



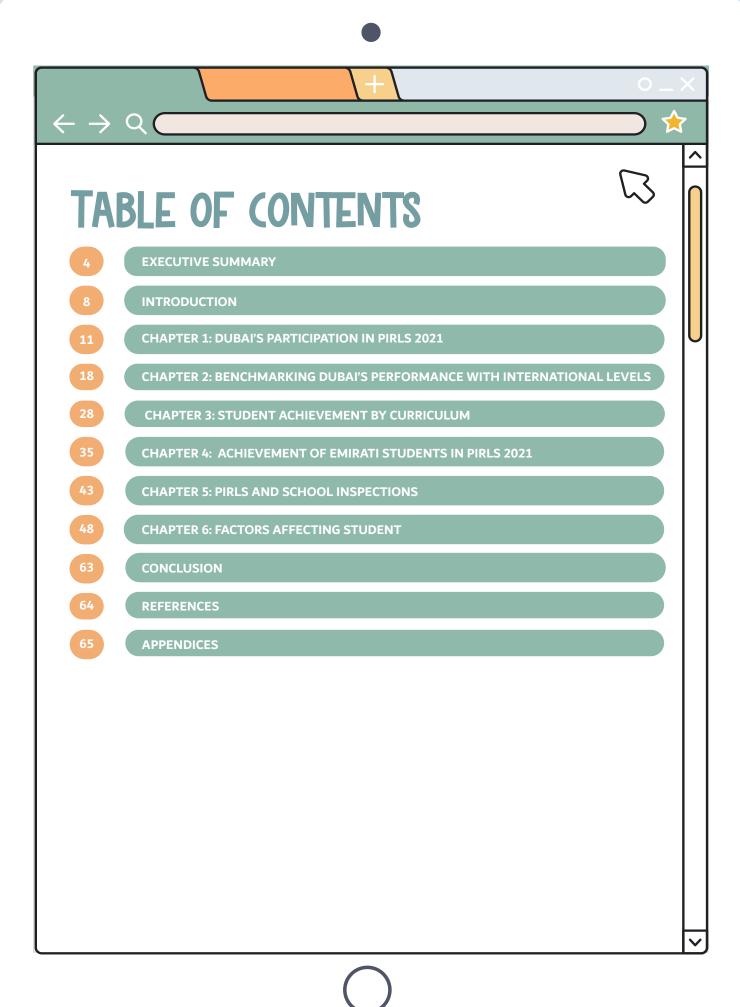
DUBAI PIRLS 2021 REPORT



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EXECUTIVE SUMMARY

Dubai has participated in three consecutive PIRLS cycles since 2011 and has witnessed significant improvement over time. This report includes the official PIRLS results of both public and private schools in Dubai, with separate scores for Dubai private schools provided to distinguish the achievements made by this group of schools; regulated as they are by the Knowledge and Human Development Authority (KHDA).



When we consider the top 15 highestachieving participants of PIRLS 2021, in terms of average points score, Dubai has shown the greatest improvement since the previous (2016) PIRLS cycle, followed by Russia, Singapore, and Ireland.

PIRLS scores are further classified according to one of four international benchmarks; "Low", "Intermediate", "High" and "Advanced". In 2021, 24% of all school students in Dubai reached the Advanced International Benchmark threshold of 625 points, compared to 11% in 2016, and 6% in 2011.

In Dubai private schools, 27% of students reached the Advanced International Benchmark threshold in 2021, compared to 12% in 2016 and 9% in 2011.

OVERALL ACHIEVEMENT IN PIRLS 2021 Students at Dubai schools

Students at Dubar Scher (public and private combined) averaged:

- 552 points
- 52 points higher than the international average of 500
 - 37 points higher than their previous score in PIRLS 2016 (515 points)

Students at Dubai private schools averaged:

- 566 points
- 66 points higher than the international average of 500
- 39 points higher than their previous score in PIRLS 2016 (527 points)

CURRICULUM MATTERS

In line with past cycles, student achievement in PIRLS varied according to school curricula. Students in schools offering the English (UK) and International Baccalaureate (IB) curricula achieved the highest average scores: (588 and 583 points respectively). Students enrolled in Indian curriculum schools achieved an average score of 567 points, while those in US curriculum schools averaged 522 points. Students attending private UAE Ministry of Education (MoE) schools attained a lower average score than their peers at 468 points, 32 points below the international average of 500.

These scores are also reflected in the context of international benchmarks. The highest proportion of privately educated students who achieved High and Advanced International Benchmarks were enrolled in UK and IB schools, while the largest proportion of students who scored at the Low International Benchmark were those attending MoE schools.

EMIRATI STUDENTS

For the first time since Dubai began participating in PIRLS, with an average score of 508, Emirati students attending private schools attained above the international mean. When compared to their peers of other nationalities, Emirati students at schools offering the UK and International Baccalaureate (IB) curricula outperformed those at schools offering the US or UAE Ministry of Education (MoE) curricula. However, on average, Emirati students still scored lower than students of other nationalities attending the same schools.



GENDER AND READING SCORES

In Dubai schools, girls averaged a score of 557 points in the PIRLS assessment, outperforming boys who averaged 547 points. This trend was observed across all nationalities in Dubai and in other participating regions.

PIRLS SCORES AND SCHOOL INSPECTIONS

Individual Dubai private school scores in PIRLS were closely correlated with school inspection ratings. 54% of students in 'Outstanding' private schools and 32% of students in 'Very Good' schools reached the Advanced International Benchmark threshold of 625, while this figure was only 11% of students in those schools evaluated as 'Acceptable' or 'Weak'. Furthermore, around 30% of students attending 'Acceptable' and 'Weak' schools were at the Low or Below Low International Benchmarks of 400 points or fewer.

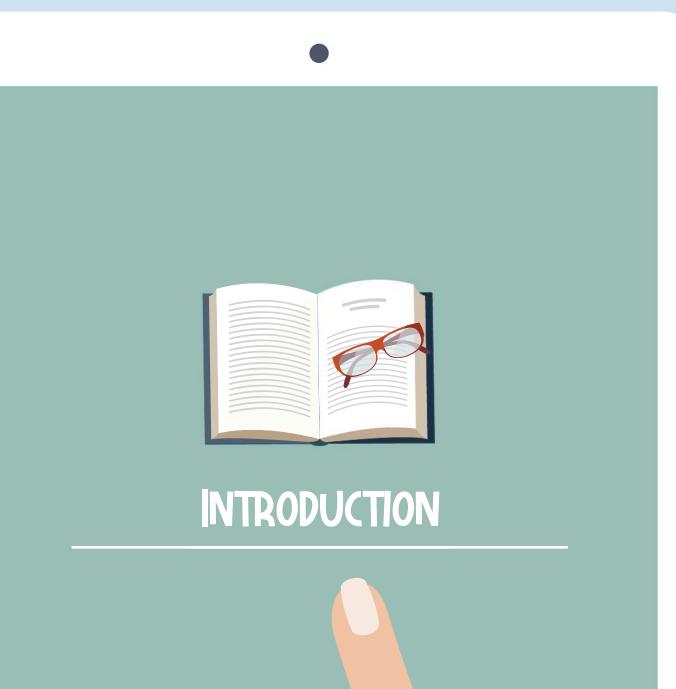
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INFLUENCES ON ACHIEVEMENT

The PIRLS assessment also incorporates questions on the social and environmental factors that may influence students' reading achievement scores. These factors include their proficiency at accessing digital resources, their early childhood exposure to literacy and their general confidence and enjoyment of reading.

For example, students in Dubai considered to have well-developed digital literacy skills scored higher in PIRLS than those who had medium to low digital skills; they averaged 581 points compared to the international average of 517. In addition, students whose parents reported their children had frequently engaged in reading activities prior to the start of primary school scored higher than students who only occasionally engaged in reading activities before primary school. Enjoyment of reading was found to be strongly correlated with reading achievement scores in PIRLS. Students in Dubai who reported they 'very much like reading' averaged 571 points, compared with 565 points for students who 'somewhat like reading' and 560 points for students who reported they 'do not like reading.'







THE IMPORTANCE OF READING IN DUBAI

In Dubai, reading holds significant importance as it plays a central role in the emirate's vision of becoming a knowledge-based society. Recognizing that reading is not only a fundamental skill but also a catalyst for personal and societal growth, Dubai has prioritized initiatives and programs that promote a culture of reading and lifelong learning.

Dubai places a strong emphasis on providing high-quality education to its residents. Reading is recognized as a fundamental skill that underpins academic achievement across subjects. Proficient reading skills enable students to comprehend complex texts, engage critically with information, and communicate effectively. By promoting a culture of reading in educational institutions, Dubai strives to empower students with the necessary literacy skills to excel academically and pursue lifelong learning.

