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What is PIRLS?

The *Progress in International Reading Literacy Study* (PIRLS) assesses reading comprehension and monitors trends in reading literacy at **five-year intervals**. PIRLS has assessed fourth year reading comprehension in over **60 countries** since 2001 and set international benchmarks for reading comprehension. To monitor **learner reading and comprehension**, PIRLS assessments offer the **opportunity to track progress** in reading comprehension within and across **languages** as well as in **provinces**. The PIRLS international scale has a range that is set from 0 to 1 000, a centre point of 500 and a Standard Deviation of 100 (reading literacy achievement scale).

Participation in PIRLS cycles

2006: Grade 4 and Grade 5 learners were assessed in all 11 languages. In Grade 5, 14 657 learners were assessed in 2006 and 16 073 Grade 4s. The sample was nationally representative and stratified by language and by province.

2011: Grade 5 learners in English and Afrikaans schools wrote the PIRLS assessment. 3 515 Grade 5 learners were assessed and 15 744 Grade 4 learners. Grade 4 learners were assessed in all 11 languages using prePIRLS (now known as PIRLS Literacy). The sample was nationally representative but was only stratified by language.

2016: Grade 5 learners wrote PIRLS and were assessed in Afrikaans, English and isiZulu schools which included PIRLS Literacy passages. Grade 4 learners were assessed using PIRLS Literacy passages, new passages translated into 10 official languages. The PIRLS Literacy Study also included PIRLS passages. A total of 5 282 Grade 5 learners were assessed and 12 810 Grade 4 learners. The sample was nationally representative and stratified by language and by province.

PIRLS Objectives

- To assess how well South African Grade 5 learners read **and to identify possible associated contextual factors**.
- To compare the reading literacy of Grade 5 South African learners both **internationally** and on a **national** level for three selected languages and nine provinces.



Achievement Assessments

Each child completes an assessment booklet. Each booklet has 2 passages:

- Literary (fiction) passage
- Informational (non-fiction) passage

Passages were translated into 10 languages. The international versions in US English were changed to UK English and the English passages were also contextualised for South Africa. Each passage is followed by about 13-15 questions. There are 12 passages used per study (PIRLS and PIRLS Literacy), and the passages are spread across 16 different booklets in a Rotated Test Design. Children seated next to one another answer different booklets.

Learners are tested in the language of learning and teaching (LoLT) used in Grade 1-3 in their school. Main data collection for Southern Hemisphere countries took place at the end of 2015.

Two types of PIRLS Achievement Assessments

- PIRLS:** passages which assess reading literacy at the international fourth year level.
- PIRLS Literacy:** passages which assess reading literacy at the lower end of the reading comprehension scale (easier passages).

Questionnaires (Contextual)

There were five questionnaires:

- Learning to Read Survey* (parent/home)
- School Questionnaire* (principal)
- Teacher Questionnaire* (classroom)
- Learner Questionnaire* (student)
- Curriculum Questionnaire* (national)



South Africa as a Benchmarking Participant at Grade 5

Due to the performance in 2006 and decisions made for 2011, South Africa remained in PIRLS as a benchmarking participant for Grade 5 to monitor trends from 2006 which was not possible with the Grade 4 learners from 2006. Some countries choose to sample only a particular sub-population; for example, one language or one province. Such countries do not have nationally representative samples and are classified as benchmarking participants. The South African Grade 5 PIRLS is classified as benchmarking participation. Only Afrikaans, English and isiZulu schools were sampled (for more information see Howie et al., 2017). The label **Eng/Afr/Zulu - RSA (5)** is used in reports to identify the benchmarking participation at Grade 5 level for South Africa.

Grade 5 PIRLS Attained Sample

A total of **5 282** Grade 5 learners in **125 Schools** were assessed. The learners were representative of three official Languages and nine Provinces. South Africa's participation rate was **94%** (after replacements).

The percentages of learners are reported based on the total weighted percentage. For example, 33% of learners wrote the assessment in KwaZulu Natal, but they represent 37% of the Grade 5 population in that province.

Below in Figure 1 the represented languages are shown.

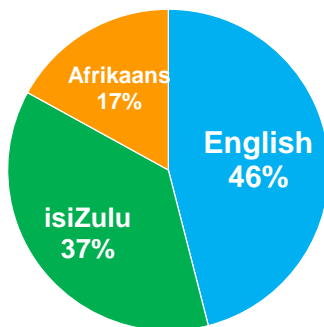


Figure 1: Grade 5 test languages

The largest groups tested represented learners writing in English (46%), followed by isiZulu (37%).

Figure 2 shows the percentage from each province represented in the sample.

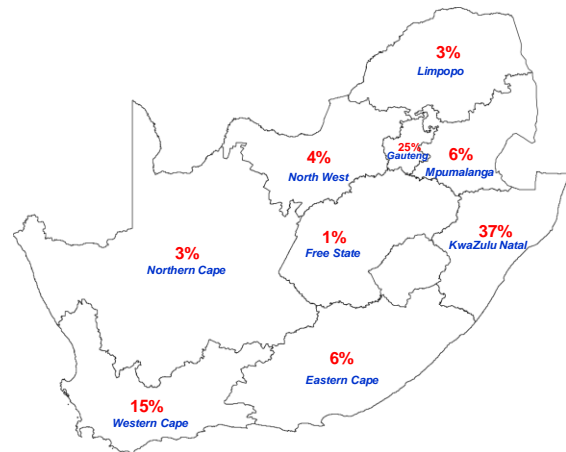


Figure 2: Grade 5 Provincial samples

Provincially, the largest percentage of learners represented **KwaZulu Natal (33%)**, **Gauteng (26%)** followed by the **Western Cape (16%)**. This is consistent with the location of the languages within the population in the country.

Grade 5 Achievement in PIRLS 2016 as a Benchmarking Participant

South African results are shown in Figure 3 compared to other benchmarking participants (see Appendix A for performance of all countries participating in PIRLS).

