## CHAPTER SIX

PHASE ONE FINDINGS:

## MESO LEVEL SCHOOL CONTEXTS AND CONDITIONS OF PRACTICE FOR READING LITERACY DEVELOPMENT

### 6.1 ORIENTATION

This chapter presents findings for the Phase One secondary analysis of the PIRLS 2006 school questionnaire data completed by the principal at each participating school sampled for the PIRLS 2006 study. This chapter partly addresses research sub-question one for the study, namely:

What are the schooling conditions in which Grade 4 reading literacy instruction practices occur at each identified PIRLS 2006 achievement benchmark?

The goal of the chapter is to describe and compare the characteristics of school milieus and reported learner characteristics across the re-classified PIRLS 2006 class achievement benchmark sub-samples of EFL 550, EFL 475, EFL 400, EFL 325, EAL 325, EFL 175 and EAL $175^{31}$. In keeping with the constructs used to organise the conceptual framework presented in Chapter Four ${ }^{32}$, this chapter is aimed at investigating the meso school level for its impact on teachers' micro level implementation of the reading literacy curriculum. Due to the recognition that learners will also shape the nature of a school environment, some nano level learner characteristics as outlined by principals are also considered. The PIRLS 2006 school questionnaires were completed by the principal as the representative of the sampled school. However, for reporting in this chapter, reference in terms of response distribution is made to the learner as PIRLS questionnaire data are presented from the perspective of learners' educational experiences and thus the unit of analysis is the learner allocated a class average reaching each of the designated benchmarks and not the principal who completed the questionnaire on behalf of the school. The data associated with class average benchmarks of EFL 550 and EFL 325 are based on small sample sizes due to the sampling strategy used. As such, the data are provided for illustrative purposes only and no generalisation should be made based on these data. All of the data tables for each graph in the chapter are presented in Appendix G.

[^0]The description and comparison of school level characteristics are focused on the principals' reports about: school environment and resources (6.2); teacher professional organisation and environment (6.3); and indications of learner characteristics (6.4). At the end of each section a discussion of findings and summary is provided for ease of comparison of the profiles of schools at each of the class average benchmarks.

## 6.2 <br> SCHOOL ENVIRONMENT AND RESOURCES

In this section, principal reports about school location (6.2.1); school climate (6.2.2) and school safety (6.2.3) are discussed. School library and reading material availability (6.2.4) and shortages and inadequacies in resources (6.2.5) are also considered. Thereafter, a summary of these data for school environment and resources across the identified class average benchmarks is presented (6.2.6).

### 6.2.1 School location

In the PIRLS 2006 school questionnaire, principals were asked to characterise the area in which their school was situated by indicating whether it was in an urban, suburban or rural location. Figure 6.1 (below) presents principal responses in terms of the percentage of Grade 4 learners in each of these locations at each of the class average benchmarks.


Figure 6.1: Principal reports on location of schools

At the lower benchmarks of EFL 175, EAL 175 and EAL 325, the majority of learners had principals who indicated that their schools were situated in a rural area. In contrast, the highest percentage of learners at EFL 325 had principals who indicated that their schools
were in suburban areas which in South Africa would include townships. Similarly, at EFL 400 and EFL 475, the majority of learners were in suburban environments. It was only at EFL 550 that the majority of learners had principals who indicated that their schools were located in an urban setting. As evidenced by these response trends, very few learners at the upper class achievement benchmarks were in schools in rural locations, whilst most learners at the lower class benchmarks were in schools in rural contexts.

### 6.2.2 School climate

The PIRLS 2006 index of principals' perception of school climate ${ }^{33}$ summarises principals' portrayal of their school with regards to: teachers' job satisfaction; teachers' expectations for learner achievement; parental support for learner achievement; learners' regard for school property; learners' desire to do well in school; and learners' regard for each others' welfare.

Figure 6.2 (below) presents the percentage of learners whose schools were at each level of the school climate index per benchmark. The majority of learners at the lower benchmarks (EFL 175, EAL 175, EFL 325) and EFL 400 were in schools with a medium level school climate according to the index compiled. At EAL 325, there was a more even spread in the response distribution. At EFL 475 and EFL 550, most learners were in schools with a high level school climate as designated by their principals.


Figure 6.2: Index of principals' perceptions of school climate

[^1]
### 6.2.3 School safety

The PIRLS 2006 index of principals' perceptions of school safety ${ }^{34}$ was determined by principals' characterisations of the extent to which a number of learner behaviours were a problem at their school. These learner behaviours included: cheating, profanity, classroom disturbance, vandalism, theft, intimidation or verbal abuse of other learners, and physical conflict amongst learners.


Figure 6.3: Index of principals' perceptions of school safety

As indicated by Figure 6.3 (above), the highest percentages of learners were in schools at the lower benchmarks (EFL 175, EAL 175, EFL 325, EAL 325) and EFL 400 which had a reportedly medium level of safety. Internationally, most learners $\left(60 \%{ }^{35}\right)$ on average were in schools with a high level of safety (Mullis et al., 2007, p.279). This international trend is mirrored at the higher benchmarks of EFL 475 (97\%) and EFL 550 (100\%), where all or nearly all of the learners were in schools with a reportedly high level of safety.

