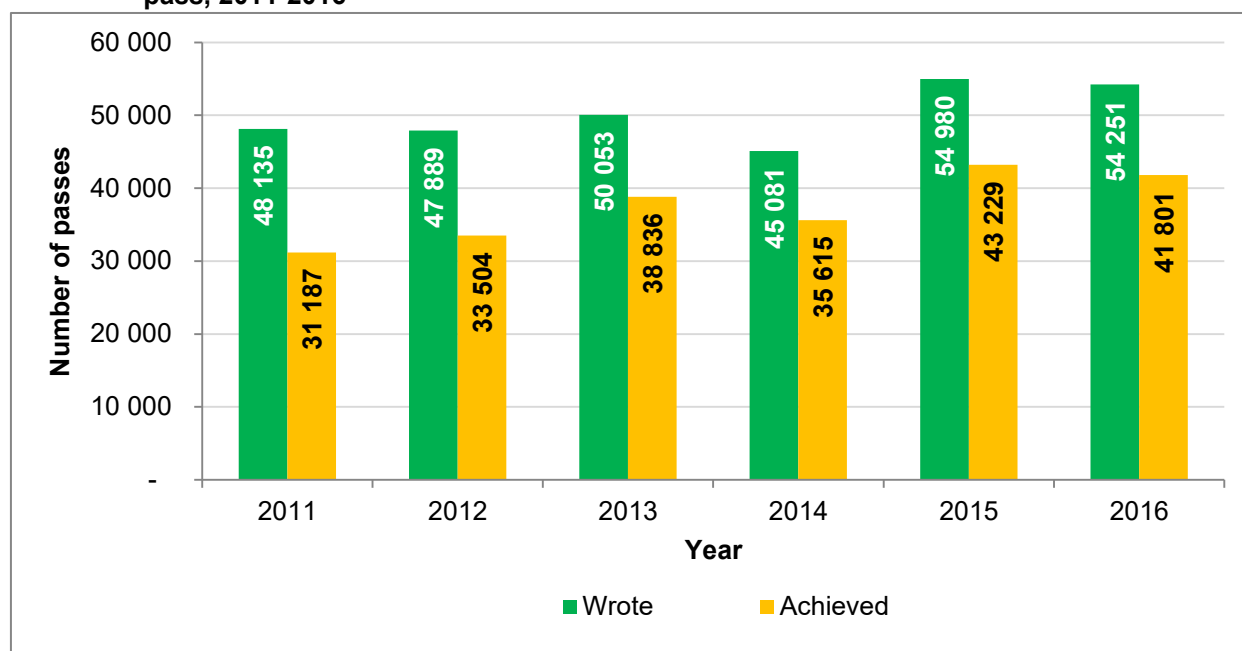
Performance of non-progressed and progressed learners

In 2016, South Africa's Grade 12 pass rate that excluded progressed learners was 76.2 per cent (Table 5), which was higher than the 74.1 per cent achieved in 2015. Mpumalanga's Grade 12 pass rate that excluded progressed learners declined from 82.1 per cent in 2015 to 81.3 per cent in 2016.

Mpumalanga, Limpopo, Northern Cape and Western Cape recorded a decline between 2015 and 2016. Mpumalanga's ranking declined from the province with the 5th highest/lowest pass rate in 2015 to the province with the 6th highest/ 4th lowest pass rate in 2016. In 2016, Free State (93.2 per cent) recorded

the highest Grade 12 pass rate that excluded progressed learners and Eastern Cape (63.3 per cent) the lowest.

Figure 1: Comparison of the number of Grade 12 learners in Mpumalanga that wrote & achieved a pass, 2011-2016



Source: Department of Basic Education - NSC Examination Report 2016

Table 5: Comparison of the number of Grade 12 learners that wrote and achieved a pass - progressed learners excluded, 2015 & 2016

| Province | 2015 | | | 2016 | | |
|-------------------|----------------|----------------|--------------|----------------|----------------|--------------|
| | Wrote | Achieved | Pass rate | Wrote | Achieved | Pass rate |
| Eastern Cape | 75 317 | 46 828 | 62.2% | 73 739 | 46 655 | 63.3% |
| Free State | 26 082 | 22 875 | 87.7% | 21 504 | 20 032 | 93.2% |
| Gauteng | 103 870 | 89 237 | 85.9% | 96 425 | 83 862 | 87.0% |
| KwaZulu-Natal | 152 579 | 93 993 | 61.6% | 134 665 | 93 537 | 69.5% |
| Limpopo | 88 524 | 63 454 | 71.7% | 85 858 | 58 586 | 68.2% |
| Mpumalanga | 49 888 | 40 939 | 82.1% | 45 647 | 37 105 | 81.3% |
| North West | 9 659 | 7 454 | 77.2% | 27 392 | 23 603 | 86.2% |
| Northern Cape | 29 743 | 24 996 | 84.0% | 8 811 | 7 243 | 82.2% |
| Western Cape | 50 119 | 44 080 | 88.0% | 48 627 | 42 665 | 87.7% |
| National | 585 781 | 433 856 | 74.1% | 542 668 | 413 288 | 76.2% |

Source: Department of Basic Education - NSC Examination Report 2016

In 2016, South Africa's Grade 12 pass rate of the progressed learners only was 43.5 per cent (Table 6), which was higher than the 37.6 per cent achieved in 2015. Mpumalanga's Grade 12 pass rate of progressed learners only improved from 45.0 per cent in 2015 to 54.6 per cent in 2016, an improvement of 9.6 percentage points.

Only KwaZulu-Natal recorded a decline the pass rate of progressed learners between 2015 and 2016. Mpumalanga's ranking improved from the province with the 5th highest/lowest progressed learner pass rate in 2015 to the province with the 4th highest/ 6th lowest pass rate in 2016. In 2016, Free State (68.1 per cent) recorded the highest Grade 12 pass rate of progressed learners and Eastern Cape (27.4 per cent) the lowest.

Table 6: Comparison of the number of Grade 12 learners that wrote and achieved a pass - progressed learners only, 2015 & 2016

| Province | 2015 | | | 2016 | | |
|-----------------|---------------|---------------|--------------|---------------|---------------|--------------|
| | Wrote | Achieved | Pass rate | Wrote | Achieved | Pass rate |
| Eastern Cape | 11 705 | 2 625 | 22.4% | 9 163 | 2 513 | 27.4% |
| Free State | 5 105 | 2 600 | 50.9% | 5 282 | 3 597 | 68.1% |
| Gauteng | 4 568 | 2 149 | 47.0% | 7 404 | 4 519 | 61.0% |
| KwaZulu-Natal | 10 070 | 4 765 | 47.3% | 12 983 | 4 495 | 34.6% |
| Limpopo | 13 022 | 3 492 | 26.8% | 15 949 | 5 009 | 31.4% |
| Mpumalanga | 5 091 | 2 290 | 45.0% | 8 604 | 4 696 | 54.6% |
| North West | 3 543 | 2 122 | 59.9% | 4 653 | 2 845 | 61.1% |
| Northern Cape | 1 963 | 613 | 31.2% | 1 230 | 659 | 53.6% |
| Western Cape | 3 589 | 1 404 | 39.1% | 2 242 | 1 051 | 46.9% |
| National | 58 656 | 22 060 | 37.6% | 67 510 | 29 384 | 43.5% |

Source: Department of Basic Education - NSC Examination Report 2016

Gender pass rates

In 2016, the national Grade 12 pass rate of males (74.3 per cent) was higher than that of females (71.1 per cent). Correspondingly, Mpumalanga's female Grade 12 learners registered a lower pass rate than males over the entire period from 2011 to 2016. Among the nine provinces, males as well as females in Mpumalanga achieved the 6th highest/4th lowest pass rate in 2016. The respective pass rates for male and female learners in Mpumalanga exceeded the average national pass rate for males and females in 2016. Grade 12 pass rates by gender for each province between 2011 and 2016 is presented in Table 7.