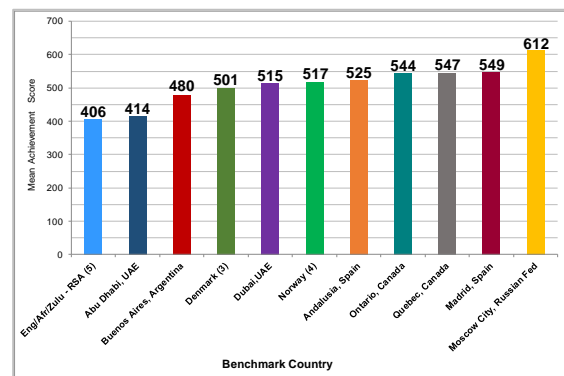


Figure 3: South African Grade 5 achievement compared to other benchmarking participants

South Africa had the lowest score compared to the **benchmarking participants** in PIRLS 2016. South Africa's performance was similar to that of Abu Dhabi (UAE).

Bearing in mind that the South African Grade 5 learners were benchmarking participants and represented only three languages, South Africa at 406 score points is **significantly below** the PIRLS centre point of 500. They performed above the SA Grade 4 national sample and would lie on the PIRLS scale between Kuwait and Oman.

Grade 5 Performance in Languages

As can be seen in Figure 4, the highest performing test languages were **English (435)** and **Afrikaans (431)**.

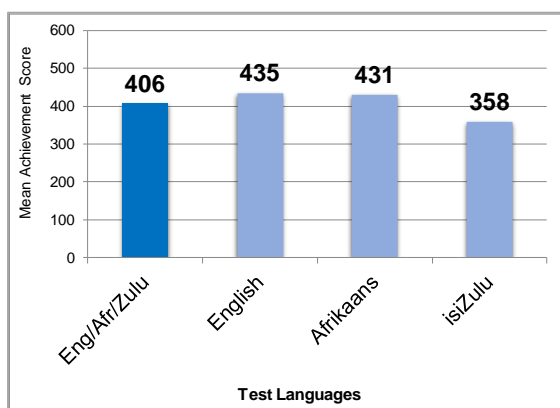


Figure 4: Grade 5 PIRLS achievement by language of test

The lowest performing language isiZulu (358). The learners writing in English and Afrikaans **achieved significantly higher scores** than isiZulu participants (differences of 73-77 points). However, Afrikaans and English do not differ statistically from one another.

Grade 5 Performance in Nine Provinces

The provincial performance for the Grade 5 learners is shown below in Figure 5.

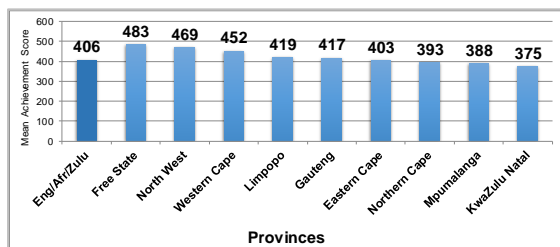


Figure 5: Grade 5 PIRLS achievement by province

Learners from the Free State achieved the highest scores (483) on average followed by North West

(469) but neither was statistically higher than each other or other provinces, except for KwaZulu-Natal. Statistically there were few differences between provinces. Only KwaZulu-Natal scored significantly below Free State, North West, Western Cape, Gauteng. Whilst Western Cape was significantly higher than Eastern Cape. There was a very large variation in scores for five provinces.

Grade 5 Performance by Gender

At **421 score points**, girls achieved 30 score points higher than **boys (391)**, which was statistically significant. Across all languages girls consistently performed better than the boys.

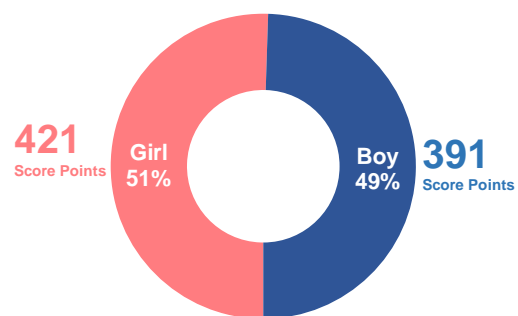


Figure 6: Grade 5 PIRLS achievement by gender

South Africa has the **second largest achievement gap (30 points)** between the genders of the benchmarking participants. In Abu Dhabi (UAE) the gap was 40 score points higher for girls.

Grade 5 Performance by School Location

Learners attending schools in remote rural settings achieve **significantly below (360 points)** the learners from urban areas (445-484) as shown in Figure 7.

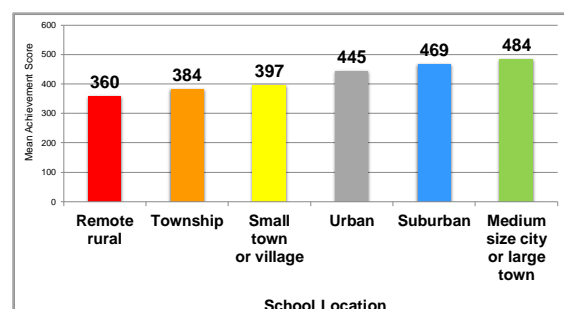


Figure 7: Grade 5 PIRLS achievement by school location

Learners attending schools in **township areas** also tended to achieve low scores, 24 points higher than learners in remote rural areas but 100 points below the highest performing group.

Grade 5 Performance if Learner spoke Language of Test at Home

In Figure 8, the frequency of speaking the test language at home is shown as well as the associated scores.

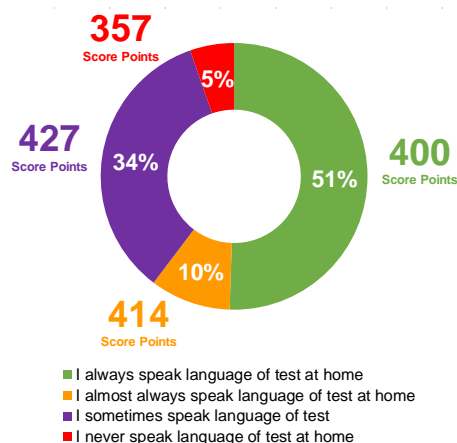


Figure 8: Frequency of speaking test language at home

Only 5% of learners said they never speak the language of the test at home and they achieve the lowest score (357) by more than 40 points.

Table 1 below is the percentage of learners who said they speak the language of the test at home and their mean reading literacy achievement.