### 6.2.4 School library and reading material availability

As part of the PIRLS 2006 school questionnaire, principals were asked to indicate whether or not their schools had a school library (Figure 6.4, below). If so, these principals also had to give an estimate of how many books with different titles (Figure 6.5, below) and how many

[^2]titles of magazines and other periodicals were available in this library (Figure 6.6, below). The vast majority of learners in schools at EFL 325 and the higher class benchmarks of EFL 400, EFL 475 and EFL 550 had a school library. Indeed, at the top-performing benchmarks of EFL 475 and EFL 550 all learners were in schools which had a library. Also, approximately half of the learners in schools at EFL 175 and EAL 325 had a school library while the other half did not. It was only at EAL 175 where the clear majority of learners were in schools without a school library (see Figure 6.4).


Figure 6.4: Percentages of learners in schools with a school library

The existence of a school library does not guarantee the availability of adequate resources in this library. There were large differences in the reported number of books with different titles available to learners in school libraries at each of the class average benchmarks (Figure 6.5).


Figure 6.5: Number of books with different titles in school libraries

Generally, it was only at the two highest benchmarks of EFL 475 and EFL 550 that there were large numbers of books available to high percentages of learners. The majority of learners (61\%) at EFL 550 were in schools with libraries that were well-resourced, with more than 10000 books with different titles. For the highest percentage of learners (40\%) at EFL 475, 5001 to 10000 books were available in their school libraries. At the other benchmarks of EFL 400, EFL and EAL 325 and EFL and EAL 175, there was a spread in the availability of books in libraries both at the benchmark and in comparison to the other benchmarks. Illustrative of the huge differences even within a class average benchmark, there are two reporting trends at EFL 400. For one large group of learners, 5001 to 10000 library books were offered. For a greater percentage of other learners at the benchmark, only 251 to 500 books were available. Disconcertingly, in comparison to all of the other benchmarks, the highest percentage of learners in schools at EAL 175 (just over two thirds) had 250 or fewer books in the library.

With reference to reports about number of titles of magazines and periodicals available (Figure 6.6, below), for learners in schools with a class average reaching the PIRLS 2006 international benchmarks 6 to 10 titles of magazines and periodicals were available at the highest percentage of learners.


Figure 6.6: Number of titles of magazines and periodicals in school libraries

It is unexpected that at EAL 325, three quarters of the learners were in schools which had libraries with 31 or more titles of magazines or periodicals and at EFL 325 nearly half of the learners were in schools with 11 to 30 titles in the library. This reporting could perhaps reflect a misunderstanding about number of titles available versus actual number or magazines or
periodicals. The figure of $82 \%$ of learners in schools with 1 to 5 titles available at EFL 175 and the $44 \%$ of learners in schools with 1 to 5 titles and $44 \%$ with no titles available at EAL 175 does seem more realistic.

Although reports about the effects of other shortages of or inadequacies ${ }^{36}$ in resources at schools are dealt with in sub-section 6.4.5, reports on the percentage of learners in schools affected by shortages or inadequacies in library books (Figure 6.7, below) as a resource are considered in this sub-section. Reports on the impact of library book shortages generally do mirror reports about the number of book titles available (see Figure 6.6, above). For example, at EFL 475 and EFL 550, shortages in library books were not at all an issue for most learners and the reported number of book titles was generally also high meaning that schools at the top benchmarks were generally well-resourced. In contrast, at EFL 400, EAL 325 , EFL 325 and EAL 175, the majority of learners were affected some or a lot by shortages of or inadequacies in library books whilst he majority of learners in EFL 175 schools were either not at all affected or only affected a little by such shortages or inadequacies. This is in spite of the fact that $42 \%$ of learners in schools at EFL 175 had access to only 501 to 2000 library books.


Figure 6.7: Percentage of learners affected by shortages of or inadequacies in library books

[^3]
### 6.2.5 Reported shortages of and inadequacies in resources

Principals were asked to point out how much their school's capacity to provide instruction was affected by a shortage of or inadequacy in a number of resources. Response options were a lot, some, a little and not at all. Selected variables linked to this question are considered in this section, namely: qualified teaching staff (6.2.5.1); teachers with a specialisation in reading (6.2.5.2); second language teachers (6.2.5.3); and instructional materials (6.2.5.4).

### 6.2.5.1 Reports on impact of shortages or inadequacies of qualified teaching staff

There is a difference in principals' reports about how much their school's capacity to provide instruction was affected by a shortage of or inadequacy in qualified teaching staff between the lower and higher class average benchmarks (Figure 6.8).