Table 7: Provincial comparison of Grade 12 pass rates by gender, 2011-2016

| Province | Gender | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|------------------|--------|--------------|--------------|--------------|--------------|--------------|--------------|
| EC ⁴ | Male | 60.8% | 64.1% | 68.5% | 67.8% | 59.6% | 61.8% |
| | Female | 56.1% | 59.7% | 62.1% | 63.5% | 54.5% | 57.3% |
| FS ⁵ | Male | 77.6% | 82.9% | 89.0% | 84.4% | 82.1% | 89.8% |
| | Female | 73.9% | 79.5% | 86.0% | 81.4% | 81.1% | 86.9% |
| GP ⁶ | Male | 81.7% | 84.6% | 87.5% | 85.5% | 85.4% | 86.1% |
| | Female | 80.5% | 83.3% | 86.5% | 84.0% | 83.2% | 84.3% |
| KZN ⁷ | Male | 68.7% | 73.8% | 78.0% | 70.6% | 61.3% | 66.8% |
| | Female | 67.6% | 72.5% | 76.8% | 68.9% | 60.2% | 66.0% |
| LP ⁸ | Male | 68.1% | 70.9% | 75.7% | 76.6% | 70.0% | 66.1% |
| | Female | 60.2% | 63.4% | 68.4% | 69.6% | 62.5% | 59.5% |
| MP ⁹ | Male | 67.4% | 72.6% | 79.7% | 81.3% | 81.2% | 79.8% |
| | Female | 62.5% | 67.7% | 75.8% | 77.1% | 76.5% | 74.8% |
| NW ¹⁰ | Male | 79.3% | 81.7% | 88.8% | 87.3% | 84.0% | 84.7% |
| | Female | 76.4% | 77.6% | 85.9% | 82.3% | 79.4% | 80.6% |
| NC ¹¹ | Male | 69.1% | 76.4% | 75.8% | 76.8% | 70.0% | 79.9% |
| | Female | 68.5% | 73.1% | 73.4% | 76.0% | 68.8% | 77.7% |
| WC ¹² | Male | 84.0% | 84.4% | 86.3% | 83.2% | 85.4% | 87.5% |
| | Female | 82.0% | 81.5% | 84.3% | 81.5% | 84.1% | 84.7% |
| National | Male | 71.9% | 75.7% | 80.0% | 77.5% | 72.4% | 74.3% |
| | Female | 68.6% | 72.4% | 76.8% | 74.4% | 69.3% | 71.1% |

Source: Department of Basic Education - NSC Examination Report 2016

⁴ Eastern Cape

⁵ Free State

⁶ Gauteng

⁷ KwaZulu-Natal

⁸ Limpopo

⁹ Mpumalanga

¹⁰ North West

¹¹ Northern Cape

¹² Western Cape

Quintile pass rates

All South African public ordinary schools are categorised into five groups, called quintiles, largely for purposes of the allocation of financial resources. Private schools are included under quintile 9. Quintile one is regarded as the 'poorest' quintile, while quintile five is the 'least poor'. These poverty rankings are determined nationally according to the poverty of the community around the school, as well as, certain infrastructural factors. Schools in quintile 1, 2 and 3 have been declared no-fee schools, while schools in quintiles 4 and 5 are fee-paying schools.

It is apparent from Table 8 that Quintile 5 schools (96.6 per cent) recorded the highest average pass rate in 2016 and Quintile 1 schools (73.4 per cent) the lowest. Between 2012 and 2016, Quintile 2 schools registered the highest increase, whilst Quintile 4 schools declined. Only Quintiles 5 and 9 recorded higher pass rates in 2016 than in 2015.

Table 8: Comparison of Grade 12 pass rates per quintile in Mpumalanga, 2012-2016

| Quintile | 2012 | 2013 | 2014 | 2015 | 2016 |
|------------|-------|-------|-------|-------|-------|
| Quintile 1 | 66.2% | 75.0% | 77.4% | 75.8% | 73.4% |
| Quintile 2 | 66.2% | 75.7% | 76.8% | 76.6% | 75.4% |
| Quintile 3 | 72.8% | 75.4% | 78.7% | 80.9% | 78.8% |
| Quintile 4 | 89.5% | 92.4% | 91.9% | 91.4% | 88.4% |
| Quintile 5 | 94.0% | 97.0% | 94.3% | 95.8% | 96.6% |
| Quintile 9 | 70.2% | 77.7% | 76.2% | 80.6% | 81.5% |

Source: Mpumalanga Department of Education, 2017

Pass categories

In 2016, 548 schools in South Africa achieved a pass rate of exactly 100 per cent whereas countrywide 18 schools registered a pass rate of 0 per cent. Mpumalanga recorded no schools with a 0 per cent pass rate in 2015 and 22 schools with a 100 per cent pass rate. As a percentage of the total number of schools in Mpumalanga, the 22 schools were only 4.0 per cent compared with the 8.0 per cent countrywide. This was the 2nd lowest/worst share among the nine provinces. Some 20.2 per cent of the schools in Western Cape achieved a pass rate of 100 per cent. Table 9 presents the Grade 12 results within certain percentage categories.

In 2016, the majority of schools in South Africa (41.9 per cent) achieved a pass rate of between 80 and 100 per cent. In Mpumalanga, the majority of schools, 51.4 per cent, were also in the 80 to 100 per cent category. Free State registered 80.8 per cent of schools in the 80 to 100 per cent category, the highest of the nine provinces followed by Western Cape (72.8 per cent).

Admission to further studies

The share of Grade 12 learners in South Africa that obtained admission to bachelor and diploma studies deteriorated between 2014 and 2016. Between 2014 and 2016, the Grade 12 learners in Mpumalanga that obtained admission to bachelor studies also declined. When compared with the national results, Mpumalanga recorded a larger drop in admission to bachelor studies between 2014 and 2016. Mpumalanga recorded a decrease in admission to diploma studies between 2014 and 2016, in line with the national decline. Similar to South Africa, the admission rate to higher certificate studies in Mpumalanga increased between 2014 and 2016. Table 10 compares the percentage of Grade 12 learners that obtained admission to further studies between 2014 and 2016.

Table 9: Provincial comparison of schools' Grade 12 results within certain percentage categories, 2016

| Province | Indicator | Number of schools | 0-19.9% | 20-39.9% | 40-59.9% | 60-79.9% | 80-100% | Exactly 0% | Exactly 100% |
|----------|--------------|-------------------|---------|----------|----------|----------|---------|------------|--------------|
| EC | Number | 925 | 43 | 183 | 276 | 231 | 192 | 2 | 44 |
| | % of schools | | 4.6% | 19.8% | 29.8% | 25.0% | 20.8% | 0.2% | 4.8% |
| FS | Number | 328 | 0 | 1 | 4 | 58 | 265 | 0 | 65 |
| | % of schools | | - | 0.3% | 1.2% | 17.7% | 80.8% | - | 19.8% |
| GP | Number | 875 | 3 | 6 | 47 | 207 | 612 | 2 | 144 |
| | % of schools | | 0.3% | 0.7% | 5.4% | 23.7% | 69.9% | 0.2% | 16.5% |
| KZN | Number | 1 745 | 105 | 240 | 388 | 486 | 526 | 10 | 85 |
| | % of schools | | 6.0% | 13.8% | 22.2% | 27.9% | 30.1% | 0.6% | 4.9% |
| LP | Number | 1 413 | 43 | 217 | 382 | 444 | 327 | 4 | 40 |
| | % of schools | | 3.0% | 15.4% | 27.0% | 31.4% | 23.1% | 0.3% | 2.8% |
| MP | Number | 551 | 1 | 14 | 64 | 189 | 283 | 0 | 22 |
| | % of schools | | 0.2% | 2.5% | 11.6% | 34.3% | 51.4% | - | 4.0% |
| NW | Number | 400 | 1 | 3 | 26 | 121 | 249 | 0 | 40 |
| | % of schools | | 0.3% | 0.8% | 6.5% | 30.3% | 62.3% | - | 10.0% |
| NC | Number | 136 | 0 | 4 | 16 | 38 | 78 | 0 | 19 |
| | % of schools | | - | 2.9% | 11.8% | 27.9% | 57.4% | - | 14.0% |
| WC | Number | 441 | 0 | 3 | 18 | 99 | 321 | 0 | 89 |
| | % of schools | | - | 0.7% | 4.1% | 22.4% | 72.8% | - | 20.2% |
| National | Number | 6 814 | 196 | 671 | 1 221 | 1 873 | 2 853 | 18 | 548 |
| | % of schools | | 2.9% | 9.8% | 17.9% | 27.5% | 41.9% | 0.3% | 8.0% |