Table 1: Percentage of learners who speak the language of the test at home and their mean achievement score

| Language | Speak at home % | Mean |
|-----------|-----------------|------|
| English | 24% | 509 |
| Afrikaans | 88% | 433 |
| isiZulu | 88% | 360 |

In Afrikaans and isiZulu, the majority (**88%**) of the learners spoke the language of the test at home, as is shown in Table 1. However, **English is the opposite** of the other languages. Of the Grade 5 learners who wrote the test in English, **only 24%** speak the language at home.

In Afrikaans and isiZulu, there was no significant difference in achievement between those who spoke the language at home and those who did not.

In Figure 9, the learners who speak English at home are compared to those who do not in terms of achievement.

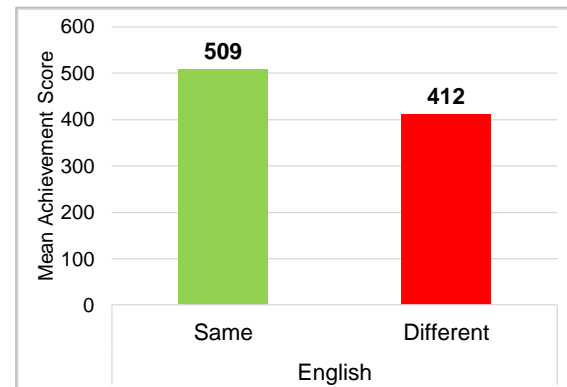


Figure 9: Grade 5 PIRLS achievement for English who spoke language at home compared to those who spoke a different language

For learners in English schools, those who **spoke the language at home (509)** had a significantly higher score (almost 100 points) than those who spoke a **different language at home (412)**. Those who don't speak English at home achieve substantially higher marks than those writing in isiZulu and not much lower than learners writing in Afrikaans.

PIRLS International Benchmarks

Four international benchmarks provide information about what children can do at certain score point ranges.

- **Those learners that did not reach the lowest benchmark (below 400 points):** cannot read for meaning or retrieve basic information from the text to answer simplistic questions
- **Low International Benchmark (400 - 474):** can read to locate and retrieve explicit information
- **Intermediate Benchmark (475 - 549):** begin to interpret and identify obvious reasons events in text as well as giving basic explanations for actions or information
- **High International Benchmark (550 - 625):** make intricate connections between events in the text. Identify crucial features and make generalisations. Interpret complex text and tables
- **Advanced International Benchmark (625 and above score points):** integrate ideas as well as evidence across a text to appreciate overall themes, understand the author's stance and interpret significant events

Grade 5 Benchmark Attainment

PIRLS Grade 5 benchmark attainment for the three language groups can be seen in Figure 10.

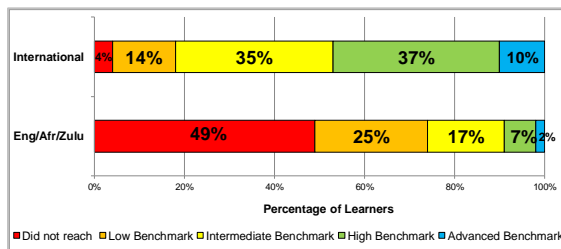


Figure 10: Grade 5 benchmark attainment compared to international median

49% of the South African Grade 5 participants were not able to reach the lowest benchmark compared to 4% internationally. Learners who did not reach the lowest benchmark could not locate explicit information or reproduce information from a text at the end of Grade 5.

A total of **2%** of Grade 5 learners did attain the Advanced Benchmark compared to 10% of Grade 4 learners internationally.

Benchmarks by Test Languages

More than a third of the learners who completed the assessment in Afrikaans (38%) or English (37%) were unable to attain the Lowest Benchmark as shown in Table 2.

Table 2: Grade 5 Benchmark attainment per test language

| | Did Not Reach | Low Benchmark | Intermediate Benchmark | High Benchmark | Advanced Benchmark |
|--------------|---------------|---------------|------------------------|----------------|--------------------|
| Afrikaans | 37,5% | 28,1% | 21,6% | 10,5% | 2,2% |
| English | 37,1% | 24,5% | 24,0% | 11,7% | 2,8% |
| isiZulu | 69,2% | 25,0% | 5,6% | 0,2% | 0,0% |
| Eng/Afr/Zulu | 48,9% | 25,3% | 16,9% | 7,3% | 1,7% |

The **disparity** between those who wrote in **isiZulu** and those who wrote in **Afrikaans or English** is very large. Most of the isiZulu test takers (**69%**) were not able to reach the Low Benchmark.

There was a considerable disparity at the top end with very few learners in isiZulu reaching the top two benchmarks compared to more than 10% in Afrikaans and English.

Benchmarks reached per Province

Table 3 shows the benchmark attainment per province. Provinces where 50% or more learners did not reach the Lowest Benchmark is shown in red.

Table 3: Benchmark attainment by province

| | Did Not Reach | Low Benchmark | Intermediate Benchmark | High Benchmark | Advanced Benchmark |
|---------------|---------------|---------------|------------------------|----------------|--------------------|
| KwaZulu Natal | 61,8% | 25,3% | 10,5% | 2,0% | 0,4% |
| Mpumalanga | 54,1% | 21,7% | 17,9% | 5,4% | 0,9% |
| Northern Cape | 51,7% | 26,8% | 13,2% | 7,7% | 0,6% |
| Eastern Cape | 50,0% | 26,0% | 16,8% | 6,6% | 0,7% |
| Gauteng | 45,7% | 22,4% | 19,2% | 10,4% | 2,3% |
| Limpopo | 41,4% | 34,0% | 21,0% | 3,6% | 0,0% |
| Western Cape | 29,5% | 29,5% | 23,3% | 13,8% | 3,9% |
| North West | 25,3% | 22,3% | 32,0% | 15,4% | 5,0% |
| Free State | 17,3% | 28,5% | 33,2% | 17,8% | 3,3% |
| Eng/Afr/Zulu | 48,9% | 25,3% | 16,9% | 7,3% | 1,7% |

Fifty percent or more learners in four provinces, KwaZulu-Natal, Mpumalanga, Northern Cape and Eastern Cape did not reach the international benchmarks with the largest percentage being in **KwaZulu-Natal**, where **62%** of learners **did not reach** the Lowest Benchmark.

Grade 5 Benchmark Attainment by Gender

A higher percentage (**55%**) of boys did not reach the lowest benchmark (see Table 4).