Figure 6.8: Percentage of learners affected by shortages of or inadequacies in qualified teaching staff

Generally, at the upper benchmarks (EFL 550 and EFL 475) and EAL 325, nearly all learners were in schools which had a principal who reported that shortages of or inadequacies in qualified teaching staff were not at all a problem. At EFL 400, $74 \%$ of the learners were in schools which were affected a little by a shortage of or inadequacy in qualified teaching staff. For class average benchmarks EFL 325, EAL 175 and EFL 175, this was not at all a problem for the highest percentages of learners. However, at these lower benchmarks (EFL 175, EAL 175 and EFL 325), there were still problems with qualified teaching staff (either a lot, some or a little).
6.2.5.2 Reports on impact of shortages of or inadequacies in teachers with a specialisation in reading

Figure 6.9 (below) illustrates that, at the two highest class benchmarks of EFL 475 and 550, shortages of or inadequacies in teachers with a specialisation in teaching reading either did not at all affect learners in schools, or only affected them a little. At EFL 400, the majority were also only affected a little by such a shortage or inadequacy. At the lower benchmarks (EAL 325, EFL 325, EAL 175 and EFL 175) one out of five learners (and one in two at EAL 325) were affected a lot or to some extent by such shortages or inadequacies.


Figure 6.9: Percentage of learners affected by shortages of or inadequacies in teachers with a specialisation in reading
6.2.5.3 Reports on impact of shortages of or inadequacies in second language teachers

At EFL 400 and above, over $50 \%$ of the learners were affected a little by a shortage or inadequacy of second language teachers (see Figure 6.10 below). Also, the majority of learners at EFL 325 were not at all affected or only affected a little by second language teacher shortages. In contrast, the highest percentages of learners at the lower class average benchmarks of EFL and EAL 175 and EAL 325 were reportedly affected some or a lot by such shortages. Thus, the lowest achieving schools generally had the greatest problem with shortage or inadequacies in second language teachers. It is not clear which second languages were reported on by principals - either English or African languages - due to the complexities of learner language profiles and language of learning and teaching at these lower benchmarks that primarily serve second language learners.


Figure 6.10: Percentage of learners affected by shortages of or inadequacies in second language teachers

### 6.2.5.4 Reports on impact of shortages of or inadequacies in instructional materials

The highest performing schools (EFL 475 and EFL 550) had learners who were not or were hardly affected by shortages of or inadequacies in instructional materials (see Figure 6.11). However, at EFL 400 and lower, shortages of or inadequacies in instructional materials clearly had a negative impact on the learners represented. Indeed, at EFL 400, EAL 325 and EFL 175, 20\% or more of the learners were impacted a lot by shortages of or inadequacies in instructional materials. At EAL 175, more than half (58\%) of the learners were affected either some or a lot by a shortage of or inadequacy in instructional materials, and for learners in schools at EFL 325 the response categories of some or a little were most prominent.


Figure 6.11: Percentage of learners affected by shortages of or inadequacies in instructional materials

### 6.2.6 Discussion and summary of data on school environment and resources

### 6.2.6.1 School environment

In terms of location, schools at the higher class average benchmark (EFL 400, 475 or 550) tended to be in urban or suburban areas. In contrast, schools with an average not reaching the PIRLS 2006 international benchmarks tended to be in rural locations ${ }^{37}$, with the exception of those at EFL 325, which also tended to be in suburban areas. The rural location of the majority of learners in schools could be a significant factor in the achievement results of learners at the lower class benchmarks.

Indices compiled from principal reports also revealed that the great majority of learners in the highest performing schools (EFL 475 and 550) had principals who reported high levels of both school climate and school safety. In contrast, the highest percentages of learners at EFL 400 and less tended to be in schools with medium levels of school safety and school climate.

### 6.2.6. $\quad$ School resources

Over four fifths of the learners in the highest performing schools, according to class average benchmark, had a school library. Indeed, there was a library for all learners in schools with performances at EFL 475 and EFL 550. For the majority of learners in schools reaching EFL 325 a library was also available. In contrast, the highest percentages of learners in other lowperforming schools (EAL 325, EFL 175 and EAL 325) did not have a school library.

For those schools with a library, only the highest performing schools (EFL 475 and EFL 550) had reasonable numbers of book titles and magazine or periodical titles. The adequacy of the libraries available at EFL 400 and lower is of concern due to the highest percentages of learners having 2000 or fewer book titles in their libraries. Thus, it is puzzling why there are not higher percentages of learners negatively affected a lot by such book title shortages at benchmarks 175 to 400 . This disjuncture in opinions about adequacy of library book resources perhaps refers to the perceived value of library books as a resource in schools,

[^4]whereby it is not seen as a serious problem to have a shortage of library books, nor thought to impact negatively on learners. Based on the large disparities in the number of books with different titles available in school libraries across the class benchmarks, it appears that there is no quantity standard for how many books should be available. Considering that school libraries should provide books to both learners and as teaching resources to their teachers, many schooling environments therefore lack proper access to books for literary experiences.

Principals also reported on the extent to which shortages of and inadequacies in qualified teaching staff, teachers with a specialisation in the teaching of reading, second language teachers and instructional materials affected their learners. Shortages of and inadequacies in qualified teaching staff were not an issue in some school settings (EAL 325, EFL 475 and 550 ). In spite of this, there were still other school environments where a lack of qualified teaching staff impacted the teaching and learning of reading either to small or large extents (EAL 175, EFL 175, EFL 325 and EFL 400). Therefore, there are still problems with shortages of qualified teaching staff which need to be addressed.