Source: Department of Basic Education - NSC Examination Report 2016

Table 10: Provincial comparison of percentage of Grade 12 learners that obtained admission to further studies, 2014-2016

| Province | Higher certificate studies | | | Diploma studies | | | Bachelor studies | | |
|----------|----------------------------|--------------|--------------|-----------------|--------------|--------------|------------------|--------------|--------------|
| | 2014 | 2015 | 2016 | 2014 | 2015 | 2016 | 2014 | 2015 | 2016 |
| EC | 17.9% | 16.2% | 16.3% | 27.4% | 23.0% | 24.1% | 20.1% | 17.6% | 18.9% |
| FS | 15.5% | 16.4% | 14.1% | 36.9% | 35.4% | 38.2% | 30.2% | 29.8% | 35.8% |
| GP | 12.4% | 14.0% | 13.1% | 35.2% | 34.5% | 35.8% | 37.0% | 35.7% | 36.2% |
| KZN | 15.5% | 14.9% | 15.1% | 28.5% | 24.5% | 26.8% | 25.6% | 21.4% | 24.5% |
| LP | 21.8% | 20.2% | 20.9% | 28.7% | 25.0% | 23.1% | 22.4% | 20.7% | 18.4% |
| MP | 18.7% | 20.1% | 20.1% | 35.3% | 34.0% | 34.0% | 24.9% | 24.5% | 22.9% |
| NW | 15.6% | 20.1% | 20.1% | 36.3% | 34.7% | 34.9% | 32.6% | 26.6% | 27.5% |
| NC | 18.1% | 19.8% | 20.1% | 33.4% | 28.4% | 32.6% | 24.7% | 21.1% | 26.0% |
| WC | 12.8% | 12.3% | 12.9% | 30.5% | 30.7% | 32.1% | 38.8% | 41.7% | 40.9% |
| National | 16.1% | 16.4% | 16.5% | 31.3% | 28.5% | 29.4% | 28.3% | 25.8% | 26.6% |

Source: Department of Basic Education - NSC Examination Report 2016

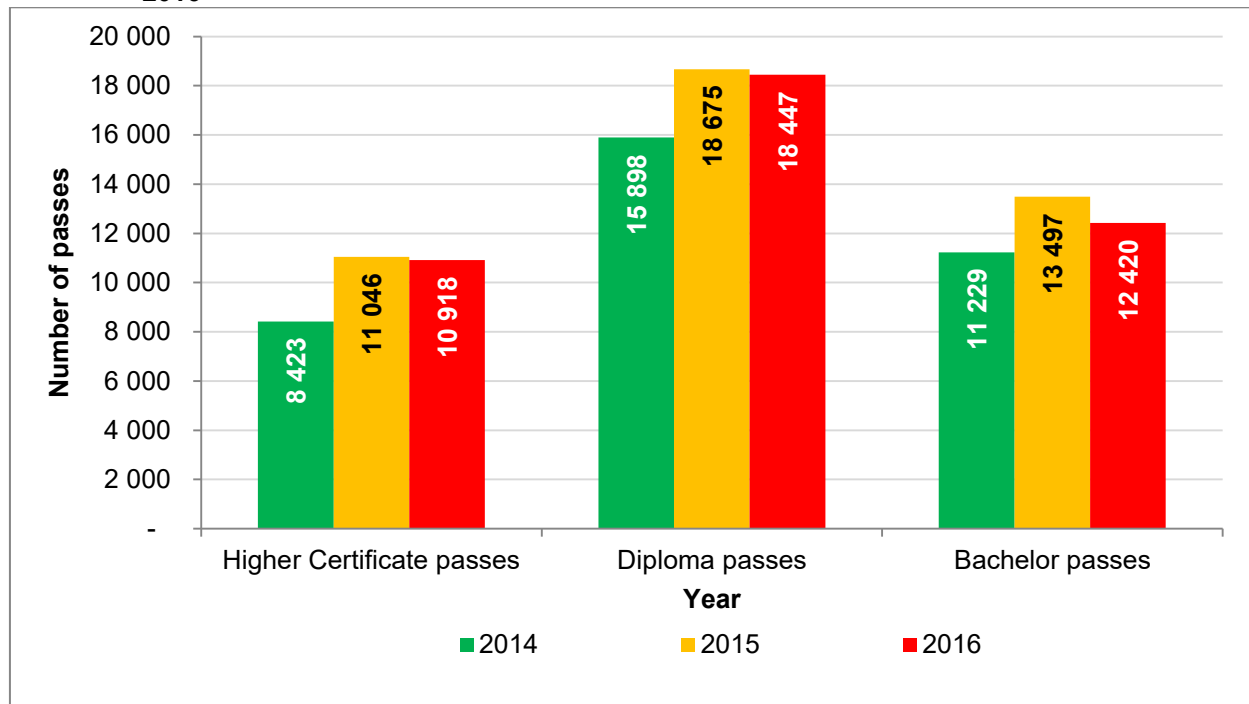
In 2016, Mpumalanga recorded the 7th highest/3rd lowest share of Grade 12 learners that obtained admission to bachelor studies (22.9 per cent) and the 4th highest/6th lowest admission to diploma studies (34.0 per cent). Western Cape (40.9 per cent) for bachelor studies and Free State (38.2 per cent) for diploma studies, achieved the highest ratio of Grade 12 learners with admission to the respective further studies. Mpumalanga (20.1 per cent) recorded the joint 2nd highest/8th lowest share of higher certificate passes.

The number of bachelor passes in Mpumalanga increased from 11 229 in 2014 to 12 420 in 2016, however, it declined between 2015 and 2016. The decrease of 1 077 between 2015 and 2016, was higher than the decrease in the number of diploma passes (228). Passes with admission to higher certificate, also decreased by 128 over the same period. Figure 2 displays the number of passes by type of qualification in Mpumalanga between 2014 and 2016.