Table 4: Grade 5 Benchmark attainment by gender

| | Did not Reach | Low Benchmark |
|-------------|---------------|---------------|
| Girls | 43% | 28% |
| Boys | 55% | 22% |

10-year Trend in PIRLS Cycles: 2006 - 2016

Trend analysis of achievement results is possible between the 2006, 2011 and 2016 participation for learners who wrote the assessment in Afrikaans and English (for more information see Howie et al., 2017).

In 2006, the South African Grade 5 PIRLS mean scores were very low and results from the African languages could not be utilised as reliable

psychometric measures as a baseline for trend. Therefore, Afrikaans and English schools were selected for participation in 2011. In PIRLS 2016 the decision was made to add isiZulu to explore if changes had taken place. It was selected as it was the most widely spoken African language, and was one of the higher performing African languages.

Comparisons possible for Grade 5:

- 2006, 2011 and 2016 Afrikaans and English
- 2006 and 2016 isiZulu

In Figure 11 and Table 5, the mean performance in **2006, 2011** and **2016** can be seen for the combined Afrikaans and English language of test participation.

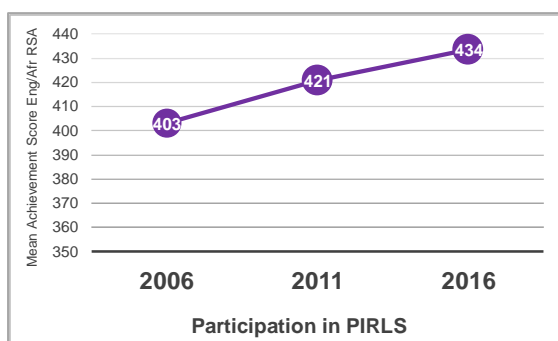


Figure 11: Combined Eng/Afr Grade 5 PIRLS mean achievement scores for three cycles of PIRLS

Overall, a **significant improvement** between **2006 (403)** and **2016 (434)** is noted. However, important to note that most of the change is accounted for between 2006 and 2011 and that there was no statistically significant difference between 2011 and 2016 nor between 2006 and 2011. This result illustrates the importance of long term trends.

Table 5: Afrikaans and English combination across cycles

| Year | Combined Afrikaans and English Score | Difference between years (score points) | |
|------|--------------------------------------|---|------|
| | | 2011 | 2006 |
| 2016 | 434 | 13 | 31* |
| 2011 | 421 | | |
| 2006 | 403 | | |

*Denotes more recent year significantly higher

2006 and 2016 Trend in isiZulu

The isiZulu group had a statistically higher achievement in 2016 compared to 2006 (see Figure 12).

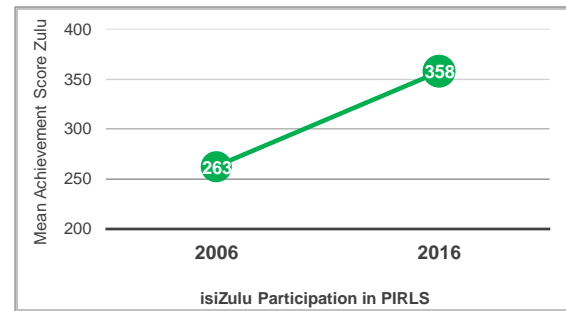


Figure 12: Grade 5 isiZulu achievement in 2006 and 2016

There is a **significant improvement** in the isiZulu Grade 5 score between 2006 and 2016 of **95 points**. Unlike the Afrikaans and English scores, there is no 2011 data and therefore when the change took place cannot be ascertained.

Differences in Achievement per language across cycles

In Table 6, the differences in the mean achievement scores across the PIRLS cycles are shown per language for each of the three languages below.

Table 6: Grade 5 participation in PIRLS cycles the mean scores per language

| Year | Afrikaans Score | Difference between years (score points) | |
|------|-----------------|---|------|
| | | 2011 | 2006 |
| | | 2016 | 431 |
| 2011 | 427 | | 11 |
| 2006 | 416 | | |

| Year | English Score | Difference between years (score points) | |
|------|---------------|---|------|
| | | 2011 | 2006 |
| | | 2016 | 435 |
| 2011 | 419 | | 20 |
| 2006 | 398 | | |

| Year | IsiZulu Score | Difference between years | |
|------|---------------|--------------------------|------|
| | | 2011 | 2006 |
| | | 2016 | 358 |
| 2011 | | | |
| 2006 | 263 | | |

*Denotes more recent year significantly higher

Of the three languages, there was only a significant difference between the isiZulu 2006 and 2016 participation (marked in green with asterisk) for not Afrikaans and English individually across any cycles.

Trends by Gender in Cycles

Within each cycle, the **girls** achieved **significantly higher** scores than the boys (see Figure 13).

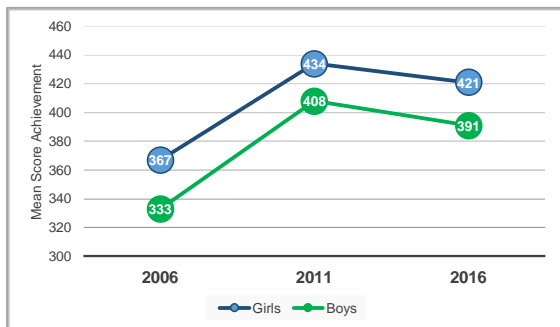


Figure 13: Gender achievement for Grade 5 per PIRLS cycle

Girls performed **significantly higher in 2011** when compared to 2006. However, there is no significant difference between the 2011 and 2016 mean reading achievement results for girls. The same is pattern is true of boys.

Grade 5 Benchmark Attainment per PIRLS Cycle

Figure 14 shows the percentages of Grade 5 learners in South Africa who could attain the international benchmarks per round of participation in PIRLS, and separates combinations of the languages for a clearer picture of benchmarks reached.

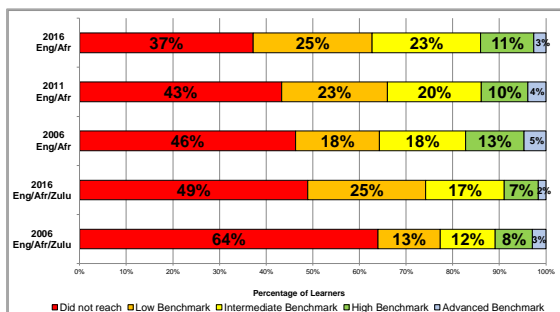


Figure 14: South African Grade 5 PIRLS attainment of benchmarks per PIRLS cycle

With each new cycle more learners **are able to reach the Low Benchmark**, and this pattern holds for all combinations of languages. However, there are also fewer learners reaching the Advanced Benchmark with each cycle.