Whereas the majority of learners in schools at EFL 325, EFL 400, EFL 475 and EFL 550 were not at all affected or only affected a little by shortages of or inadequacies in teachers with a specialisation in reading, learners in lower-performing schools (EAL 325; EAL 175 and EFL 175) were inclined to be affected either a lot or to some extent. Therefore, shortages of and inadequacies in teachers with a specialisation in reading were not an issue in highperforming schools but there are clearly still some low-performing schools where this may be an issue that impacts the teaching and learning of reading. Given the rural location of these schools, location could be a factor in access to suitable teachers.

At EFL 400, 475 and 550, over $50 \%$ of the learners were negatively affected a little by shortage or inadequacy of second language teachers. As there is only one language of instruction in these EFL education settings, and as second language learners were not a majority grouping at these class benchmarks ${ }^{38}$, it is plausible that a shortage in or inadequacy of second language teachers would not have a major impact on learners. In contrast, one can then understand why such shortage of or inadequacies in second language teachers would have a far greater impact at schools at the lower class average benchmarks of EFL and EAL 175 and EAL 325, where the highest percentages of learners were reportedly affected some or a lot by a shortage of or inadequacy in second language teaching staff. It is not clear what second languages are reported on by principals - either

[^5]English or African languages - due to the complexities of learner language profiles and language of learning and teaching at these lower benchmarks which primarily serve second language learners.

It was only for learners in the highest performing schools (EFL 475 and EFL 550) that shortages of or inadequacies in instructional materials were not at all an issue. However, at EFL 400 and lower, shortages of or inadequacies in instructional materials clearly had a negative impact at the schools represented. It can therefore be surmised that shortages of or inadequacies in instructional materials are serious problems in most education settings, except for the privileged minorities in high-performing, well-resourced schools.

In the next section, teachers' professional organisation and environment as reported by principals are presented.

### 6.3 TEACHER PROFESSIONAL ORGANISATION AND ENVIRONMENT

In this section, the opportunities available for teacher collaboration and development in schools (6.3.1) are examined, specifically principals' reports on the existence of an official policy statement related to promoting cooperation and collaboration among teachers, and the frequency of formally scheduled time for teachers to meet to share or develop instructional materials and approaches. The organisation of the school reading literacy strategy (6.3.2) is then reported. The availability of a written statement of the reading curriculum to be taught is discussed, followed by reports on informal initiatives undertaken to encourage learners to read, school-based teacher development programmes for improving reading instruction, and the availability of school guidelines on how to coordinate reading instruction across teachers.

### 6.3.1 Teacher collaboration and development opportunities

Figure 6.12 (below) depicts principals' responses to the question "Does your school have an official policy statement related to promoting cooperation and collaboration among teachers?" With the exception of EFL 550, the majority of learners in schools at the other class average benchmarks had an official policy statement for promoting cooperation and collaboration among teachers. Nevertheless, there were still large percentages of learners in schools at each of the class average benchmarks which did not have such a policy. Of course, the existence of this policy document does not guarantee implementation.


Figure 6.12: Reports on existence of an official policy statement related to promoting cooperation and collaboration among teachers

Principals' responses to the question "About how often do the teachers in your school have formally scheduled time to meet to share or develop instructional materials and approaches?" offer some highly relevant insights into teacher collaboration in schools at each of the class average benchmarks (Figure 6.13, below).


Figure 6.13: Reported frequency of formally scheduled time for teachers to meet to share or develop instructional materials and approaches

Most learners(87-100\%) in schools reaching the highest benchmarks according to class average (EFL 400, 475 and 550) had teachers with formally scheduled time to meet to share or develop instructional materials and approaches once a week more often. This scheduled
time dropped to between $37 \%$ and $59 \%$ of learners with teachers that met once a week or more often at the lowest benchmarks (EFL175, EAL 175, EFL 325 and EAL 325).

Principals were also asked to mark which teacher education opportunities were available to teachers responsible for reading instruction in their schools. At all of the class average benchmarks, all of the learners (100\%) had teachers who had opportunities to attend short courses, workshops and seminars and in-service training programmes.

### 6.3.2 Organisation of the school reading literacy teaching strategy

Principals were asked a number of questions designed to give an indication of the level of planning, organisation and coordination of the school reading literacy teaching strategy. Firstly, principals stated whether or not their school had a written statement of the reading curriculum to be taught in the school (in addition to national or regional curriculum guides). At EFL 175, EAL 175, EFL 325 and EFL 400, the majority of learners were in schools that did not have such a statement. Even at EAL 325, EFL 475 and EFL 550, large percentages of learners were in schools without such a statement (see Figure 6.14, below).


Figure 6.14: Reports on availability of a written statement of the reading curriculum to be taught in the school

Secondly, principals specified whether their schools had informal initiatives to encourage learners to read. Figure 6.15 (below) illustrates graphically the principals' responses at each of the class average benchmarks. Clearly, the majority of learners were in schools which had informal initiatives to encourage learners to read.