In 2016, females (6 337) recorded more bachelor passes in Mpumalanga than males (6 083). Both females and males recorded a higher number of bachelor passes in 2016 than in 2014, however, both

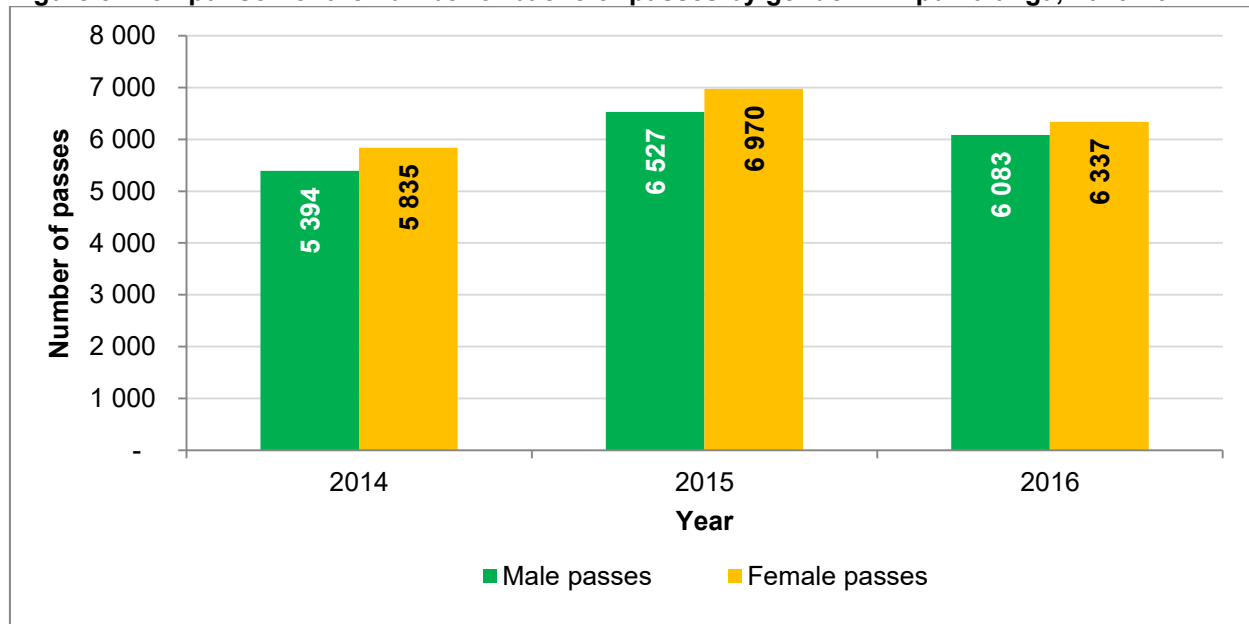
gender groupings recorded declines between 2015 and 2016. Figure 3 displays the number of bachelor passes by gender in Mpumalanga between 2014 and 2016.

Figure 2: Comparison of the number of passes by type of qualification in Mpumalanga, 2014-2016



Source: Department of Basic Education - NSC Examination Report 2016

Figure 3: Comparison of the number of bachelor passes by gender in Mpumalanga, 2013-16



Source: Department of Basic Education - NSC Examination Report 2016

In 2016, Quintile 5 schools (50.9 per cent) achieved the highest admission to bachelor studies when compared with the other quintiles in Mpumalanga and Quintile 1 schools (19.0 per cent) the lowest. In 2016, Quintile 5 schools (40.0 per cent) also recorded the highest admission to diploma studies and Quintile 1 schools (22.3 per cent) the highest admission to higher certificate studies. Table 11 compares the percentage of Grade 12 learners in Mpumalanga that obtained admission to further studies by quintile in 2016.

Table 11: Comparison of percentage of Grade 12 learners that obtained admission to further studies by quintile in Mpumalanga, 2016

| Quintile | Higher certificate studies | Diploma studies | Bachelor studies |
|------------|----------------------------|-----------------|------------------|
| Quintile 1 | 22.3% | 32.0% | 19.0% |
| Quintile 2 | 21.0% | 33.6% | 20.8% |
| Quintile 3 | 20.8% | 35.9% | 22.1% |
| Quintile 4 | 12.1% | 39.4% | 36.8% |
| Quintile 5 | 5.7% | 40.0% | 50.9% |
| Quintile 9 | 18.5% | 37.7% | 25.4% |

Source: Mpumalanga Department of Education, 2017

Subject pass rates

The pass rate of selected Grade 12 non-language subjects in South Africa are presented by province and compared with the national results in Table 12. In 2016, Grade 12 learners in Mpumalanga registered a higher pass rate in six of the nine selected non-language subjects when compared with the national average. Mpumalanga's pass rates of Business Studies, History and Mathematical Literacy were lower than the national average. Grade 12 learners in Mpumalanga achieved the 5th highest/lowest pass rate in Life Sciences, Physical Sciences and Economics compared to other provinces.

Table 12: Provincial comparison of the pass rate¹³ in selected Grade 12 non-language subjects, 2016

| Province | Accounting | Business Studies | Economics | Geography | History | Life Sciences | Mathematical Literacy | Mathematics | Physical Sciences |
|-----------------|--------------|------------------|--------------|--------------|--------------|---------------|-----------------------|--------------|-------------------|
| EC | 61.8% | 64.7% | 54.5% | 69.4% | 74.8% | 61.8% | 56.1% | 37.5% | 49.6% |
| FS | 86.4% | 86.3% | 68.7% | 90.6% | 94.1% | 85.3% | 88.6% | 71.3% | 75.5% |
| GP | 82.7% | 87.1% | 80.0% | 86.1% | 95.0% | 83.0% | 86.2% | 68.7% | 68.5% |
| KZN | 59.7% | 67.8% | 65.4% | 72.1% | 81.6% | 67.8% | 60.3% | 37.9% | 57.8% |
| LP | 64.9% | 59.0% | 53.4% | 70.9% | 66.8% | 63.2% | 62.4% | 53.9% | 62.3% |
| MP | 73.0% | 71.8% | 68.7% | 77.1% | 82.4% | 72.9% | 69.4% | 53.6% | 63.6% |
| NW | 78.9% | 85.8% | 77.4% | 79.8% | 92.3% | 75.0% | 79.5% | 62.7% | 69.6% |
| NC | 74.0% | 78.5% | 74.2% | 79.9% | 89.5% | 67.9% | 77.6% | 60.7% | 57.4% |
| WC | 79.8% | 82.5% | 71.7% | 86.3% | 95.7% | 77.0% | 85.8% | 77.2% | 73.8% |
| National | 69.5% | 73.7% | 65.3% | 76.5% | 84.0% | 70.5% | 71.3% | 51.1% | 62.0% |

Source: Department of Basic Education - NSC Examination Report 2016

Mathematics and Physical Sciences

Between 2014 and 2016, the pass rate¹⁴ for Mathematics decreased in South Africa and Mpumalanga alike, whereas the pass rate for Physical Sciences increased in both. Table 13 displays the Mathematics and Physical Sciences pass rates for Grade 12 learners in South Africa and Mpumalanga between 2014 and 2016.

Table 13: Grade 12 pass rate for Mathematics and Physical Sciences in South Africa & Mpumalanga, 2014-16

| Subject | 2014 | 2015 | 2016 |
|------------------------|-------|-------|-------|
| Mathematics - SA | 53.5% | 49.1% | 51.1% |
| Mathematics – MP | 56.6% | 55.5% | 53.6% |
| Physical Sciences – SA | 61.5% | 58.6% | 62.0% |
| Physical Sciences – MP | 58.7% | 62.6% | 63.6% |

Source: Department of Basic Education - NSC Examination Report 2016

¹³ Achieved 30 per cent and above

¹⁴ 30 per cent and above

In 2016, Quintile 5 schools in Mpumalanga achieved the highest pass rate for Mathematics (91.1 per cent) and Physical Sciences (91.9 per cent), respectively. Quintile 1 schools registered the lowest pass rate for Mathematics whilst Quintile 2 schools recorded the lowest pass rate for Physical Sciences as can be observed in Table 14.