Background Factors associated with Achievement

Selected variables from the *School, Teacher and Home Questionnaires* were analysed and are reported below. The average class size was 39 learners per Grade 5 class.

In Figure 15 the school locations are shown. The largest groups of learners tested were located in schools from **remote rural areas (23%)**, followed by urban densely populated areas (21%).

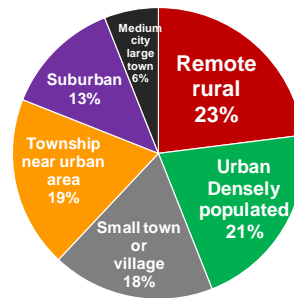


Figure 15: School location

There were slightly more **boys (51%)** than girls represented in the study. The average age was 11.6 years at the end of Grade 5.

School Environment

Principals reported that as many as **76% of learners** were estimated to come from disadvantaged backgrounds, as can be seen in Figure 16.

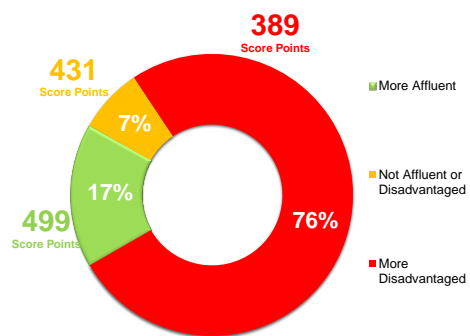


Figure 16: Grade 5 Learner Economic Background

There is a **large, significant difference in achievement** between those from disadvantaged backgrounds (389 points) and from more affluent backgrounds (499 points).

Resources shortages affected the majority of learners somewhat or a lot (**75%**), see Figure 17.

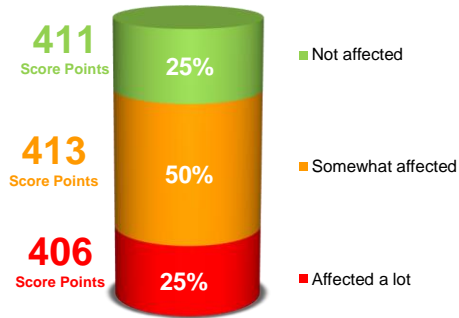


Figure 17: Grade 5 learner instruction affected by resource shortages in PIRLS 2016

About **25% of learners** were in schools not affected by instruction shortages, though this was not related to reading literacy achievement.

According to the school principals, **only half (55%)** of the Grade 5 PIRLS learners attended schools with libraries as depicted in Figure 18. Grade 5 learners on average achieved 36 points more (427) when they attended schools with a school library.

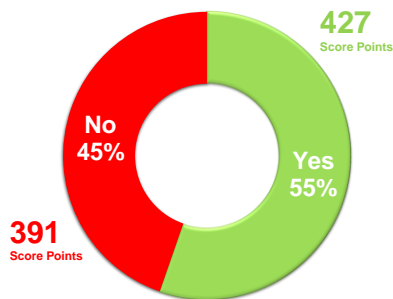


Figure 18: School libraries reported in Grade 5 PIRLS study

The frequency of bullying reported by the Grade 5 learners and their associated achievement is shown in Figure 19.

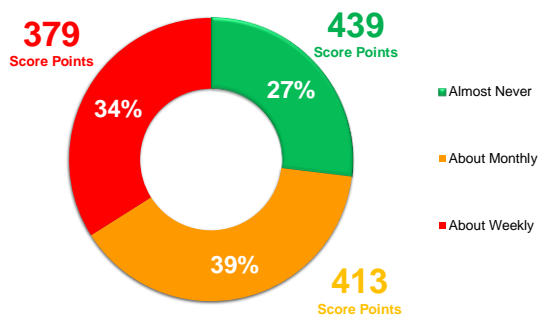


Figure 19: Frequency of bullying reported by Grade 5 learners in PIRLS 2016 study

One out of three Grade 5 learners (34%), reported **weekly bullying** and achieved 60 points less (379) compared to those almost never bullied (439).

Figure 20 below shows the frequency of problems experienced with school discipline and safety.

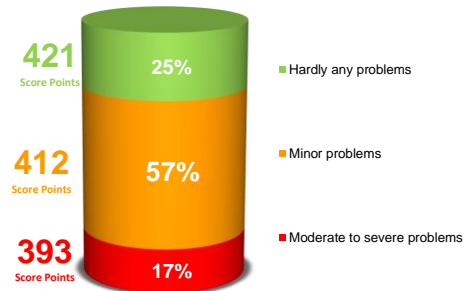


Figure 20: Grade 5 school discipline and safety

Learners achieving the **highest mean score of 421** attended schools with **Hardly Any Problems** with school discipline and safety, 28 points more than those Grade 5 learners who attended schools with **Moderate to Severe Problems**.

In Figure 21 principals' reporting of problems with **teacher behaviour** is shown.

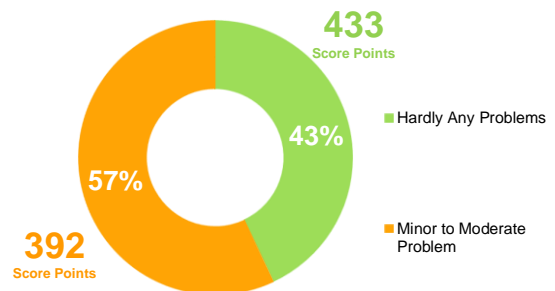


Figure 21: Problems with teacher behaviour

More than half (57%) of the Grade 5 learners were in schools where the principals reported that there are **Minor to Moderate problems** with the teachers and achieved 41 points less than those in schools with Hardly any problems.

None of the principals indicated that they experience serious behavioural problems with teachers. A total of 20% of school principals in KwaZulu Natal indicated that teachers fail to complete the curriculum. In particular, absenteeism and failure to complete the curriculum were a problem in some of the schools.