Figure 6.15: Reports on informal initiatives to encourage learners to read

Thirdly, principals indicated whether their school had school-based programmes for teachers geared towards the improvement of reading instruction. In consideration of the response distributions in Figure 6.16 (below), there is no distinctive pattern across the benchmarks. At EFL 550, all of the learners were in schools with such instructional development support for teachers. At three of the lowest class benchmarks of EFL and EAL 175 and EAL 325, small majorities of learners were in schools which did offer such programmes for their teachers. In these cases, and for the minority of learners in schools at EFL 325, EFL 400 and EFL 475, it would appear that there was an attempt to improve teachers' instruction skills.


Figure 6.16: Reports on school-based programmes for teachers geared towards the improvement of reading instruction

Lastly, principals were asked whether or not their school had its own guidelines on how to coordinate reading instruction across teachers (Figure 6.17, below). With the exception of
learners in schools at class benchmark EFL 325 and EFL 400, the majority were in schools which did have their own guidelines on how to coordinate reading instruction across teachers. Even so, very high percentages of learners were in schools at EFL 175, EAL 175, EAL 325 and EFL 475 which did not have such guidelines. Again, it was only at EFL 500 where all learners were in schools which had guidelines in place.


Figure 6.17: Reports on school's own guidelines on how to coordinate reading instruction across teachers

### 6.3.3 Discussion and summary of data on teacher professional organisation and environment

### 6.3.3.1 Opportunities for teacher collaboration and development

Except for learners in schools at EFL 550, the majority at the rest of the class average benchmarks did have an official policy statement for promoting cooperation and collaboration among teachers. Nevertheless, there were still large percentages at each of the class average benchmarks in schools which did not have such a policy. As evident in principals' responses regarding formally scheduled time for teachers to meet to share or develop instructional approaches or materials, the existence of policy for teacher collaboration and cooperation does not guarantee implementation. It was only at schools reaching the highest benchmarks according to class average (EFL 400, 475 and 550) that by far the majority of learners had teachers who reportedly had formally scheduled time to meet to share or develop instructional materials and approaches once a week or more often. At schools at the lower benchmarks of EFL and EAL 325 and EFL 175 and EAL 175, such formal meetings were more sporadic. At EFL 325, although a small majority (58\%) of learners in schools also
had teachers with weekly formally scheduled times to meet, the remainder (42\%) had teachers who only had formally scheduled time either once a month or less than once a month. In stark contrast to the higher class average benchmark schools, whilst there is a wide response distribution at each of the benchmarks, the highest percentages of learners in schools at EAL 325, EFL and EAL 175 had teachers who only had formally scheduled time to meet once a month. The wide response distribution suggests a lack of standardisation regarding scheduled meeting times for teachers in schools. Also, if meetings are a measure of cooperation and collaboration amongst teachers at a school then policy alone does not lead to active collegial engagement.

Principals were also asked to mark which teacher education opportunities were available to teachers responsible for reading instruction in their schools. Every learner in all schools at each class benchmark had teachers who had opportunities to attend short courses, workshops and seminars and in-service training programmes. Given the availability of such opportunities, it might be expected that teachers would be able to address the teaching of reading comprehensively at schools. In light of the PIRLS 2006 achievement results, this is clearly not the case. Therefore, whether or not teachers utilise these opportunities optimally is questionable, as is the quality and/or relevance of the training teachers do attend.

### 6.3.3.2 Organisation of the school reading literacy strategy

Principals commented on the availability of a written statement of the reading curriculum to be taught, on informal initiatives undertaken to encourage learners to read, school-based teacher development programmes for improving reading instruction, and the availability of school guidelines on how to coordinate reading instruction across teachers.

At EFL 175, EAL 175, EFL 325 and EFL 400, the majority of learners were in schools which did not have a written statement of the reading curriculum to be taught at the school. Even at EAL 325 and the highest benchmarks of EFL 475 and EFL 550, large percentages of learners were in schools without such a statement. Although formal strategy documents were reportedly lacking in many schools at each of the class benchmarks, for the majority of learners in schools informal initiatives were undertaken to encourage them to read.

In terms of school-based programmes for teachers geared towards the improvement of reading, there is no distinctive pattern across the benchmarks. Only at the highest class average benchmark of EFL 550 were all learners in schools with such instructional development support for teachers. Thus, it would seem that teachers in schools at this level
of achievement do not 'rest on their laurels', and teacher development is an ongoing process in spite of presumed learner success. At three of the lowest class benchmarks of EFL and EAL 175 and EAL 325, small majorities of learners were in schools that did offer such programmes for their teachers. In these cases, and for the minority of learners in schools at EFL 325, EFL 400 and EFL 475, it appears that there is an attempt to improve teachers' instruction skills. However, it would seem that ongoing school-based programmes for teacher improvement of reading are a necessity for all teachers in South African primary schools.