Reading is a source of intellectual enrichment, personal growth, and lifelong learning. Dubai encourages individuals of all ages to cultivate a love for reading by providing access to libraries, community centers, and digital resources. The act of reading broadens horizons, expands knowledge, and nourishes the mind. It fosters curiosity, creativity, and a thirst for continuous self-improvement. By embracing reading as a leisure activity, Dubai residents can enhance their well-being, expand their perspectives, and embark on intellectual journeys.

PARTICIPATION IN PIRLS 2021

The Progress in International Reading Literacy Study (PIRLS) is a globally assessment that evaluates the reading literacy skills of fourth grade / year five students across various countries. PIRLS is conducted every 5 years under the guidance of the International Association for the Evaluation of Educational Achievement (IEA).

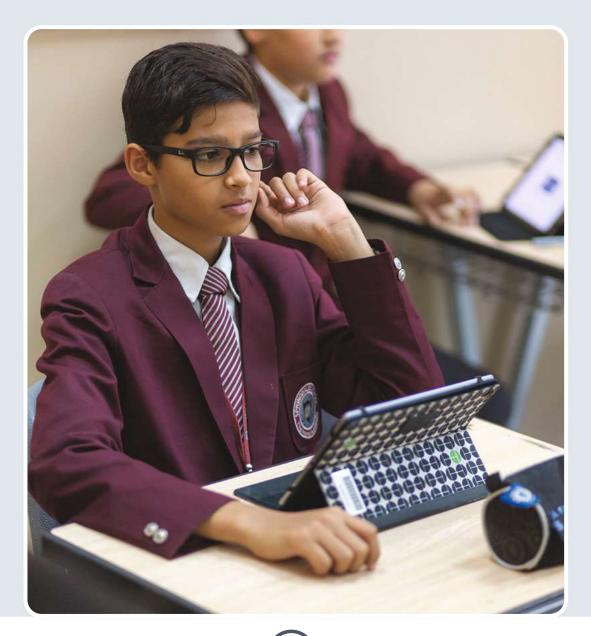
PIRLS 2021 aimed to provide a comprehensive understanding of students' reading abilities and their performance on a global scale. By participating in PIRLS 2021, countries had the opportunity to benchmark their students' reading skills against international standards and gain valuable insights into the factors that contribute to successful reading literacy. PIRLS test explores the reading habits of students, their engagement with different types of texts and the instructional practices employed by participating countries. Participating in this assessment will provide valuable information that can inform evidence-based policies and interventions aimed at improving literacy education.



DUBAI SAMPLE PARTICIPATING IN PIRLS 2021

A total of 9,350 Grade 4 students were sampled for PIRLS 2021. This accounts for a 16% increase from 2016, when only 7,859 students participated. The schools sampled for the assessment reflect the diversity of curricula offered in Dubai's education system.

This report outlines Dubai's Third participation in PIRLS and it will focuses on Dubai's remarkable achievement in reading literacy, drawing comparisons with global participants. Furthermore, the report scrutinizes the trends observed between the PIRLS 2016 and PIRLS 2021 assessments.







CHAPTER 1:

DUBAI'S PARTICIPATION IN PIRLS 2021

1.1 WHY PIRLS?

PIRLS is an international comparative study that evaluates reading literacy performance as well as instructional practices used by schools and teachers.

PIRLS uses an assessment framework derived from a comprehensive analysis of national curricula. The study was developed and is implemented by the International Association for the Evaluation of Educational Achievement (IEA), an independent international cooperative of national research institutions and government agencies. The IEA has been leading the way in international comparative assessments of educational achievement since the 1960s. These assessments help to deepen our understanding of the impact of different policies across countries with diverse educational systems.

Figure 1 identifies the two purposes of reading (literary and informational) and the four processes of reading comprehension:

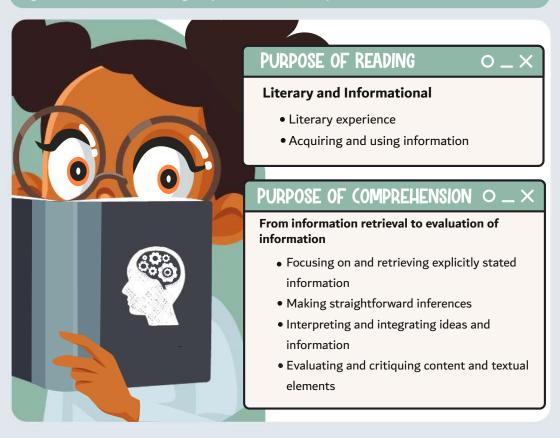


Figure 1 - PIRLS: Two Reading Purposes and Four Comprehension Processes

O = X

PIRLS employs a balanced approach by evaluating against these identified reading purposes and reading comprehension processes, elucidated as follows:

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Reading Purposes:

Across the world, reading literacy is directly related to the reasons people read; including reading for pleasure and personal interest, learning, and participation in society.

Young children's early reading experience often includes narrative texts (e.g., storybooks or picture books) or informational texts that tell children about the world around them.

As young students advance in their literacy skills and encounter more complex reading materials in their schoolwork, their ability to obtain information from books and other printed materials becomes increasingly crucial.

Reading Comprehension Processes:

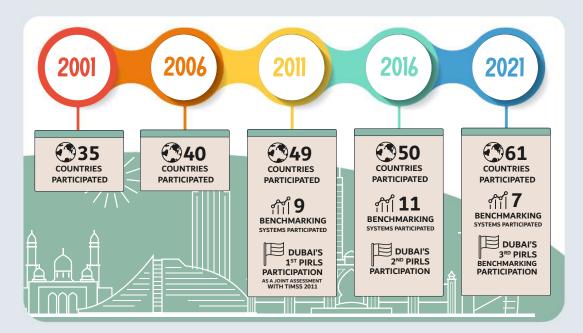
Various reading situations require readers to construct meaning through different processes, which may vary depending on the context.

Beyond these processes, readers can employ metacognitive strategies to assess their comprehension and adjust their approach accordingly.

In addition, the background experiences that readers bring to reading equip them with an understanding of language, texts, and the world, through which they filter their comprehension of the material.

1.2 TWENTY YEARS OF PIRLS TRENDS

PIRLS 2021 is the fifth assessment in the current trend series, following PIRLS 2001, 2006, 2011, and 2016. 2021 is Dubai's third participation as *benchmarking participant*. ¹ Dubai has been a full participant in this programme since 2011.



The IEA oversees the global administration of PIRLS, with each participating nation or education system adhering to specific international guidelines regarding target populations, sampling design, sample size, exclusions, assessment administration, and the determination of participation rates when collecting their own data.

In Dubai, the Knowledge and Human Development Authority (KHDA) is responsible for carrying out PIRLS. As a governmental regulatory body focused on education quality assurance in Dubai, United Arab Emirates, the KHDA oversees the *private* education sector. This role encompasses early childhood education centres, schools, higher education providers, and training institutes.

Although this report is substantively focused on the Dubai private school sector, for comparison, and for some of the data presented here, the combined Dubai private and public section outcomes are quoted. This is the case because the actual 'benchmarking participation' of Dubai is in relation to all schools in the Emirate.

¹ a benchmarking participant refers to a country or education system that participates in the study but is not included in the international rankings or comparisons



1.3 TRANSITIONING TO DIGITAL PIRLS

In line with its commitment to innovation, PIRLS 2021 shifted from paper-based booklets to a digital platform. About half of the countries participating in the study implemented the test via computers, providing students with a streamlined and user-friendly interface that allowed them to read passages and answer questions seamlessly. The colourful passages were designed to engage students, and new questions were added to facilitate automated scoring.

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Figure 2: Digital PIRLS

EASY TO ADMINISTER

PIRLS 2021 was administered through an eAssessment system that brought efficiency to the operational aspects of PIRLS including computerised delivery of assessment materials to students

BETTER MEASUREMENT

One unified PIRLS 2021 assessment can better measure the range of high, medium, and low reading abilities found in each of the PIRLS participating countries

BETTER EXPERIENCE

DigitalPIRLS 2021 reading assessment included a variety of reading texts, presented in an engaging and visually attractive format. This aimed to motivate students to read and interact with the texts and answer comprehension questions

The computerised DigitalPIRLS 2021 integrated the PIRLS passages and the less difficult PIRLS Literacy passages in flexible ways. This made it possible to target the difficulty of the PIRLS 2021 assessment to the level of achievement of the student population in the participating countries.