Table 14: Grade 12 pass rate for Mathematics and Physical Sciences by quintile in Mpumalanga, 2016

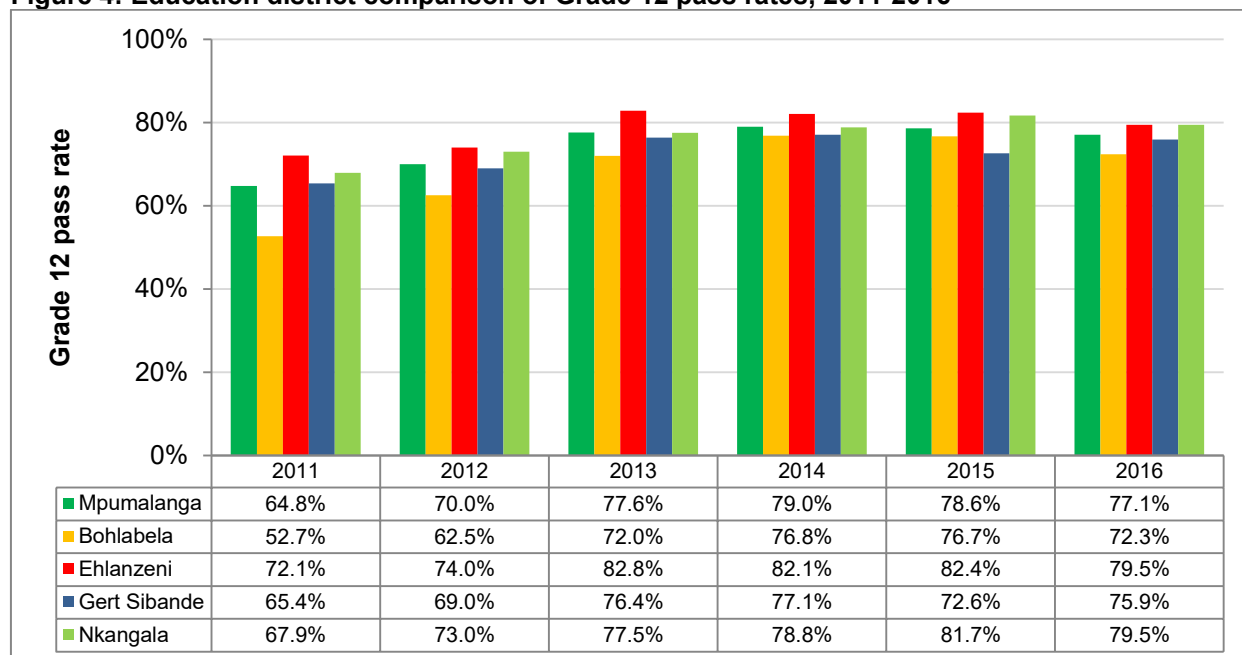
| Quintile | Mathematics pass rate | Physical sciences pass rate |
|------------|-----------------------|-----------------------------|
| Quintile 1 | 46.3% | 60.3% |
| Quintile 2 | 51.5% | 59.2% |
| Quintile 3 | 54.7% | 65.1% |
| Quintile 4 | 77.9% | 82.0% |
| Quintile 5 | 91.1% | 91.9% |
| Quintile 9 | 51.0% | 60.0% |

Source: Mpumalanga Department of Education, 2017

3. EDUCATION DISTRICT GRADE 12 RESULTS

The average Grade 12 pass rate in Mpumalanga was 77.1 per cent in 2016 – deterioration from the 78.6 per cent mark set in 2015. The Grade 12 pass rates of only Gert Sibande improved, from 72.6 per cent in 2015 to 75.9 per cent in 2016. A comparison of Grade 12 pass rates among the four education districts from 2011 to 2016 is presented in Figure 4. Ehlanzeni and Nkangala jointly recorded the highest pass rate of 79.5 per cent, whilst Bohlabela registered the lowest pass rate 72.3 per cent.

Figure 4: Education district comparison of Grade 12 pass rates, 2011-2016



Source: Department of Basic Education - NSC Examination Report 2016

In 2016, Ehlanzeni (25.7 per cent) recorded the highest share of Grade 12 learners that obtained admission to bachelor studies and Bohlabela (17.8 per cent) the lowest. All four districts recorded lower shares of learners that obtained admission to bachelor studies in 2016 than in 2015. Nkangala achieved the highest share of Grade 12 learners with admission for diploma studies (37.7 per cent) and Bohlabela for higher certificate studies (22.4 per cent). Table 15 compares the percentage of Grade 12 learners that obtained admission to further studies in 2015 and 2016.

Table 15: Education district comparison of admission to further studies, 2015-2016

| Education district | Higher certificate studies | | Diploma studies | | Bachelor studies | |
|--------------------|----------------------------|--------------|-----------------|--------------|------------------|--------------|
| | 2015 | 2016 | 2015 | 2016 | 2015 | 2016 |
| Bohlabela | 23.5% | 22.4% | 34.2% | 31.9% | 18.6% | 17.8% |
| Ehlanzeni | 17.7% | 20.1% | 35.4% | 33.7% | 28.9% | 25.7% |
| Gert Sibande | 17.9% | 18.7% | 33.3% | 32.2% | 25.7% | 25.0% |
| Nkangala | 16.4% | 19.3% | 37.7% | 37.7% | 24.7% | 22.5% |
| Mpumalanga | 18.7% | 20.1% | 35.3% | 34.0% | 24.9% | 22.9% |

Source: Mpumalanga Department of Education, 2017

In 2016, 8 084 subject distinctions were obtained in Mpumalanga compared with 9 346 in 2015. This was 1.9 per cent of all subjects written, a decline from the 2.3 per cent share of 2015. It is clear from Table 16 that the most subject distinctions in 2015 were achieved in Nkangala and the lowest number in Bohlabela. Grade 12 learners in Nkangala achieved distinctions in 2.3 per cent of the subjects they have written.

Table 16: Education district comparison of Grade 12 subject distinctions obtained, 2015-2016

| Education district | Subject distinctions | | | |
|--------------------|----------------------|--------------|-----------------------|-------------|
| | Number | | % of subjects written | |
| | 2015 | 2016 | 2015 | 2016 |
| Bohlabela | 1 868 | 1 427 | 2.1% | 1.5% |
| Ehlanzeni | 2 632 | 2 242 | 2.2% | 1.8% |
| Gert Sibande | 2 101 | 1 987 | 2.2% | 2.2% |
| Nkangala | 2 745 | 2 428 | 2.8% | 2.3% |
| Mpumalanga | 9 346 | 8 084 | 2.3% | 1.9% |

Source: Mpumalanga Department of Education, 2017

The results of the 9 most popular non-language Grade 12 subjects are presented and compared with the education districts' results in these subjects (Table 17). In 2016, Grade 12 learners in Bohlabela registered the lowest pass rate in 7 of the 9 most popular non-language subjects. Less than 40 per cent of Grade 12 learners in Bohlabela achieved a pass rate of 30 per cent in Mathematics. Nkangala recorded the highest pass rate in 4 of the 9 subjects and Ehlanzeni in three.

Table 17: Education district comparison of the pass rate in 9 most popular non-language Grade 12 subjects, 2016

| Subject | Bohlabela | Ehlanzeni | Gert Sibande | Nkangala | Mpumalanga |
|----------------------|-----------|-----------|--------------|----------|--------------|
| Accounting | 60.1% | 77.1% | 79.0% | 73.6% | 63.9% |
| Business Studies | 60.0% | 78.4% | 72.6% | 75.7% | 71.7% |
| Economics | 68.5% | 71.6% | 67.7% | 67.2% | 68.7% |
| Geography | 66.3% | 77.8% | 77.1% | 82.4% | 77.1% |
| History | 81.7% | 84.2% | 81.1% | 83.3% | 82.4% |
| Life Sciences | 69.0% | 72.6% | 73.2% | 76.6% | 72.9% |
| Mathematics Literacy | 52.3% | 69.1% | 74.9% | 78.0% | 69.4% |
| Mathematics | 38.7% | 53.9% | 59.9% | 62.4% | 53.6% |
| Physical Sciences | 54.8% | 64.2% | 68.0% | 67.0% | 63.6% |

Source: Mpumalanga Department of Education, 2017

4. LOCAL MUNICIPAL AREA GRADE 12 RESULTS

In 2016, schools in Thaba Chweu achieved the highest Grade 12 pass rate among the local municipal areas of 88.8 per cent (Table 18). The pass rate in twelve of the seventeen local municipal areas was higher than the provincial pass rate of 77.1 per cent. Mkhondo (66.1 per cent), Dipaleseng (65.2 per cent) and Dr Pixley Ka Isaka Seme (64.5 per cent) were the only three municipal areas with a pass rate below 70 per cent. Between 2015 and 2016 the pass rate improved in eight local municipal areas, with Dipaleseng registering the largest improvement of 11.6 percentage points. Between 2015 and 2016, Dr

JS Moroka recorded the largest decline of 6.5 percentage points.