The majority of learners in schools at EFL 325 and EFL 400, and very high percentages of learners in schools at EFL 175, EAL 175, EAL 325 and EFL 475, had a principal who reported that the school did have its own guidelines on how to coordinate reading instruction across teachers. Again, it was only at EFL 550 that all learners were in schools that had guidelines in place. A lack of guidelines on how to coordinate reading instruction across teachers either within a grade or across the primary school grades could perhaps indicate a lack of consensus on school goals for reading instruction. This lack of awareness of school goals could in turn lead to a lack of a quality standard for reading development outcome at each grade and a non-awareness of expectations of learners as they enter subsequent grades and phases of education.

### 6.4 LEARNER CHARACTERISTICS

In this section, principal reports on the characteristics of the learners who completed the PIRLS assessments are presented across the class average benchmarks. Indicators of learners' socioeconomic status are discussed (6.4.1). Learners' language of testing for the PIRLS 2006 versus their home language(s) is also deliberated upon (6.4.2). Reports about learners' early literacy skills are then presented (6.4.3).

### 6.4.1 Socioeconomic status

To help to establish the socioeconomic status of learners, principals were asked to indicate the approximate percentages of their learners who came from economically disadvantaged and economically advantaged homes. Response options included 0 to $10 \%, 11$ to $25 \%, 26$ to $50 \%$ and more than $50 \%$. Figure 6.18 (below) outlines the percentages of learners considered to be from economically disadvantaged homes at each class average benchmark. As evident in the graph, the vast majority of learners were in schools at the lower class benchmarks of EFL 175, EAL 175, EFL 325 and EAL 325 which had more than $50 \%$ of the learners from economically disadvantaged homes. Even at EFL 400, 35\% of the learners
were in schools which had more than $50 \%$ of learners from disadvantaged homes. A further $33 \%$ of learners were in EFL 400 schools which had $26 \%$ to $50 \%$ of the learners from a disadvantaged home economic milieu. In comparison, at the two highest class benchmarks of EFL 475 and EFL 550, nearly all of the learners were in schools which had only 0 to $10 \%$ of learners from a disadvantaged background.


Figure 6.18: Principal reports on percentages of learners from economically disadvantaged homes

Therefore, as suggested by Figure 6.19, most learners were in schools at the lower class average benchmarks (between 175 and 400) where principals reported that only 0 to $10 \%$ of learners were from affluent homes. At the two highest benchmarks (EFL 475 and 550), most learners were in schools which had more than $50 \%$ of learners from affluent backgrounds.


Figure 6.19: Principal reports on percentages of learners from economically affluent homes

Another indicator of the socioeconomic make-up of the school learner population is the percentage of learners who receive a free or reduced-price lunch. Principals were asked "For the grade 4 learners in your school, about how many receive free or reduced-price lunch?' On the basis of the patterns of response distribution across the class benchmark subsample, it can be seen that there are three clear response distributions aligned to various levels of the class average achievement continuum (Figure 6.20, below).


Figure 6.20: Percentage of Grade 4 learners receiving free or reduced-price lunch

At the lowest class average benchmarks of EFL and EAL 175,over half of the learners were in schools where all of them received a free or reduced-price lunch. At the mid-level class average benchmarks (EFL 325, EAL 325 and EFL 400) between $66 \%$ and $84 \%$ of the learners were in schools which had some of them receiving a free or reduce-priced lunch. At the highest class average performance levels, none of the learners were in schools which had a a free or reduced-price lunch programme.

### 6.4.2 Language of testing versus home language

Principals were asked what percentage of their learners did not speak the language of testing for the PIRLS 2006 at their school as a first language. Response categories included 0 to $10 \%, 11$ to $25 \%, 26$ to $50 \%$ and more than 50\%. For learners in EFL schools at the lower class average benchmarks of EFL 175 and EFL 325, most were in schools which had more than $50 \%$ of learners who did not speak English as the language of testing as a first language. Even higher up on the achievement spectrum at EFL 400, close to half of the learners were in schools in which more than 50\% were tested in English which was not their first language and a further $51 \%$ were in schools with 26 to $50 \%$ of learners tested in this
non-vernacular. At EFL 475, 51\% of learners were in schools which had 26 to $50 \%$ of their learners without the test language as a home language and another 49\% in schools which had 0 to $10 \%$ of learners who were not first language speakers of the test language.

At EFL 550, all learners were in schools which had only 0 to $10 \%$ who did not speak the language of the test as a first language. In comparison, at EAL 175, the majority of learners were in schools which had 0 and $10 \%$ who did not speak the language of testing as a first language. At EAL 325, half of the learners were in schools which had 0 to $10 \%$ who did not speak the language of testing as a first language (see Figure 6.21, below).


Figure 6.21: Principal reports on the percentage of learners who did not speak the language of testing as a first language

Principals also gave an indication of the percentage of learners at their school who received some instruction at school in their home language rather than the language of testing (i.e. the main language of learning and teaching from Grades 1 to 3). As evident in Figure 6.22 (below), the only extreme outlier is EFL 175, where $44 \%$ of learners were in schools which had more than $50 \%$ of learners who received instruction in a language other than the language of testing. Another interesting pattern of response distribution is at EFL 475, where $29 \%$ of learners were in schools which had more than $50 \%$ of the learners receiving some instruction in their home language other than English. At EFL 400, 40\% of learners were in schools which had 26 to $50 \%$ of learners who also received some instruction in their home language.