1.4 WHAT THE PIRLS RESULTS TELL US

PIRLS outcomes are reported on a scale from 0 to 1,000, with an average scale score of 500 and standard deviation of 100. In addition to numerical scale scores, PIRLS also features the aforementioned international benchmarks. These benchmarks offer a method for interpreting the scale scores and understanding the variations in students' proficiency in a subject along the assessment scale. The PIRLS benchmarks classify students' reading achievement into four levels, each determined by the skills and knowledge required to successfully answer the test items at specific score cutoff points.

Since its inception in 2001, the list of global participants in PIRLS has changed. However, comparisons between the 2021 results and previous ones remain possible because achievement scores in each assessment are placed on a scale that is independent of the participating education systems in any specific year.

In addition to international benchmarking, PIRLS provides a wealth of data and useful insights for individual schools and for system-wide education stakeholders.

These insights include:

- methods to enhance teaching and learning through research-backed analyses of the data;
- the need for a dynamic process of curriculum reform and revision;
- comprehensive data collected on the contexts for teaching and learning reading;
- country comparisons in reading achievement;
- the monitoring of system-level achievement trends, in a global context;
- trend results over time for each jurisdiction;
- exposed strengths, weaknesses, opportunities, and threats in national education systems, and
- comparisons by gender, nationality, and curriculum.



1.5 DUBAI SAMPLE

Initially, Dubai students were scheduled to complete the PIRLS assessment in March-April 2021. However, due to COVID-19-related disruptions in schooling, the assessment was postponed until October and November 2021.

The schools selected for the assessment reflect the diversity of curricula offered in Dubai's education system. To obtain an in-depth picture and comprehensive view of Dubai's education system, all eligible schools in the Emirate whose language of instruction was either English or Arabic participated in PIRLS 2021.

In Dubai, a stratified sample of **190 schools participated in the PIRLS 2021** data collection; a similar sample size to that of 2016. The sample's stratification ensured that it accurately represented the Grade 4 population in Dubai, taking into account school type, curriculum, and language of instruction. In each sampled school, at least one entire Grade 4 class participated in PIRLS 2021. Through statistical weighting, these students represented the entire Grade 4 student population in Dubai.

Table 1 illustrates this stratified sample of schools, across all relevant curricula andthe number of participating students from each.

	Public MOE	UK	Indian	US	ІВ	Private MOE	Others	
	PUBLIC							
No of schools	20	-	-	-	-	-	-	
No of students tested	825	-	-	-	-	-	-	
	PRIVATE							
No of schools	-	77	31	33	14	9	6	
No of students tested	-	3090	1397	1163	524	404	308	

Table 1: Dubai sample in PIRLS 2021





CHAPTER 2:

BENCHMARKING DUBAI'S PERFORMANCE WITH INTERNATIONAL LEVELS





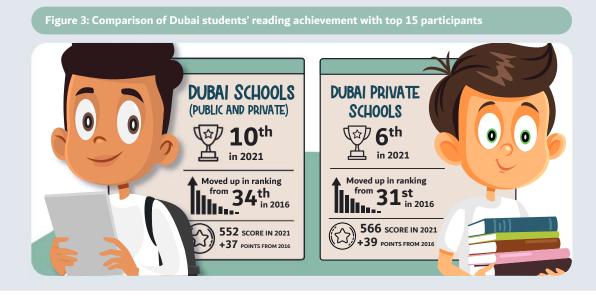
2.1 DUBAI'S ACHIEVEMENT IN PIRLS 2021

By participating in international assessments, countries and benchmarking participants can compare the performance of their students with that of their counterparts globally. Sixty-one countries and seven benchmarking systems took part in PIRLS 2021. As indicated earlier, a benchmarking participant is a specific region or a sub-national entity within a participating country that has a distinct education system. Such participants are given the opportunity to have a larger sample of schools participate in the assessment. Their results are included for the purpose of comparison against the other participants at both the country and benchmarking participant levels.

In this chapter, we will examine the reading literacy performance of students in Dubai schools in comparison to other countries and the international average. Although the results published by PIRLS include both the public and private schools of Dubai, we shall also look separately at the performance of Dubai private schools as a discrete group, overseen as they are by the aforementioned Knowledge and Human Development Authority (KHDA).

On average, students in Dubai schools (private and public combined) scored 552 points in PIRLS. This is higher than the international average of 500 points, and a 37 point improvement from the previous cycle in 2016.

In 2021, students at private schools in Dubai scored an average of 566 points, surpassing the international average by 66 points, and improving on their 2016 result by 39 points.



When we consider the top 15 ranked participants of PIRLS 2021, Dubai (public and private combined) has shown the most significant improvement, scoring 37 points higher than in the previous cycle. When Dubai private schools alone are considered, this is even better, with a (+39) point improvement. Other countries whose scores improved include the United States (+21), Singapore (+15), Ireland (+11), Lithuania (+8), Hong Kong SAR (+4) and Northern Ireland (+2).

Among the top 15 participants, those whose scores decreased since PIRLS 2016 include Finland (-16), Chinese Taipei (-16), Poland (-15), Russian Federation (-14), Sweden (-11) and Bulgaria (-11).

ble 2: Perfo	le 2: Performance of top 15 participants						
	Participant	PIRLS 2021	PIRLS 2016	Score Change			
1	Singapore	587	576	+11			
2	Ireland*	577	567	+10			
3 🐕	Hong Kong, SAR	573	569	+4			
4	Russian Federation	567	581	-14			
5	Northern Ireland*	566	565	+1			
6	Dubai Private Schools, UAE*	566	527	+39			
7	England^	558	559	-1			
8	Croatia*	557	-	-			
9	Lithuania*	552	548	+4			
10	Dubai overall Schools, UAE*	552	515	+37			
11	Finland	549	566	-16			
12	Poland	549	565	-16			
13	United States*	548	565	-15			
14	Chinese Taipei	544	549	-1			
15	Sweden	543	555	-12			

2 * Delayed Assessment of Fourth Grade Cohort at the Beginning of Fifth Grade

^ Assessed one year later than originally scheduled

Countries highlighted in Grey Assessed Fourth Grade Students at the End of the School Year

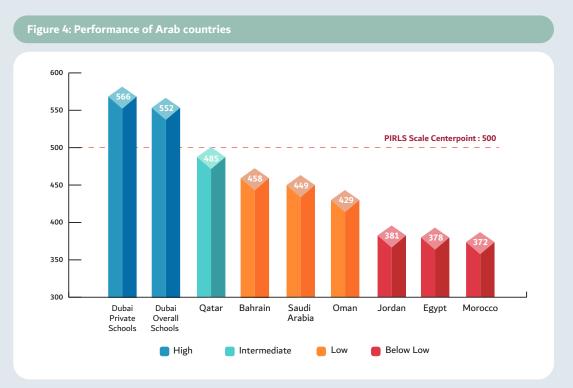




COMPARISON OF DUBAI STUDENTS' ACHIEVEMENT WITH THEIR PEERS IN THE ARAB COUNTRIES

This section presents a comparative analysis of the performance of Dubai schools in PIRLS 2021 with other Arab countries; countries including Qatar, Bahrain, Saudi Arabia, Oman, Jordan, Egypt and Morocco.

Similarly to the previous PIRLS cycle, in 2021, students in Dubai demonstrated higher levels of reading proficiency compared to their peers in the Arab countries. Dubai were the only participants in the region to have scored higher than the international average of 500. Sixty seven points separate Dubai from Qatar, the next highest-scoring Arab country in the region.



Dubai schools were benchmarked at the top most category of 'High' more than IEA scale average of 500. Qatar is in the 'Intermediate' category, with other countries at 'Low' or 'Below low' categories. Jordan, Egypt and Morocco have been benchmarked at 'Very Low' category.



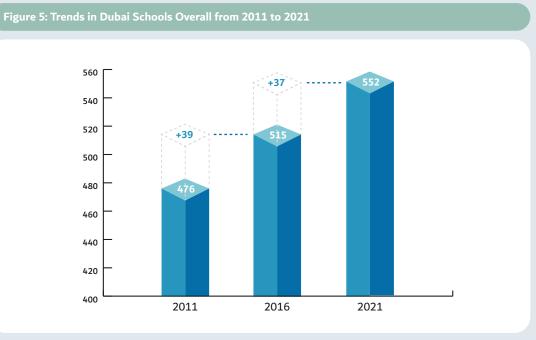


2.2 DUBAI'S ACHIEVEMENT OVER TIME

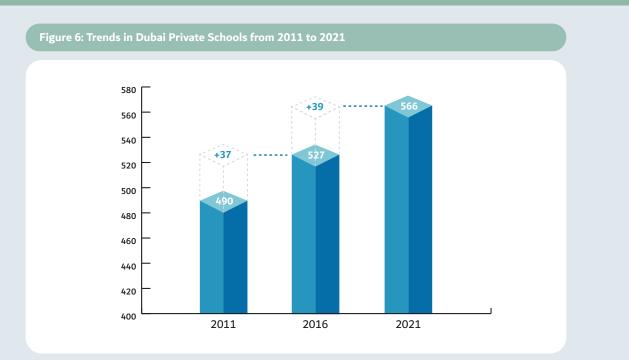
The purpose of PIRLS is to equip countries with data that support informed policy decisions aimed at enhancing learning outcomes. By employing precise measurement methods, PIRLS offers longitudinal data for countries participating in multiple assessment cycles, revealing trends over time. This section illustrates Dubai's performance since its initial participation in PIRLS in 2011.