Classroom Contextual Factors

In Figure 22, teachers of Grade 5 learners in the PIRLS 2016 study reported on their formal qualifications.

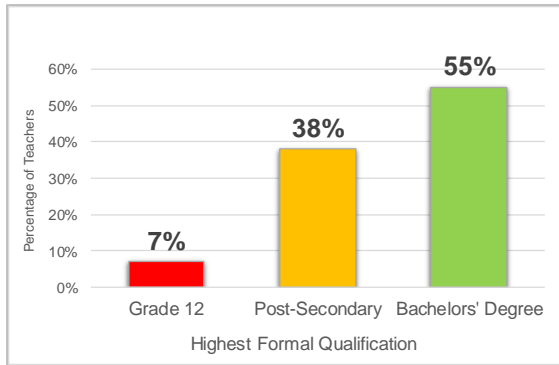


Figure 22: Formal qualifications as reported by the teachers of Grade 5 learners

Seven percent of learners were taught by teachers who had only completed Grade 12. The largest group of learners (55%) are taught by teachers with Bachelors' degrees.

Forty percent of learners are taught by teachers with 20 or more years of teaching experience (Figure 23). However, nearly a quarter of teachers had less than 5 years indicating new entrants into teaching.

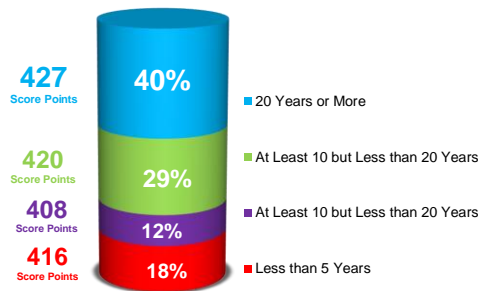


Figure 23: Teacher years of experience in PIRLS 2016 study

There is **no clear association** between the formal qualifications and achievement. A curvilinear pattern can be observed.

In Figure 24 the age categories of teachers are shown for the Grade 5 PIRLS 2016 study.

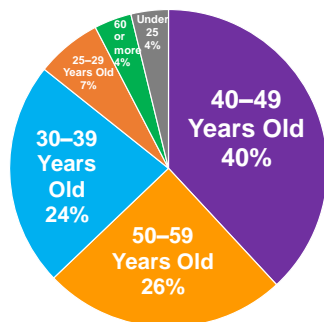


Figure 24: Grade 5 learners taught by teachers in different age categories

Most of the learners are taught by teachers who are **40 years or older (70%)**. Only 4% of the Grade 5 learners were taught by teacher younger than 25 years old or older than 60 years old (respectively).

Figure 25 shows the job satisfaction reported by teachers of the Grade 5 learners.

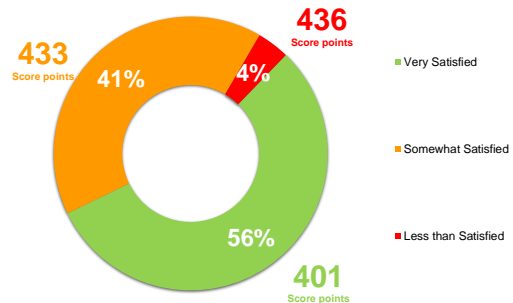


Figure 25: Grade 5 teacher job satisfaction

Overall, more than half (55%) of the Grade 5 learners were taught by teachers who **were very satisfied with their career**. Only 4% of learners were taught by teachers who were **less than satisfied** with their teaching career and these learners achieved the highest mean score (436 points).

Learners were asked about their enjoyment of reading activities, and their responses and associated reading literacy mean scores are shown in Figure 26.

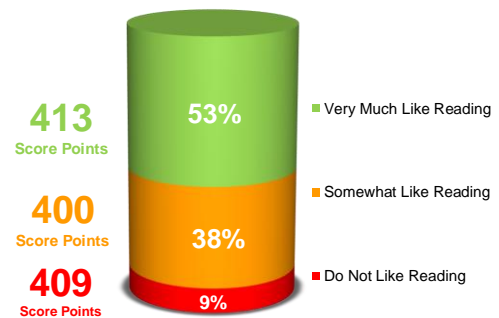


Figure 26: Grade 5 learner enjoyment of reading

More than **half (53%) of learners** said they **like reading** and their mean achievement score was 413 score points. There was no clear association between how much Grade 5 learners reported enjoying reading and their associated reading achievement.

Figure 27 shows how often learners said they were absent from school.

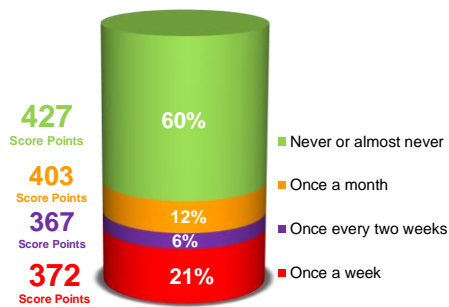


Figure 27: Grade 5 Learner absenteeism and achievement

Grade 5 learners who are **Never or Almost Never** absent from school achieved 56-61 points more learners than those who said they were absent weekly or **Once Every Two Weeks (372- 367)**.

In Table 7 the percentage of learners in classes with **classroom libraries** are shown as well as their associated mean achievement.

Table 7: Classroom libraries

| Classroom Libraries | % | Mean |
|---------------------|-----|------|
| Yes | 62% | 417 |
| No | 38% | 411 |



A total of **62% of Grade 5 learners** were in classes which have a classroom library but there was no significant difference between those learners who were in a classroom with a library and those were in a class that had no library.

The Home Environment

In the home questionnaire parents were asked how much they enjoyed reading (see Figure 28).

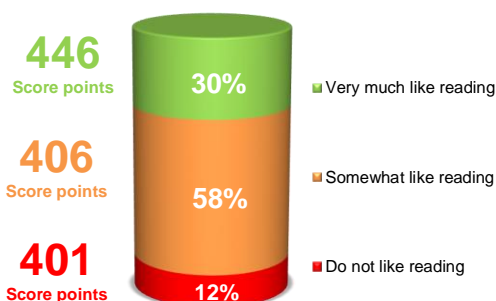


Figure 28: Parents/guardians of Grade 5 learners report enjoyment of reading

About 30% of Grade 5 learners had parents that **very much like reading** and achieved the highest mean score at 446 points and more than 40 points more than those whose parents do not liking reading. These learners achieved the lowest score (401).