Figure 6.22: Principal reports on the percentage of learners who received some instruction in their home language which was not the language of testing

More specifically, principals were asked if, for learners in Grade 4 and below, their school made provisions for reading instruction in mother tongue for those students whose mother tongue was not English (Figure 6.23). Regardless of whether or not schools were EFL or EAL institutions, between approximately $26 \%$ and $85 \%$ of learners in these schools received mother tongue reading instruction from Grades 1 to 4 at each of the class average benchmarks. At EFL 175, 86\% of learners had access to mother tongue reading instruction at these grades. The high percentage of learners in schools at EFL 400 (69\%) receiving mother tongue reading instruction also stands out.


Figure 6.23: Percentage of learners in schools which made mother tongue reading instruction provisions for learners whose mother tongue was not English

### 6.4.3 Early literacy skills

Principals in schools at each of the class benchmarks identified how many of their learners had early literacy skills on entry to school. Figure 6.24 (below) reveals that the highest percentages of learners were in schools at benchmarks EFL 175, EAL 175 (65\%, 4.6), EFL 325, EAL 325 and EFL 400 that had less than $25 \%$ of the learners entering school with early literacy skills. Even at class average benchmark EFL 475, nearly a third of the learners were in schools which had less than $25 \%$ of the learners entering with such skills. Seemingly, EFL 550 was the only class average benchmark at which early literacy skills did not present a major problem, with nearly three quarters of the learners in schools which had more than $75 \%$ of their learners entering with early literacy skills.


Figure 6.24: Principal reports on the percentages of learners with early literacy skills

### 6.4.4 Discussion and summary of data on learner characteristics

### 6.4.4.1 Socioeconomic status

The vast majority of learners in schools at the lowest class benchmarks had principals who reported that more than $50 \%$ of their learners were from economically disadvantaged homes. Even at EFL 400, 35\% of the learners were in schools that had more than $50 \%$ of learners from disadvantaged homes. In comparison, at the two highest class benchmarks of EFL 475 and EFL 550 nearly all of the learners were in schools which had only 0 to $10 \%$ of learners from a disadvantaged background. Confirming this trend further, most learners were in schools at the lower class average benchmarks (between 175 and 400) that had only 0 to
$10 \%$ of learners from affluent homes. At the two highest benchmarks, most learners were in schools which had more than $50 \%$ of learners from affluent backgrounds.

At the lowest class average benchmarks of EFL and EAL 175, over half of the learners were in schools which had all of their learners receiving a free or reduced-price lunch. At the midlevel range of performance (EFL 325, EAL 325 and EFL 400), the majority of learners were in schools which had some of their learners receiving a free or reduce-priced lunch. For No learners at the highest class average performance level schools received a free or reducedprice lunch.

Therefore, learner socioeconomic status does play a strong role in the achievement of learners at each of the class average benchmarks. On average internationally for the PIRLS 2006 main study, $18 \%$ of the learners were in schools which had more than $50 \%$ of their learners from economically disadvantaged homes, with the greatest percentages (more than $60 \%$ of learners) in South Africa and Indonesia. Moreover, on average internationally, the reading achievement of learners attending schools with a high proportion of disadvantaged learners was lower than for learners with fewer disadvantaged peers (Mullis et al., 2007). Thus, it is not surprising to find this same low achievement and learner socioeconomic disadvantage trend for this study for learners across the class average achievement benchmarks.

### 6.4.4.2 Language of testing versus home language

At both of the lower EFL (EFL 175 and EFL 325) benchmarks, most learners were in schools which had more than $50 \%$ of learners who did not speak English as the language of testing as a first language. Therefore, these learners' second language status likely plays a strong role in their achievement outcomes. Even at EFL 400, close to half of the learners were in schools which had more than $50 \%$ of their learners tested in a non-vernacular language, and a further $51 \%$ of learners were in schools which had 26 to $50 \%$ of their learners tested in this non-vernacular.

In comparison, at EAL 175, the majority of learners were in schools that had the bulk of their learners tested in their home language. These learners would have been tested in the language of instruction from Grades 1 to 3, an African language. At EAL 325, half of the learners were in schools which had only 0 to $10 \%$ of their learners who did not speak the language of testing as a first language. On this basis, it would appear that differences in
learner home language and testing language do not offer the only explanation for poor learner achievement at these EAL class benchmarks.

At EFL 475, half of the learners were in schools with 26 to $50 \%$ of learners who did not have the test language as a home language, and another $49 \%$ were in schools which had 0 to $10 \%$ of learners who were not first language speakers of the test language. This language of testing scenario at EFL 475 indicates a multilingual learner cohort, and suggests that testing in a language other than the language spoken at home is not an issue for these learners. Socioeconomic status and/or early literacy skills could play a role in the higher class average achievement of these learners. At EFL 550, there was a very high level of congruence between reports of learners' home language and language of testing, suggesting a mostly homogeneous cohort in terms of language at this level of achievement.