The figures presented below demonstrate a significant improvement in Dubai's PIRLS performance since the 2011 cycle. It is also worth mentioning that Dubai private schools alone exhibit higher average scores compared to the overall combined scores of public and private Dubai schools.

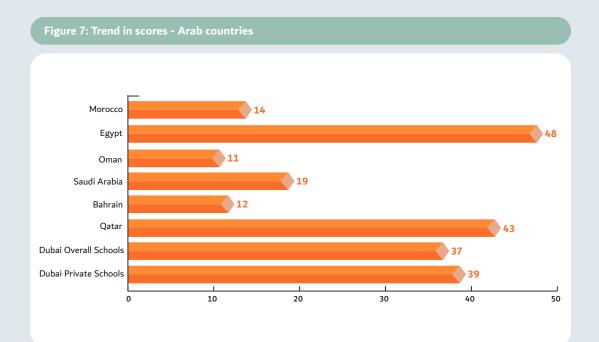
During the past three PIRLS cycles, Dubai's scores have improved by between 37 and 39 points.



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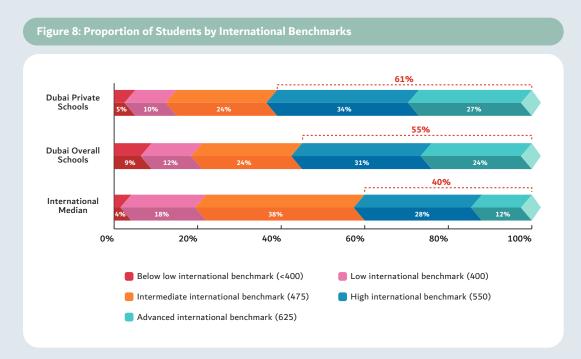
All Arab countries saw an increase in PIRLS scores from 2016 to 2021, with the most significant improvement occurring in Egypt (+48) followed by Qatar (+43).





2.3 INTERNATIONAL BENCHMARK PERFORMANCE

The figure below indicates the percentage of students at Dubai schools who reached specific international benchmarks.³



Students in Dubai schools (public and private combined) and Dubai private schools scored higher than the international average in both the 'High' and 'Advanced' international benchmarks.

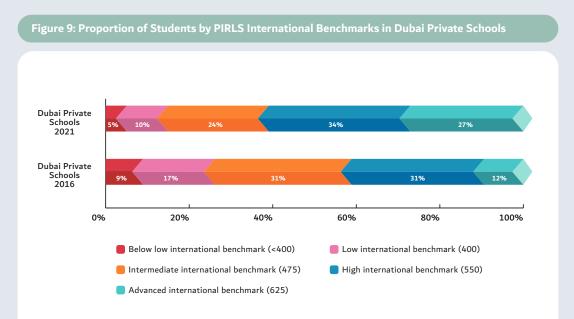
- 61% of students in Dubai private schools are at High and Advanced levels (21% higher than the international median)
- 55% of students in Dubai overall schools are at High and Advanced levels (15% higher than the international median)

In 2021, 27% of Dubai private school students reached the Advanced benchmark; 34% performed at the High benchmark; and a further 24 % at the Intermediate benchmark. The proportion of students achieving 'High' and 'Advanced' benchmark levels, at 61%, is an increase of 18 percentage points from PIRLS 2016.

³ The lowest international benchmark in PIRLS is the "Low International Benchmark." Below the Low International Benchmark level is not considered one of the four PIRLS international benchmarks; however, this level was created in this report to emphasise the significant percentage of students in some schools who failed to achieve the Low International Benchmark level, which is considered the minimum requirement for students. Kindly refer to Appendix 1 for the description of each international benchmark level.



Put together, more than 85% of Dubai private school students reached the Intermediate benchmark or higher, while 15% of students scored at 'Low' and 'Below low' levels - an 11% decrease from PIRLS 2016.







2.4 DUBAI'S ACHIEVEMENT BY GENDER

In PIRLS 2021 assessments, girls in Dubai schools scored higher than boys. On average, girls scored 557 points across Dubai schools (public and private combined) and 572 in private schools alone, whereas boys scored 547 across all Dubai schools and 562 in private schools each a difference of 10 points.

This difference between the scores of boys and girls in Dubai is not as significant as that seen in the international landscape, in which girls, on average, scored 18 points more than boys.

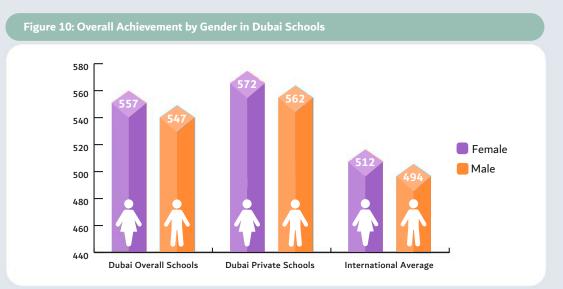
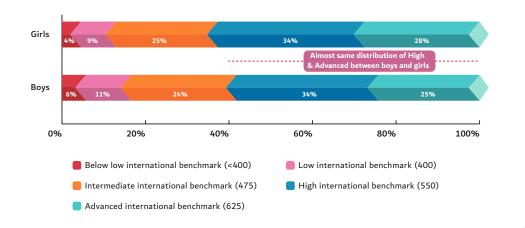


Figure 11: Proportion of Students Reaching the PIRLS International Benchmarks in Private schools by Gender



While the proportion of boys and girls performing at the High and Advanced international benchmarks is relatively even, on average, more girls than boys achieve at the Advanced international benchmark level.

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2.5 DUBAI'S ACHIEVEMENT IN READING PURPOSES AND COMPREHENSION PROCESSES ON PIRLS

Table 3 below reports the average scale scores by reading subdomain of all schools in Dubai and private schools specifically. Private schools in Dubai outperformed Dubai schools overall (public and private schools combined).

When looking at the overall score versus that of private schools alone, across the subdomains, there is variation in terms of score was only between 10 and 14 points.

ble 3: Ac	hieve	ment in Reading Subdoma	ins on PIRLS in Dubai Acro	oss All Schools	and Private Schools
				Public and Private Schools Combined	Private Schools Only
			Acquire and Use Information Purpose	553 (0.8)	567 (2.2)
	Purposes for Reading	Literary Experience	550 (1.6)	564 (2.1)	
	Durante (Complexity	Retrieval and Straightforward Inferences Process	550 (1.6)	563 (1.7)	
	Processes of Comprehension	Interpreting, Integrating and Evaluating Process	554 (1.8)	569 (1.9)	

4 Standard errors appear in parentheses. Because of rounding, some results may appear inconsistent.







CHAPTER 3:

STUDENT ACHIEVEMENT BY CURRICULUM





3.1 OVERALL ACHIEVEMENT BY CURRICULUM

The private school landscape in Dubai is highly diverse, with 216 schools catering to over 300,000 students, from 185 nationalities. These schools provide a choice of 18 curricula, with the National Curriculum for England (referred to as UK) being the most popular. This is followed by US, Indian, and International Baccalaureate (IB) curricula. Other curricula available include those from France, the Philippines, Germany, Russia, Australia, China, Japan and Pakistan. Some private institutions offer the UAE Ministry of Education curriculum, which is otherwise, the standard curriculum in public schools. All schools mentioned in this report refer to the private sector, unless specified otherwise.

This section of the report explores the average PIRLS outcomes across the different curricula.

Approximately 78% of students attend schools offering UK, Indian and US curricula. The student participation in PIRLS 2021 mirrors their distribution across these curricula. All schools whose language of instruction was English or Arabic were included in the 2021 cycle.

In PIRLS 2021, Dubai students exhibited a continued upward trend in overall performance. However, there is noticeable variation in performance when comparing different curricula.⁵



5 Please note that the "Private - other" category amounted to only 4 % of the sample of schools participating in PIRLS 2021 and hence has not been included in the charts in this chapter.