Table 18: Local municipal area comparison of Grade 12 pass rates, 2013-2016

| Local municipal area | 2013 | 2014 | 2015 | 2016 |
|---|--------------|--------------|--------------|--------------|
| Thaba Chweu | 75.8% | 81.1% | 85.7% | 88.8% |
| Emalahleni | 83.2% | 81.9% | 84.6% | 88.0% |
| Lekwa | 78.5% | 84.7% | 82.6% | 87.5% |
| Emakhazeni | 71.3% | 85.7% | 87.0% | 84.5% |
| Victor Khanye | 82.9% | 74.6% | 85.4% | 82.1% |
| Steve Tshwete | 84.5% | 85.6% | 86.3% | 81.0% |
| Chief Albert Luthuli | 79.4% | 80.1% | 79.5% | 80.9% |
| Nkomazi | 85.6% | 86.0% | 85.7% | 80.4% |
| Mbombela (City of ...*2016) ¹⁸ | 81.1% | 80.5% | 80.5% | 78.8% |
| Msukaligwa | 75.9% | 80.6% | 71.3% | 77.8% |
| Govan Mbeki | 77.1% | 76.3% | 74.4% | 77.6% |
| Thembisile Hani | 73.0% | 77.1% | 77.8% | 77.3% |
| Dr JS Moroka | 74.0% | 73.8% | 80.0% | 73.5% |
| Bushbuckridge | 71.7% | 76.4% | 76.0% | 71.1% |
| Mkhondo | 73.7% | 70.9% | 66.9% | 66.1% |
| Dipaleseng | 72.6% | 81.4% | 53.6% | 65.2% |
| Dr Pixley Ka Isaka Seme | 68.1% | 68.1% | 60.7% | 64.5% |
| Umjindi ¹⁵ | 77.5% | 67.6% | 72.3% | - |
| Mpumalanga | 77.6% | 79.0% | 78.6% | 77.1% |

Source: Mpumalanga Department of Education, 2017

It is evident from Table 19 that Thaba Chweu (36.1 per cent) achieved the highest admission rate to bachelor studies, whilst Emalahleni (45.7 per cent) attained the highest admission rate to diploma studies in 2016. In 2016, Dipaleseng's admission rate to bachelor studies (15.1 per cent) and Mkhondo's admission to diploma studies (24.4 per cent) were the lowest, respectively. Eleven local municipal areas achieved a higher admission rate to bachelor studies and ten to diploma studies than the respective provincial averages of 22.9 per cent and 34.0 per cent.

Table 19: Local municipal area comparison of Grade 12 pass rates and admission to further studies, 2016

| Local municipal area | Pass rate | Admission to: | | |
|-------------------------|--------------|----------------------------|-----------------|------------------|
| | | Higher Certificate studies | Diploma studies | Bachelor studies |
| Thaba Chweu | 88.8% | 36.1% | 38.8% | 13.9% |
| Emalahleni | 88.0% | 27.0% | 45.7% | 15.3% |
| Lekwa | 87.5% | 30.7% | 39.5% | 17.3% |
| Emakhazeni | 84.5% | 21.4% | 44.2% | 19.0% |
| Victor Khanye | 82.1% | 27.8% | 38.8% | 15.5% |
| Steve Tshwete | 81.0% | 28.5% | 38.0% | 14.5% |
| Chief Albert Luthuli | 80.9% | 26.3% | 34.4% | 20.3% |
| Nkomazi | 80.4% | 25.2% | 34.3% | 20.9% |
| City of Mbombela | 78.8% | 26.0% | 33.3% | 19.4% |
| Msukaligwa | 77.8% | 32.3% | 29.2% | 16.3% |
| Govan Mbeki | 77.6% | 24.5% | 34.8% | 18.3% |
| Thembisile Hani | 77.3% | 17.2% | 38.1% | 22.0% |
| Dr JS Moroka | 73.5% | 20.4% | 30.1% | 23.1% |
| Bushbuckridge | 71.1% | 16.5% | 31.4% | 23.1% |
| Mkhondo | 66.1% | 24.7% | 24.4% | 17.0% |
| Dipaleseng | 65.2% | 15.1% | 28.8% | 21.4% |
| Dr Pixley Ka Isaka Seme | 64.5% | 16.2% | 27.6% | 20.8% |
| Mpumalanga | 77.1% | 22.9% | 34.0% | 20.1% |

Source: Mpumalanga Department of Education, 2017

¹⁵ The 2016 grade 12 results for Umjindi Local Municipality and Mbombela Local Municipality were not released separately as in the past, but together as City of Mbombela Local Municipality.