Figure 29 shows the frequency of homework Grade 5s received, according to their parents or guardians.

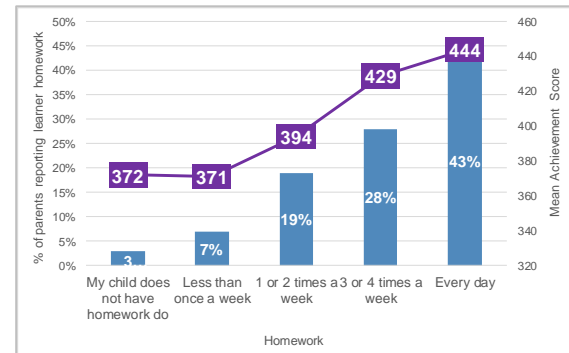


Figure 29: Grade 5 learners with homework according to parents

Overall, Grade 5 learners who receive homework on a more regular basis tended to have higher mean achievement. The parents of 43% of learners reported that their child receives homework everyday, and these learners had a significantly higher mean score (**444**) than learners (3%) who do not receive homework (**372**) or **less than once a week (371)**.

When parents **often read stories, sang songs, played with their child and talked to them** before the child started school, learners achieved higher mean scores (as shown in Figure 30).

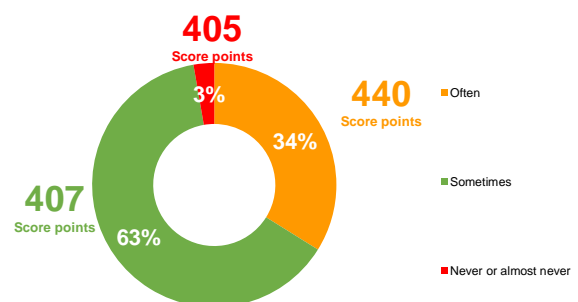


Figure 30: Early literacy activities and learner reading achievement

Learners with parents who **never or almost never** did any early literacy activities had the lowest mean score (**405 points**).

In Figure 31 the achievement of Grade 5 learners are shown for those who attended a preschool and those who did not. Only **13% of learners** did not attend a preschool.

Most of the Grade 5 learners **attended** a preschool (87%) and achieved a **higher** mean scores (**423 points**) than those who **did not** attend.

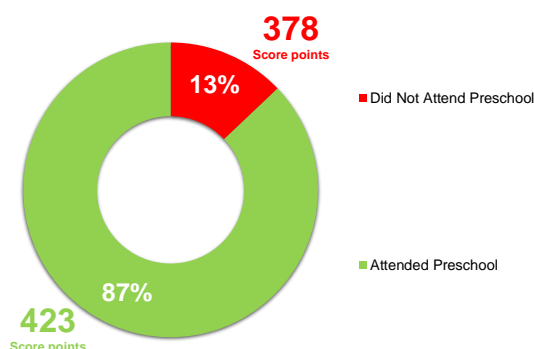


Figure 31: Percentage of Grade 5 learners who attended preschool and learner achievement

Having **resources** in the home, such as books, child's own room, internet access, better-educated parents and higher-level occupations is strongly associated with learner reading literacy achievement (see Figure 32).

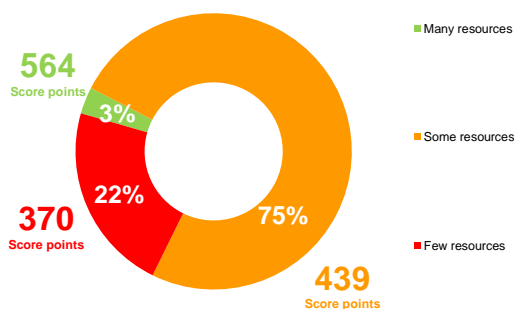


Figure 32: Home resources for learning and learner achievement

The **3%** of learners who came from homes with **many resources achieved (564)** well above the international centre point of 500 and comparable to performance in the top ten countries in PIRLS. Most learners (**75%**) came from homes with some resources. Those with few resources at home had by far the lowest mean achievement at 370 score points.

Key findings of PIRLS Grade 5

South Africa was the **lowest performing country (mean score of 406)** out of **11 benchmarking participants** in the PIRLS 2016 study and the achievement could be equated to that in the bottom five countries on the PIRLS scale. The Grade 5 learners were 175 points below the Russian Federation and 94 points below the international average. On the PIRLS scale, approximately 40

score points are equal to a year's schooling. This means that South Africa is **more than 4 years** behind the top performing country. However, the 2016 score was significantly **higher** than the 2006 achievement for Afrikaans and English combined score.

Around **49% of South African Grade 5 learners (Eng/Afr/Zulu)** do not reach the international benchmarks and therefore do not have basic reading skills by the end of the Grade 5 school year, in contrast to **only 4%** of learners **internationally**.

Learners writing in **isiZulu** attained the **lowest mean score (358)**, significantly lower than those writing in **Afrikaans (431)** and **English (435)**. Between **2006 and 2016** there is a statistically significant **improvement in isiZulu**. However, isiZulu also started at a very low base. Afrikaans and English have achievement results that can be compared for 2006, 2011 and 2016. There was no significant difference in achievement between 2006 and 2011 and 2011 and 2016 for the English and Afrikaans test takers. However, between 2006 and 2016 there is a statistically significant difference and improvement in achievement.

When the international benchmarks for each language are compared for the South African 2016 participation, there is a clear divide between **isiZulu (69% do not reach)** and those who wrote in **Afrikaans or English (37% do not reach)**. **KwaZulu Natal** had the highest percentage of learners not reaching the Low Benchmark (62%). In the **Western Cape, only 30%** were not able to attain this benchmark and this percentage is higher in **Gauteng where 46%** of learners could not reach the Low Benchmark. When benchmark attainment is examined across cycles, a positive picture emerges as with each cycle more learners were able to reach the Low Benchmark. However, fewer learners were able to attain the Advanced Benchmark with each cycle.

The **Free State, North West and the Western Cape** achieved the three highest scores in the PIRLS 2016 study, KwaZulu Natal had the lowest performance (374) of the provinces. Gauteng and the Western Cape performed significantly better than KwaZulu Natal.