Figure 12 illustrates the average overall performance of students by curriculum, showing the position of each at international benchmark levels. Students attending schools with the UK, IB, and Indian curricula are situated at the 'High' international benchmark level of 550 and above.

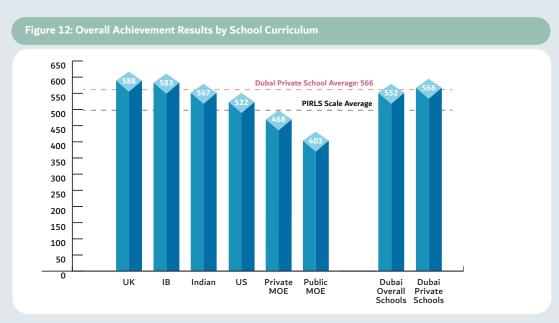


Figure 13 compares the average achievement of students in specific curricula with the Dubai average (public and private combined). Students enrolled in UK, IB and Indian curriculum schools outperformed their peers in US and UAE Ministry of Education schools, who scored below the Dubai (combined public and private) average of 552.

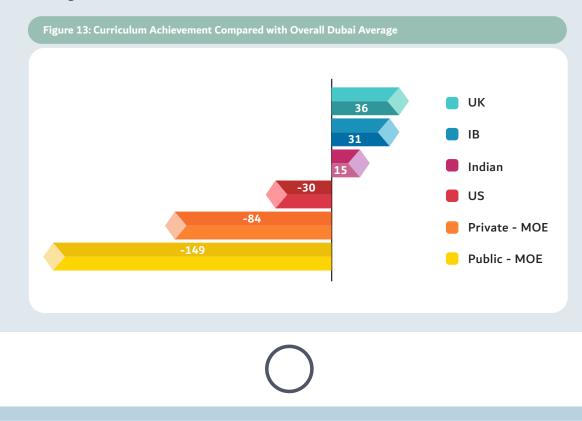
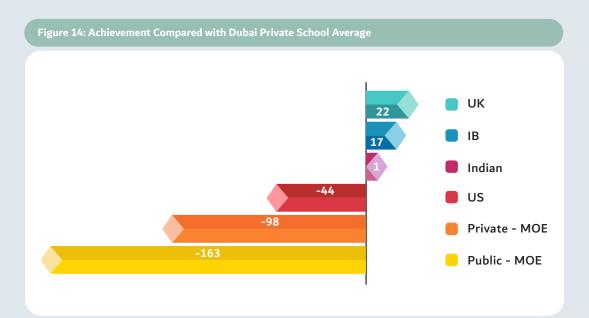


Figure 14 contrasts the average achievement of students in specific curricula with the Dubai private school average of 566. Students attending schools with UK, IB, and Indian curricula scored higher than the average of Dubai private schools, while students in schools with US and UAE Ministry of Education curricula scored notably lower.



3.2 TRENDS ACROSS CURRICULA

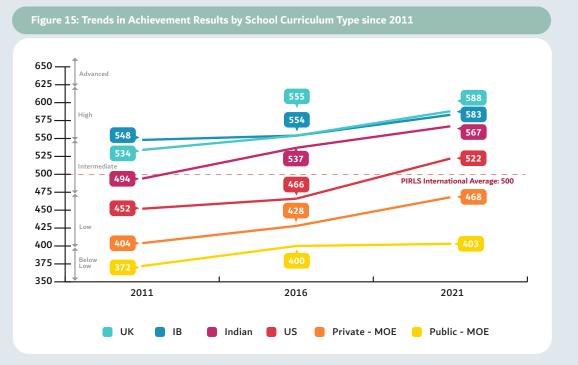
Dubai has participated in three PIRLS cycles, with the first in 2011. The following section examines trends in the average achievement of students in PIRLS across curricula over each cycle.

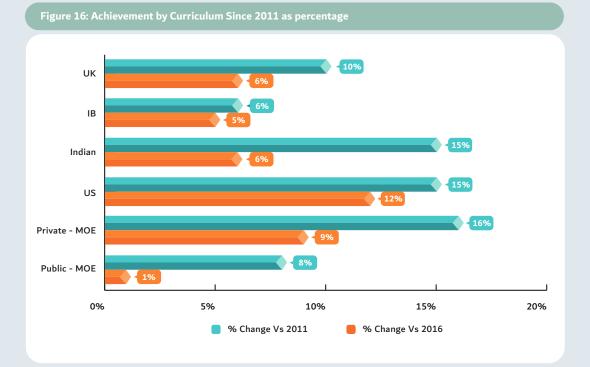
Students' average achievement at all Dubai private schools participated in PIRLS 2021 has improved significantly since the 2011 PIRLS cycle. Average student achievement was below the intermediate benchmark level of 550 in 2011. In 2021, for students attending UK, IB and Indian curriculum schools average achievement is now in the high benchmark level of 550 in 2021.





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While students at UK and IB curriculum schools continue to score higher than students in other curriculum schools, students attending Indian, US and Private MOE schools have made the most significant improvement since 2011.



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3.3 INTERNATIONAL BENCHMARK ACHIEVEMENT BY CURRICULUM

PIRLS uses an anchored scale to define student achievement in reading. Referred to as international benchmarks, and as indicated earlier, these are separated into four levels with scale score thresholds as follows - Advanced (625), High (550), Intermediate (475), and Low (400). Each benchmark includes specific descriptions of what students are required to know, understand and be able to do at that level.

Figure 17 shows the proportion of students achieving each benchmark in each curriculum compared to the international average of 500. The large majority of students attending UK, IB and Indian curriculum schools performed at the high or advanced benchmarks, while only a minority of students at US and UAE Ministry of Education schools performed at the same level.

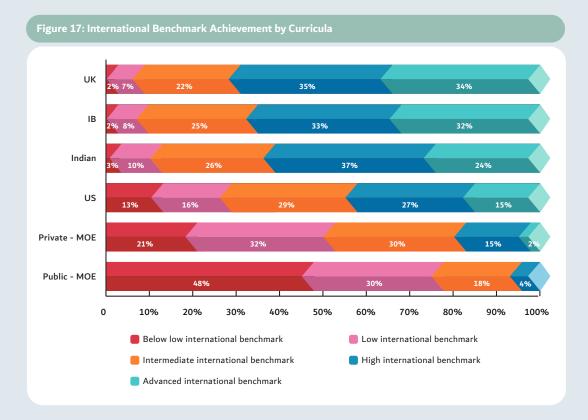
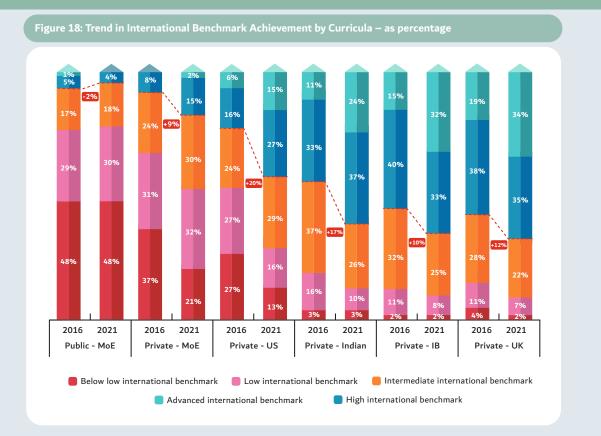


Figure 18 shows student achievement against international benchmarks since PIRLS 2016, compared with the international average of 500. The rate of improvement in US curriculum schools is the highest, where 20% more students now achieve in the high and advanced international benchmarks.





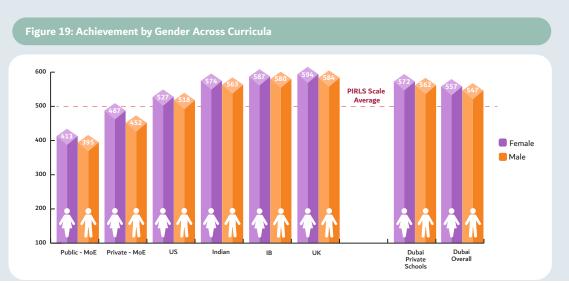
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3.4 ACHIEVEMENT BY CURRICULUM AND GENDER

In line with international trends, girls outperformed boys across all curricula in Dubai. The difference in achievement across most curricula was between 7 to 10 points, with the exception of UAE Ministry of Education curriculum schools, where for example, in private schools, girls scored 35 points higher than boys.