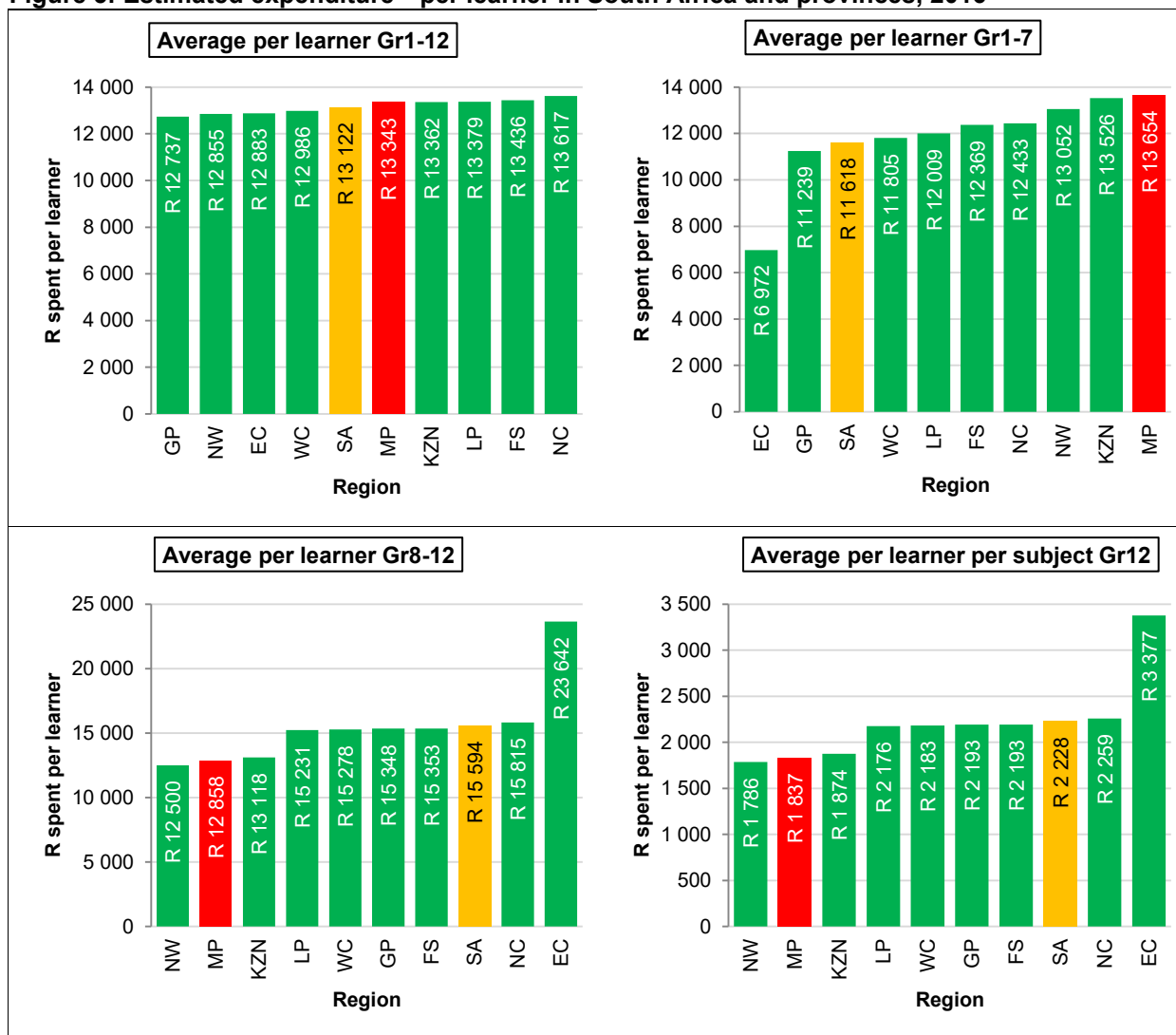
5. VALUE FOR MONEY

The focus of public service institutions is to deliver service of high quality and to attain value for money in this pursuit. Government departments should conduct expenditure reviews to ensure greater value for money. The schools system is not immune from the need to deliver value for money. This section will attempt to provide a measure to evaluate the value for money in Grade 12 expenditure.

Average education expenditure

It is evident from Figure 5, that, across all provinces, the total estimated expenditure per learner (Grade 1 to 12) did not differ very much. The expenditure values were extracted from the National Treasury's database of the various provinces' Estimates of Provincial Revenue and Expenditure (EPRE) and then divided by the relevant number of learners in a province. In 2016/17, the Northern Cape's estimated expenditure of R13 617 per learner was the highest and that of Gauteng (R12 737) the lowest – a difference of only R880. Mpumalanga's estimated expenditure of R13 343 per learner was the 5th highest/lowest and slightly higher than the national average of R13 122.

Figure 5: Estimated expenditure¹⁶ per learner in South Africa and provinces, 2016



Sources: National Treasury –EPRE, 2016/17 of the various provinces
Department of Basic Education – School Realities, 2016

¹⁶ Specifically refers to estimated expenditure on Programme 2: Public Ordinary School Expenditure as well as Programme 3: Independent School Subsidies and excludes any additional Grade 12 expenditure and interventions.

The estimated expenditure values per primary school learner (Grade 1 to 7) and secondary school learner (Grade 8 to 12) in the nine provinces were not as equal as total expenditure per learner. Mpumalanga's estimated expenditure of R13 664 per primary school learner was the highest, whereas the Eastern Cape expenditure was only R6 972 per learner. Similarly the estimated expenditure per secondary school learner differed widely between provinces, where the Eastern Cape estimated to spend R23 642 per learner and North West R12 500 per learner. Mpumalanga's estimated expenditure per secondary school learner was the 2nd lowest at R12 858. This scenario is also observable in prior years and not only a feature of the 2016 estimated expenditure.

Mpumalanga's expenditure per primary school learner was R311 more and the expenditure per secondary school learner was R485 less than the province's total expenditure per learner (R13 343). Therefore, Mpumalanga estimated expenditure was R796 more per primary school learner than per secondary school learner. Only Mpumalanga, North West and KwaZulu-Natal budgeted to spend more per primary school learner than per secondary school learner. On the other extreme, the Eastern Cape's estimated expenditure per secondary learner was R16 670 more than the average per primary learner.

The ratio of Grade 12 learners to secondary learners in a province was used to arrive at the average value spent per Grade 12 learner. This value per Grade 12 learner was further divided by the average number of subjects per Grade 12 learner to arrive at the average value spent per Grade 12 learner per subject. It is evident from Figure 5 that Mpumalanga's estimated expenditure of R1 837 per Grade 12 learner per subject was the 2nd lowest among the provinces. North West (R1 786) registered the lowest and Eastern Cape (R3 377) the highest estimated expenditure per Grade 12 learner per subject.

Value for money index

The above is only an indication of differing priorities and philosophy among the nine provinces and not whether there was value for money in the spending. In order to gauge whether expenditure was successful or not, the estimated expenditure per Grade 12 learner was indexed against the lowest provincial expenditure and then adjusted with the Grade 12 pass rate for a particular province. A province will extract full value for money with an index value equal to one. The same can be done for each subject based on the fraction of Grade 12 learners that wrote the particular subject as well as the pass rate for that subject. Although very simplistic and with no regard for spending in earlier grades, an index such as this is only possible where there is a uniform assessment/exam such as the NSC exams.

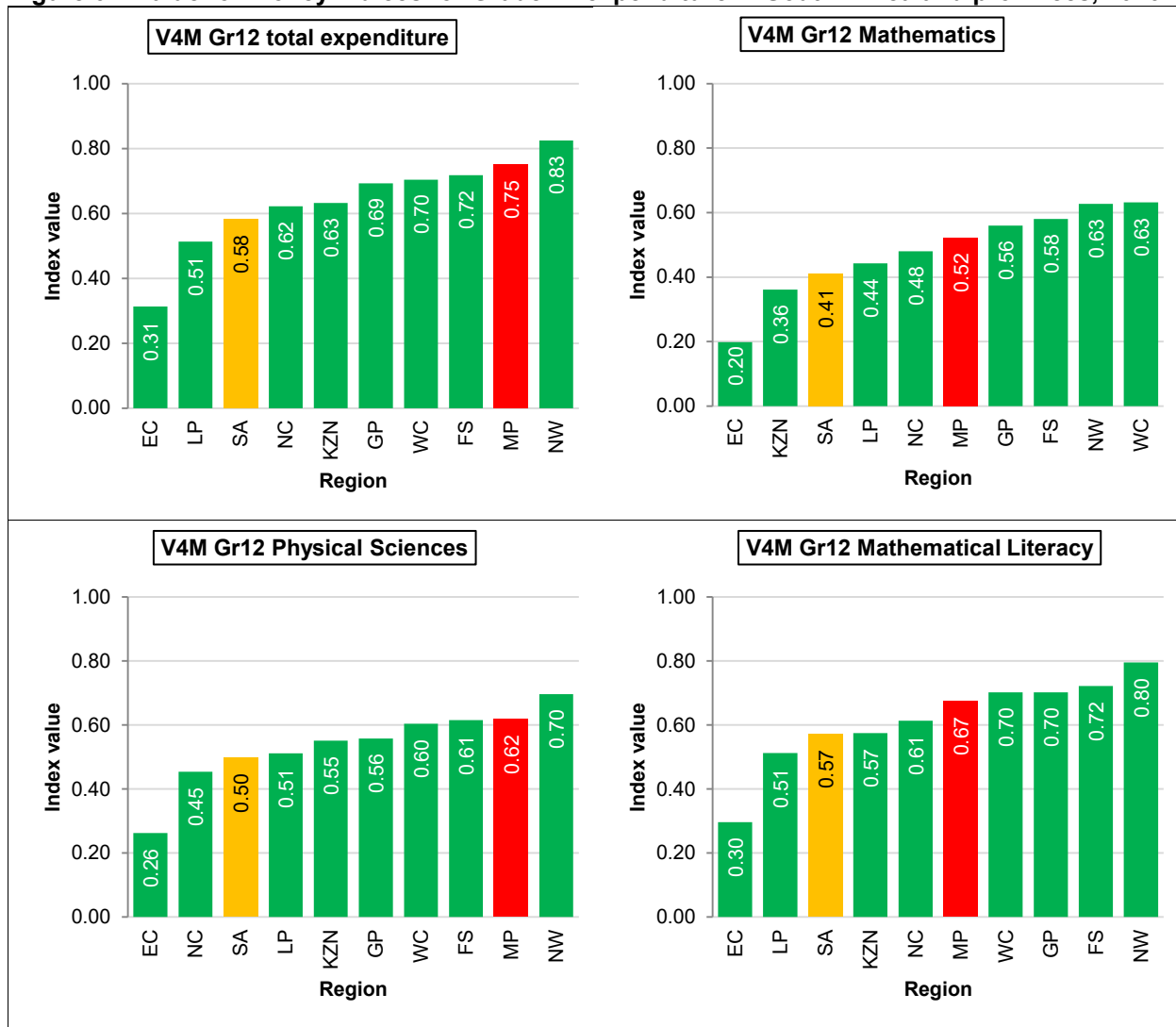
Figure 6 graphically illustrates the 2016 value for money (V4M) index values of South Africa and the nine provinces in terms of estimated expenditure on Grade 12 learners adjusted for pass rates. It further also displays the V4M index values of Mathematics, Physical Sciences and Mathematical Literacy. In 2016, North West (0.83) recorded the highest V4M index value in terms of total Grade 12 expenditure and Eastern Cape (0.31) the lowest. Mpumalanga (0.75) recorded the 2nd highest V4M index value which was also higher/better than the national level.