In terms of the percentage of learners who received some instruction at school in their home language rather than the language of testing, the only extreme outlier is EFL 175, where $44 \%$ of the learners were in schools which had more than $50 \%$ of learners who received instruction in a language other than the language of testing. In an EFL schooling context at this very low level of class average achievement, this is indicative of the level of support learners still need in their home language to support their learning in English. Therefore, these learning environments are definitely not monolingual English learning environments. At EFL $400,40 \%$ of learners were in schools which also had 26 to $50 \%$ of learners who received some instruction in a home language that was not their main instructional language. Nearly a third of the learners were in schools at EFL 475 which had more than $50 \%$ of their learners receiving some instruction in their home language other than English. At these two higher class benchmarks, this could be indicative of a learning support strategy implemented which could be beneficial for achievement.

Moreover, regardless of whether or not schools were EFL or EAL institutions, between approximately $26 \%$ and $85 \%$ of learners in these schools received mother tongue reading instruction from Grades 1 to 4 at each of the class average benchmarks. At EFL 175, perhaps confirming the aforementioned comments about the non-English instructional focus in school environments at this level of achievement, most of the learners had access to mother tongue reading instruction at these grades. The high percentage of learners in schools at EFL 400 (69\%) who received mother tongue reading instruction also stands out. At this level of achievement one would not expect mother tongue reading instruction to be so prominent, especially in English medium schools.

### 6.4.4.3 Early literacy skills

The highest percentages of learners at benchmarks EFL 400 and lower were in schools which had less than $25 \%$ of their learners entering school with early literacy skills. Even at class average benchmark EFL 475, nearly a third of the learners were in schools where less than $25 \%$ of the learners entered school with early literacy skills. Seemingly, EFL 550 was the only class average benchmark at which early literacy skills did not present a major problem, with the majority of learners being in schools which had more than $75 \%$ of their learners entering school with early literacy skills. Generally, most South African learners therefore do not enter school with adequate preparation for literacy, and this may impact negatively on their achievement, as evidenced by these data. The DoE (2009a) reports that evidence from household surveys confirmed that by 2007, as many as $88 \%$ of six-year-olds and $60 \%$ of five-year-olds participated in some form of Early Childhood Development (ECD). The DoE (2009a) also acknowledges that the quality of such education varies in the country. The findings for this study stated above suggest that, at the least, this ECD preparation does not sufficiently address the development of early literacy skills.

### 6.5 CONCLUDING COMMENTS

In this chapter, PIRLS 2006 principal questionnaire data were used to describe the meso level school contexts and characteristics of those learners at each of the class average benchmarks for the study.

In Chapter Seven, findings for the Phase Two qualitative case studies of schooling contexts for the development of reading literacy are presented.


[^0]:    ${ }^{31}$ EFL $=$ English as a First Language; EAL = English as an Additional Language; See Chapter Five for an explanation of the sampling and selection of these class average benchmarks.
    ${ }^{32}$ See Chapter Four for a visual summary of the conceptual framework.

[^1]:    ${ }^{33}$ An average was computed for each principal on a five-point scale where: very low $=1$, low $=2$, medium $=3$, high $=4$, and very high $=5$. Learners whose principal had an average response greater than 3.67 were assigned to the high level of the index; those where the average was below 2.33 to the low level; and the rest to the medium level (Mullis et al., 2007, p.270).

[^2]:    ${ }^{34}$ Principals' average response on a 4-point scale was computed in the following manner: Serious problem $=1$; Moderate problem $=2$; Minor problem $=3$; and Not a problem $=4$. Schools which had an average greater than 3 were allocated to the high level of the index; schools which had an average between 2 and 3 were assigned to the medium level of the index; and those with less than 2 to the low level (Mullis et al., 2007, p.278).
    ${ }^{35}$ For data reporting purposes throughout this chapter, the results have been rounded off to the nearest whole number so the aggregate of the percentages at each benchmark may appear inconsistent.

[^3]:    ${ }^{36}$ It is recognised that the phrase "shortages or inadequacies" is ambivalent in that it can refer to either quantity or quality issues regarding key resources. However, the phrasing has been retained as it was used in the phrasing of the question for the items in the PIRLS 2006 school questionnaire. Thus, principals may have been referring to shortages and/or inadequacies when they responded to these items but this cannot be determined.

[^4]:    ${ }^{37}$ A factor that must be considered in the interpretation of this response distribution is that there is no consensus about what constitutes rural and urban areas in South Africa. Their meaning and uses vary considerably, depending on who employs them and for what purposes (Nelson Mandela Foundation, 2005, p.x). The high percentage of rural schools sampled for the PIRLS 2006 main study is however also a reflection of the location of several of the African language schools and attempts to ensure sufficient sampling of all the language samples for the study (Howie et al., 2007).

[^5]:    ${ }^{38}$ As suggested by Figure 6.21, which reports percentages of learners who did not write the PIRLS assessments in a first language.