CHAPTER 4:

ACHIEVEMENT OF EMIRATI STUDENTS IN PIRLS 2021



OUBAI PIRLS 2021 REPORT



4.1 COMPARATIVE ACHIEVEMENT OF EMIRATI STUDENTS

Education plays a vital role in the vision of Dubai and its ambition to consolidate its position among the top three global cities by 2030.

An estimated 65,000 Emiratis are expected to enter the private and public sector workforce by 2030. The quality of education they receive at school will be critical to their future success. Schools in Dubai are committed to developing Emirati students and helping them reach their full potential in reading literacy and all core subject areas.

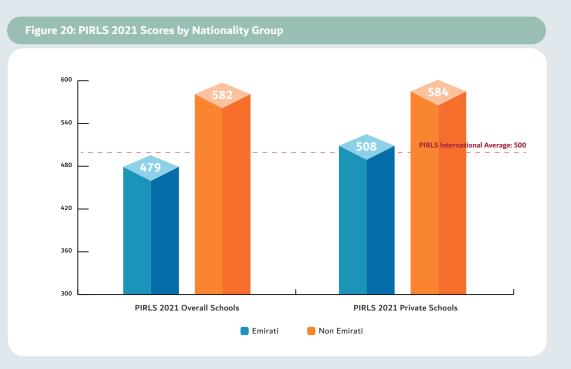
KHDA uses international assessment results to compare the performance of Emirati students with their peers of other nationalities. In Dubai, 2100 Grade 4/Year 5 Emirati students at both public and private schools took part in PIRLS 2021. 95% of these students attended schools spread across only four different curricula: UAE Ministry of Education (public and private), US, IB and UK.

This section describes the overall performance and achievement of Emirati students by curriculum and gender over time.



Overall Achievement by Nationality Group

Figure 20 compares the achievement of Emirati students to that of their non-Emirati peers. Emirati students in public and private schools combined scored an average of 21 points below the international average of 500, whereas Emirati students enrolled in private schools scored an average of eight points above. Non-Emirati students outperformed Emirati students in both instances.



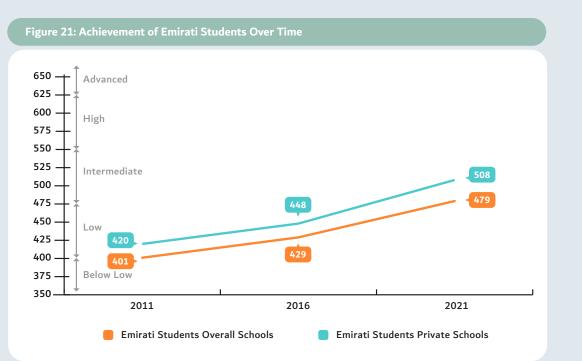
4.2 EMIRATI ACHIEVEMENT TREND OVER TIME

The following section discusses trends in the scores of Emirati students over three PIRLS cycles.

The achievement of Emirati students in PIRLS has improved since PIRLS 2011. In both 2011 and 2016, Emirati students, on average, scored less than 475 points, placing the cohort between the 'Low' and 'Intermediate' benchmark levels.

In the 2021 cycle, Emirati students progressed to the 'Intermediate' benchmark, scoring 479 points on average, in private and public schools combined. Emirati students enrolled private schools, meanwhile, on average, scored eight points above the international average of 500.





4.3 EMIRATI STUDENT ACHIEVEMENT AGAINST INTERNATIONAL BENCHMARKS

Figure 22 compares the achievement of Emirati and non-Emirati students against PIRLS international benchmarks in the 2021 cycle.

25% of Emirati students at all schools performed at the 'High' or 'Advanced' international benchmark levels, compared with 34% of Emirati students at private schools. A corresponding trend can be seen for Emirati students performing at the 'Low' benchmark level – 46% of students at all Dubai schools performed at the 'Low' benchmark of 400, a score matched by just 33% of Emirati students at private schools.





Figure 22: Achievement Against International Benchmarks PIRLS Private Schools Emirati 33% 25% 20% 139 Non Emirati 36% 32% PIRLS Overall Schools Emirati 24% 299 19% 22% Non Emirati 36% 32% 0 20 40 60 80 100 Below low international benchmark Low international benchmark High international benchmark Intermediate international benchmark Advanced international benchmark

4.4 EMIRATI STUDENT ACHIEVEMENT BY CURRICULUM

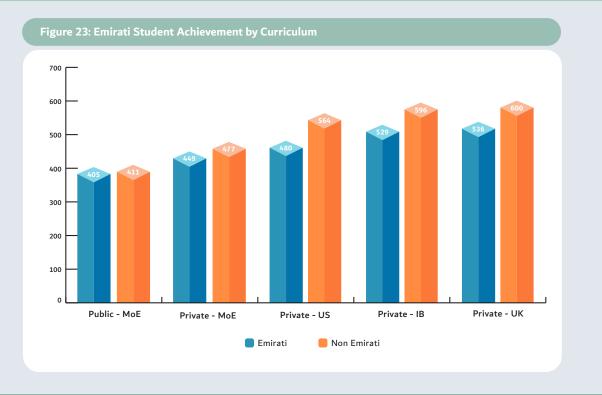
This section of the report explains the achievement of Emirati students and their peers by curriculum. The analysis includes only the performance of students attending schools of four specific curricula attended by 95% of all Emirati students (MoE, US, UK, IB).

Figure 23 compares the achievement of Emirati and non-Emirati students in the four main curricula in which there is a significant Emirati student population. Substantial differences can be seen between the overall averages of different curricula.

Emirati students enrolled in schools with UK and IB curricula scored above the PIRLS international average of 500, outperforming their counterparts in schools with other curricula. Additionally, both Emirati and non-Emirati students in UK and IB schools scored higher than their peers in US or MoE schools (private and public). Among Emirati students, those attending private MoE schools performed better than those in public MoE schools



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4.5 EMIRATI STUDENT ACHIEVEMENT BY GENDER

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This section compares the performance of Emirati students by gender.

As shown in Figure 24, Emirati girls outperformed Emirati boys by 15 points in PIRLS 2021, a trend mirrored by non-Emirati boys and girls, however for non-Emirati boys and girls the differential is only 8 points.

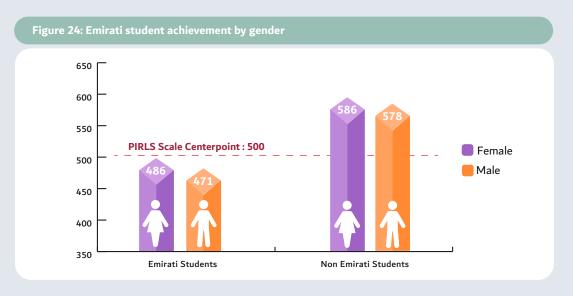
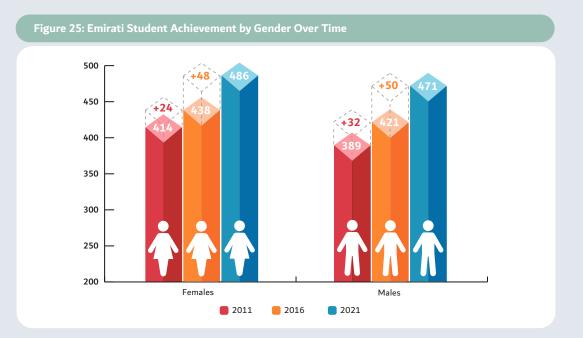




Figure 25 shows improvement in the scores of Emirati students over three PIRLS cycles.

Emirati boys scored 32 points higher than they did in the 2016 cycle than in 2011, and 50 points higher in 2021 than in 2016, corresponding to an overall increase of 82 points since Dubai's first participation in PIRLS. Similarly, Emirati girls scored 24 points more in 2016 than in 2011, and 48 points more in 2021 than 2016, for an overall improvement of 72 points. From a lower starting point, the performance of Emirati boys is improving more rapidly and the gap between boys' and girls' performance is narrowing.









CHAPTER 5:

STUDENTS ACHIEVEMENT BY INSPECTIONS





5.1 PIRLS AND SCHOOL INSPECTIONS

This section examines the correlation between the school inspection judgements of 2022-2023 and the PIRLS 2021 outcomes. This analysis provides valuable evidence for evaluating the impact of school inspections on student achievement.

As part of the inspection process, the DSIB encourages schools to effectively utilise assessment data, including cognitive and international benchmark assessments. Teachers are expected to use these assessments and the published school reports to adapt their curricula and personalise educational provision. This focus, along with other contributing factors, has resulted in a significant increase in the academic and personal progress of students, including those with special educational needs or disabilities. Moreover, these students have achieved notable success in international assessments.