South Africa and all nine provinces extracted less value from expenditure on Grade 12 Mathematics¹⁷ than total Grade 12 expenditure. For example, the V4M index value for North West was considerably lower at 0.63 compared with the abovementioned 0.83 for total Grade 12 expenditure. Western Cape

¹⁷ Excludes any additional Grade 12 interventions and subject specific expenditure.

and North West, jointly, recorded the highest V4M index value of 0.63 and Eastern Cape (0.20) the lowest. Mpumalanga extracted the 5th highest/lowest value from expenditure on Grade 12 Mathematics, which was again higher than the national V4M index value.

Figure 6: Value for money indices for Grade 12 expenditure in South Africa and provinces, 2016



**Sources: National Treasury –EPRE, 2016/17 of the various provinces
 Department of Basic Education – School Realities, 2016
 Department of Basic Education - NSC Examination Report 2016**

Similarly, South Africa and eight provinces extracted less value from expenditure on Grade 12 Physical Sciences¹⁸ than total Grade 12 expenditure. North West (0.70) recorded the highest V4M index value followed by Mpumalanga (0.62) with the 2nd highest index value. Yet again, Eastern Cape (0.26) recorded the lowest V4M index value, which was also considerably lower than the national V4M index value. Limpopo (0.51) recorded the same V4M index value than for total Grade 12 expenditure and therefore managed to extract the same value for expenditure on Physical Sciences than for total Grade 12 expenditure.

The results for Mathematical Literacy¹⁸ were much better than for the other two subjects because of the higher pass rate achieved. North West (0.80) recorded the highest V4M index value and Eastern Cape

¹⁸ Excludes any additional Grade 12 interventions and subject specific expenditure.

(0.30) the lowest. Mpumalanga (0.67) extracted the 5th highest/lowest value from the expenditure on Mathematical Literacy. Limpopo, Western Cape and Free State recorded similar V4M index values than for their respective total Grade 12 expenditure, whereas Gauteng (0.70) extracted more value from its Mathematical Literacy results than for its total Grade 12 expenditure.

It is clear from this exercise that all provinces must seek improvement in the efficiency and effectiveness of its education expenditure. North West was the province with the lowest expenditure per Grade 12 learner per subject, however, it was the province that came closest in extracting full value from its expenditure in the four examples. On the other hand, the disproportionately large amounts of expenditure by Eastern Cape on secondary schools (and per implication Grade 12 learners) make it virtually impossible to extract any decent value.

6. SUBJECT CHOICES AND THE ECONOMIC RELEVANCE THEREOF

One of the developmental tasks of any individual is the preparation for a career. Learners should be advised to take subjects that will lead to careers that impact the economy positively. They should also be encouraged to take subjects that will help them stem the technical and science skills shortages in the economy. This section will focus on whether learners are advised and encouraged relevant to Mpumalanga's economic situation and challenges.

South Africa and Mpumalanga requires more skills related to Mathematics, Physical Sciences and technical subjects. Not only is there a shortage of these skills in the economy, but the global economy is developing in such a way that more of these related skills will be necessary in future. Despite this need for more of these skills, only 43.0 per cent of the Grade 12 learners in Mpumalanga wrote Mathematics and 34.9 per cent Physical Sciences in 2016. Only 5.8 per cent of the 2016 Grade 12 learners wrote technical subjects (Civil, Electrical, Mechanical and Engineering Graphics). Less than 0.5 per cent of Grade 12 learners wrote Information Technology and only 6.3 per cent wrote Computer Applications Technology.

The low number of learners encouraged and enabled to take the abovementioned subjects stand in contrast to certain subjects of which the related skills are not in high demand, or not as high as is generally thought. For example, 8.1 per cent of Grade 12 learners wrote a second additional language in 2016 and ended with three languages on their transcript of results. Nearly three times as many learners wrote History (14.6 per cent) than the combined total for technical subjects mentioned in the previous paragraph. Some 6.3 per cent of Grade 12 learners wrote Religion Studies, which was also more than the total for technical studies. The next paragraph will site two specific examples that contrasts plainly with the situation under foot in the economy.

In 2016, 33.1 per cent of Grade 12 learners wrote the three agriculture subjects, however, agriculture contributes approximately 3 per cent to the Mpumalanga economy and 8 per cent to employment in the province. In 2016, 39.2 per cent of Grade 12 learners in Mpumalanga wrote Tourism. However, tourism only contributes approximately 3 per cent to the economy of Mpumalanga and 5 per cent to employment. On face value, it would appear if the Department of Education's career guidance function is unaware of these facts.

Although more than 36 per cent of Grade 12 learners have written Business Studies since 2011, more needs to be done to encourage school leavers to open their own business. According to unemployment data from Statistics South Africa, only 16 per cent of the unemployed (aged 18 to 24) in Mpumalanga with a NSC would start a business if they had the means. Research evidence suggests that a practical approach to business studies and an exposure to entrepreneurship from an early stage, would lead to an increase in school-leavers establishing business instead of waiting for a large corporation to employ them.

7. CONCLUSION

Quality school education is widely regarded as the most important medium for transforming South Africa and its provinces into a more equitable society. To achieve higher economic growth and lower unemployment the province must develop the capabilities of its labour force through education and skills training. Improved education outcomes should also lower the premium for skilled labour resulting in lower levels of income inequality and poverty.

The improvements in Mpumalanga's Grade 12 pass rate since 2011 must be acknowledged, however, the improvement is, to a large degree, the result of an abnormally high drop-out rate and low throughput rate. The low throughput rate essentially supplies uneducated and unskilled individuals to the labour force and improvement in the labour force as a result of the higher Grade 12 pass rate is therefore partly undone. Appropriate measures to curb the high drop-out rate must be implemented before the benefits of higher Grade 12 marks will be felt on the provincial labour force. Special intervention should also be considered by the Department of Education in the local municipalities of Dr Pixley Ka Isaka Seme, Dipaleseng and Mkhondo, due to the relatively low pass rates and low bachelor admission rates recorded.

Despite the fact that more than one fifth of Grade 12 learners qualified to enrol in bachelor studies, less qualified to do so with Mathematics and Physical Sciences as Grade 12 subjects. This transpired despite the high demand for skills related to these two subjects. The establishment of a Mathematics, Science and Technology Academy in Mpumalanga to improve teachers' pedagogical knowledge should assist in turning this situation around.

Provincial education departments are not extracting anything close to full value for money spent on education. All provinces must seek improvement in the efficiency and effectiveness of its education expenditure. Better Grade 12 outcomes and cost reductions, in other words more with less, is what the Mpumalanga Department of Education should strive for.