Grade 5 **girls performed significantly better (30 points)** than boys in PIRLS 2016 and South Africa had the second largest gender gap internationally when compared to other benchmark countries. **55% of boys could not reach the Low Benchmark**, compared to 43% of girls. Whilst within each cycle of PIRLS, girls performed significantly better than boys, there was no significant difference for girls or for boys between their 2011 and 2016 achievement. However, both genders performed significantly better in 2011 compared to 2006.

Learners living in **remote rural areas** and **townships** had the lowest reading literacy achievement (between **362-384** points). **Urban, suburban** and **medium or large towns** had higher achievement.

88% of Grade 5 learners in Afrikaans and isiZulu schools reported that they **speak the language of the test at home**, whereas only **24%** of Grade 5 learners in English schools said they **speak English at home** (and achieved about 97 points more than those who spoke a different language at home).

The **school climate factors** that were analysed revealed that three-quarters of **Grade 5 learners** were reported by their principals as coming from **economically disadvantaged** backgrounds and learners from **affluent** backgrounds had significantly higher reading literacy achievement. Learners in schools not affected by resource shortages had no significantly higher achievement than those affected. A total of **45% of Grade 5 learners** are in schools which **do not have school libraries**, and they scored significantly worse than those in schools with libraries. As many as **34% of Grade 5 learners** reported being bullied weekly and their associated reading literacy scores were much lower than those not as frequently bullied. Closely related to this is the fact that **17% of the learners** attended schools where principals said school **discipline and safety** were moderate to severely problematic. **More than half of the Grade 5 learners** were in schools with **minor to moderate problems** with teacher behaviour (absenteeism, failure to complete the curriculum, arriving late).

There were considerable differences in **classroom** conditions. The average class size in **South African Grade 5 classes was 39** learners per class. South Africa on average had experienced teachers (15 years of experience). Most of the learners (70%) were being taught by teachers older than 40 years of age. More than half of learners were taught by teachers who were very satisfied or somewhat satisfied with their teaching profession. Just less than two-thirds of classes (62%) have libraries and most learners **enjoy reading** and less than 12% do not. Nearly one in five learners are **absent** from school at least **once a week**, and their associated reading literacy score was much lower than those who were never or almost never absent.

Parents are less positive about reading in general but children of parents who do **enjoy reading** achieve higher scores. More than a third of learners (43%) received homework daily and their reading literacy scores were higher than those did not receive homework. The **three percent** of Grade 5 learners who came from homes with more resources at home had the highest reading literacy achievement had performed significantly above the international mean. Learners whose parents did early reading literacy activities with their child before school,

tended to achieve much higher reading literacy scores.

Main Recommendations of PIRLS Grade 5 Study

Whilst the full PIRLS Literacy report (Howie et al., 2017) elaborates on recommendations more in-depth, a few recommendations are summarised:

1. **Strengthen teaching of reading literacy** and training of pedagogical content knowledge of teachers across all languages in the Foundation Phase and especially African languages.
2. **Increase proportion of time spent on reading** in Foundation and Intermediate phases in the curriculum as well as encourage extra-mural reading and reading habits.
3. **Initiate Pre-primary Campaigns for parents and teachers** and emphasise importance of Early Literacy activities and training at pre-primary level.
4. **Urgently reduce class sizes** to policy stipulations and stop the “creep” that is occurring across all schools and provinces.
5. **Increase efforts to attract younger quality candidates into teaching** to address attrition.
6. **Target interventions for high-risk populations** including boys, learners living in remote rural areas, townships. Limpopo, the Eastern Cape and Northern Cape provinces need additional support.
7. **Provide and increase school resources** such as school libraries and classroom libraries, especially in areas where performance is poor.
8. **Review interventions on ICT provision in primary schools** and increase effective and sustainable access to ICT and utilisation thereof in education.
9. **An intervention is needed to reduce** teacher and learner absenteeism at primary schools.
10. **Increase and implement programmes addressing bullying** at schools.
11. **Campaign** for greater parental involvement in school and learner activities.

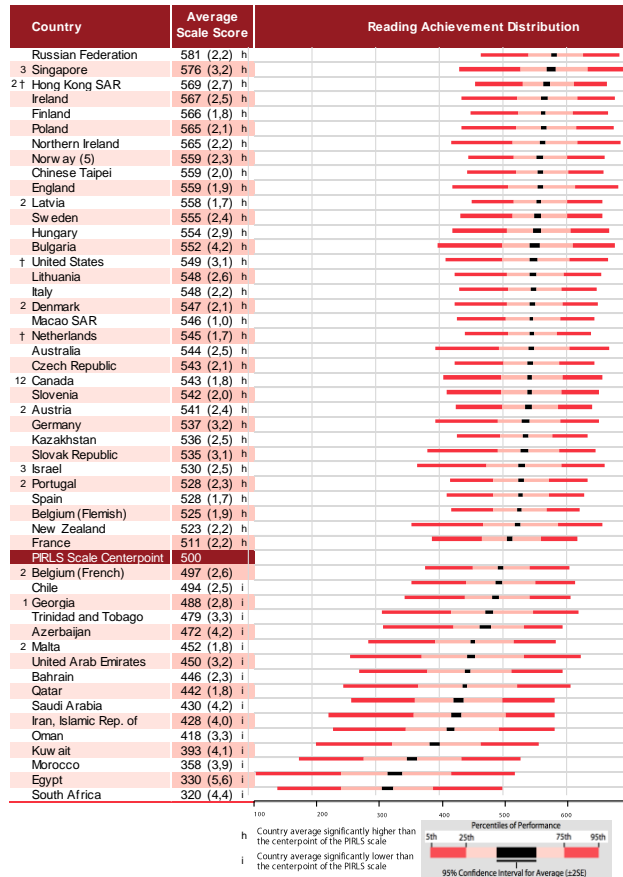
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References:

Howie, S.J., Combrinck, C., Roux, K., Tshele, M., Mokoena, G.M., & McLeod Palane, N. (2017). *PIRLS Literacy 2016 Progress in International Reading Literacy Study 2016: South African Children's Literacy Achievement*. Pretoria: Centre for Evaluation and Assessment.

APPENDIX A: ACHIEVEMENT OF PIRLS 2016 COUNTRIES



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