The primary aim of the annual inspections is for all schools in Dubai to attain an overall judgment of at least 'Good' on a six-point scale, ranging from very weak to outstanding, during their first and subsequent yearly inspections. Since the inception of inspections in 2008, the number of schools rated as 'Good,' 'Very Good,' and 'Outstanding' in Dubai has consistently increased each year.

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5.2 THE USE OF INTERNATIONAL AND BENCHMARK ASSESSMENT DATA BY SCHOOLS

Following each successive international assessment window (PISA, TIMSS, PIRLS), KHDA issues a full report to each school, and for PIRLS, this report includes the following information:

- A target for the school to attain in the subsequent PIRLS assessment window.
- A comparison table linking that school's scores to the average of other private schools in Dubai.
- A summary of the numbers of students assessed in the previous window and their overall (average) performance of the school (as a score (e.g., 570) and a benchmark (e.g., High International Benchmark).





- The percentage of each student in the school that scored in the different international benchmarks (from Below Low to Advanced International Benchmark).
- A comparison with the previous score for the school (E.g., 2011 in the 2016 reports).
- Differences in the way different groups performed (boys/girls; Emirati/ Non-Emirati).
- A breakdown of how the selected students in the school performed in the various elements and skills of the reading assessment.

During DSIB school inspections, the extent to which school leaders and teachers effectively use the findings in these personalised reports is evaluated. Schools are also expected to implement appropriate international benchmark assessments including reading literacy.

The effective use by schools of the data information from all assessments is evaluated in terms of how leaders and teachers adapt both the curriculum and the planning of lessons, emphasising closing gaps and raising attainment, for example, in different reading literacy skills. DSIB places great emphasis on schools developing students' reading skills. This is not least because high reading literacy skills are a gateway to optimal access to the curriculum and assessments.

The analysis of the correlation between PIRLS outcomes in 2021 and school inspection judgments in 2023 provides a practical evaluation of the effectiveness of schools in utilising assessment data to improve student learning outcomes. The personalised reports and international benchmark assessments provide schools with valuable information on student performance in reading literacy skills.

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5.3 PIRLS 2021 AND SCHOOL INSPECTIONS 2022-2023

Whilst the PIRLS international scale average score is 500, the Dubai private school average score in PIRLS 2021 was 566. So, on average, Dubai private schools' performance was 66 points or 13% higher than the scale average. In PIRLS 2016, the Dubai private school average score was 527 which is only 5% higher than the scale average. This itself marks a significant improvement in average performance over the five years – especially during a pandemic.



Below, in Figure 26, we immediately see a correlation between the 2023 school inspection judgements and the average PIRLS 2021 scores for each group of schools.

For example, the average score for schools evaluated as 'Outstanding' in 2023 (631) is significantly above the Dubai private school average (566), and the average score for both 'Very Good' and 'Good' schools is significantly above the international scale average (500).

The difference in average scores between 'Outstanding' and 'Very Good' schools was 43 points, compared to only a 26-point difference in PIRLS 2016. Similarly, the difference in average scores between 'Outstanding' and 'Good' schools in 2021 was 67 points, compared to only a 49-point difference between these two groups in PIRLS 2016.

The average gaps in PIRLs performance between schools evaluated at different levels are widening – becoming more significant.

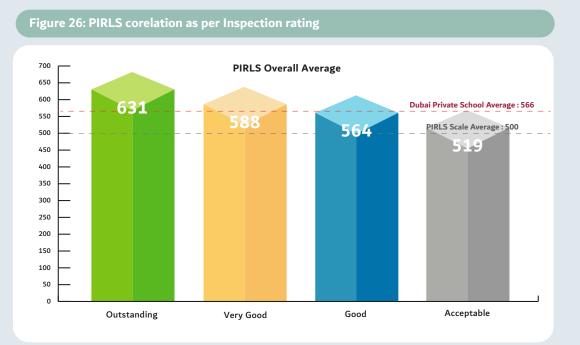
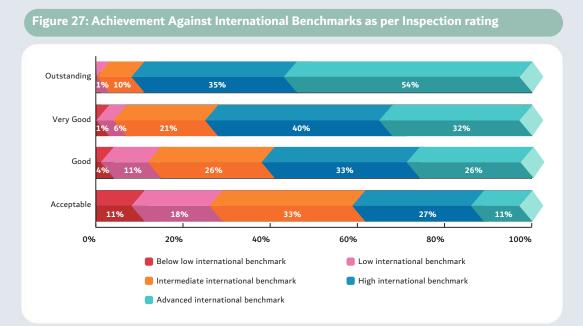






Figure 27 shows this trend even more graphically when we look at the percentages of different grades of a school whose average score places them in the Advanced and High international benchmarks. For example, whereas 89% of 'Outstanding' schools have average PIRLS scores that put them in the high and advanced benchmarks, only 72% of 'Very Good', 59% of 'Good', and 38% of 'Acceptable' schools share this attribute.



Over the past two PIRLS assessment windows, the average-score gaps between schools of different inspection judgement gradings have only significantly widened for 'Outstanding' schools. However, no other gaps have narrowed – as seen in Figure 28 below.









CHAPTER 6:

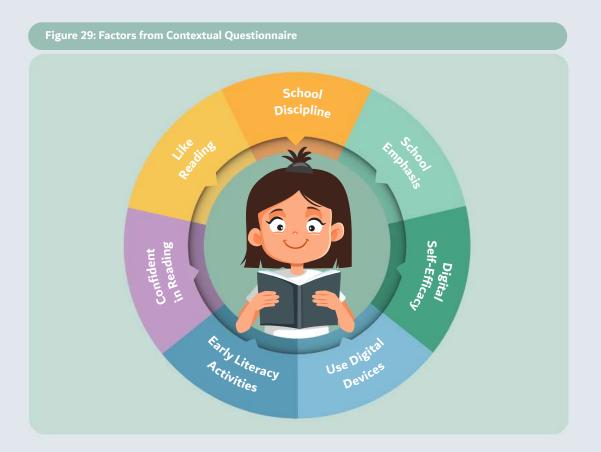
FACTORS AFFECTING STUDENT ACHIEVEMENT



PIRLS uses context questionnaires administered to students, parents, teachers and school principals, designed to better understand the factors affecting student achievement in reading. Questionnaires are organised according to five broad contexts that affect students' reading development: home, school, classroom, student attributes, and national contexts. Taken together, insights from these questionnaires provide comprehensive data that enables greater insights into the factors affecting students' reading performance in PIRLS.

Multiple regression was used to identify these key factors. This is a statistical approach to find out which factors have the strongest connection to student performance while taking into account other factors like curriculum, gender, age, and home environment.

To summarise data from the questionnaire, the responses of related items are combined to form an index or scale, which is divided into 'cut scores.' Responses are then grouped into categories on the scale, which enables more reliable and valid analysis of the data than the analysis of individual responses.





6.1 STUDENTS LIKE READING

Students were provided with eight statements to reflect on their 'enjoyment' of reading, alongside two statements regarding their 'reading habits' outside of school. To each statement, students were asked to respond according to a four-point scale ranging from 'agree a lot' to 'disagree a lot'.

Students who responded 'agree a lot' to at least four of the eight statements, and who answered 'every day or almost every day' to questions about their reading habits outside of school, scored at or above the 'cut score'.

Students who responded 'disagree a little' to at least four of the eight statements, and who answered 'once or twice a month' to questions about their reading habits outside of school, scored at or below the 'cut score'.

These statements, and the related question, are shown below.

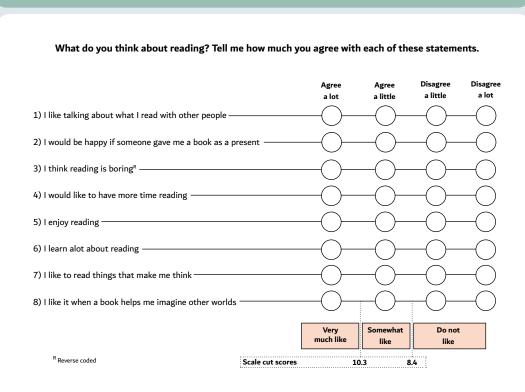
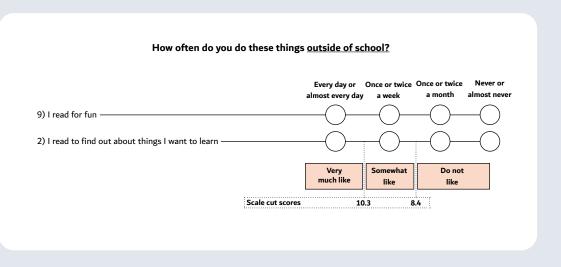


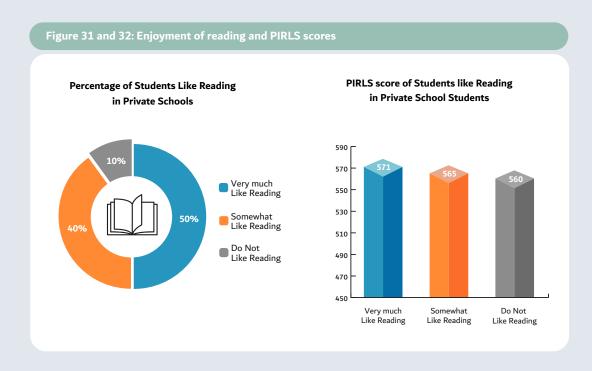
Figure 30: Enjoyment of reading questionnaire





Responses from the context questionnaire show that half of all students at Dubai private schools 'very much like reading.' Students in this category scored an average of 571 points in PIRLS, well above this measure's international average of 516. 10% of students whose responses indicated they 'do not like reading' scored 560 points on average, lower than students who 'very much like reading', but still well above the international average.

These data shows a clear correlation between students' enjoyment of reading and PIRLS scores.



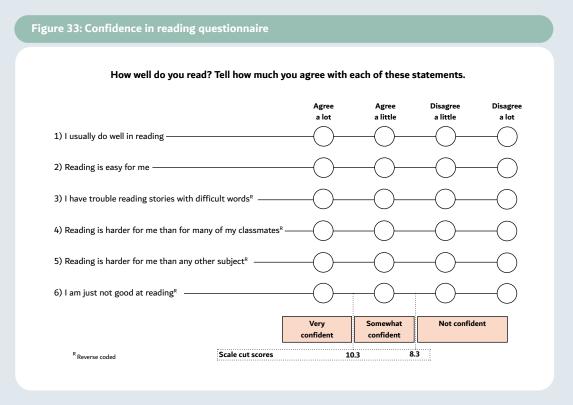


6.2 STUDENTS' CONFIDENCE IN READING

For this element, similarly and as shown in Figure 33, students were asked to respond to six statements to reflect upon their 'confidence level' in reading.

Students who responded 'agree a lot' to at least three of the six statements, and 'agree a little' to the remaining statements were categorised as 'very confident in reading' and scored at or above the 'cut score'.

Similarly, students who responded 'disagree a little' to at least three of the six statements, and 'agree a little' to the remaining statement were categorised as 'not confident in reading' and scored at or below the 'cut score'.



Responses from the context questionnaire show that over half of all students at Dubai private schools feel 'very confident' in reading; 31% are 'somewhat confident';17% believe they are 'not confident.'

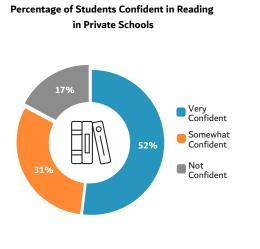
Students categorised as very confident scored an average of 599 points in PIRLS, significantly higher than the international average of 543. These data show a clear correlation between students' confidence in reading and PIRLS scores.



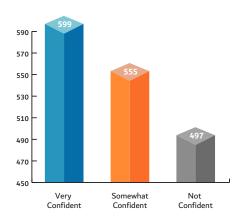


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PIRLS scores by Confidence in Reading in Private School Students





6.3 STUDENTS' DIGITAL SELF-EFFICACY

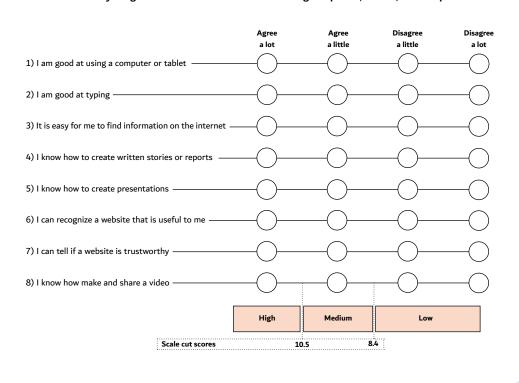
Digital self-efficacy pertains to students' beliefs about their proficiency in using digital technology. Students were prompted to evaluate their digital self-efficacy by responding to eight statements, once again using a four-point scale that ranges from 'strongly agree' to 'strongly disagree'. Students who responded 'agree a lot' to at least four of the eight statements, and 'agree a little' to the remaining four were categorised as having high digital self-efficacy, and scored at or above the 'cut score'.

Students who responded 'disagree a little' to at least four of the eight statements, and 'agree a little' to the remaining four statements were categorised as having low digital self-efficacy, and scored at or below the cut score. (See Figure 36)





Figure 36: Digital self-efficacy questionnaire



How much do you agree with these statements about using computers, tablets, or smartphones?

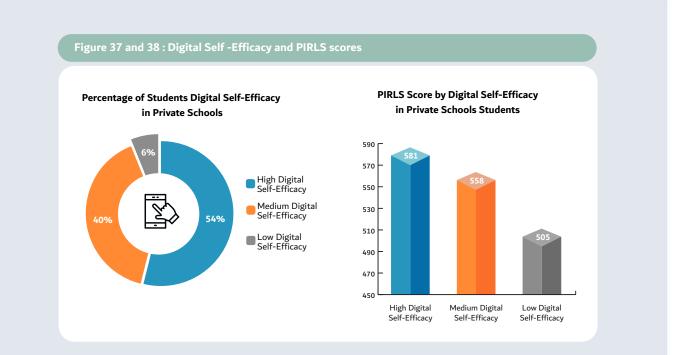
Overall, 94% of students in Dubai private schools believe that they have at least 'medium to high' digital self-efficacy.

Students with perceived 'high' digital self-efficacy scored higher on reading achievement scale with an average score of 581, compared to the international average for this measure of 517.





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6.4 STUDENT USE OF DIGITAL DEVICES TO FIND AND READ INFORMATION

It is well-established that the amount of time children spend on technological devices at home and in school is increasing. However, this time is often shown to be disproportionately in favour of social media and playing games online rather than using the technology for primarily educational purposes.

One question that was asked of students was in relation to the amount of time they spend using a device to find and read information for their schoolwork on a typical school day. (Figure 39)

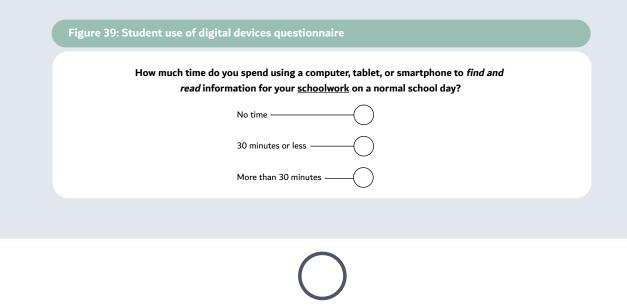
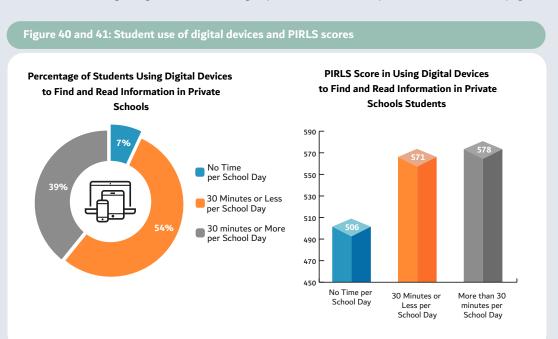


Figure 40, 41 shows the results emerging from this question. We see that 39% of students in Dubai private schools access digital devices for at least 30 minutes per day to find and read information, 54% of students access these devices for schoolwork less than 30 minutes per day. 7% of students in Dubai reported they do not spend any time accessing digital devices to find and read information at school.

The average score in PIRLS for the most prolific users of technology in their schoolwork was 578 and for those who at least made some use was 571 – both of these scores are well above the international average for this particular measure of 502 for more than 30 minutes and 512 for 30 minutes or less.

Notably, for those students who reported spending no time on technology for their schoolwork, their PIRLS average score, at 506 was well above the international average of 486.



For more details regarding international averages, please refer to the link provided on the reference page.





6.5 EARLY LITERACY ACTIVITIES BEFORE PRIMARY SCHOOL

The context questionnaire includes a question for parents on how often their children were engaged in literacy activities - such as reading books, telling stories, or singing songs - before they were first enrolled in school.

Children who were 'often' engaged in at least five out of nine literacy activities, and 'sometimes' engaged in the remaining four, scored at or above the 'cut score'.

Children who were 'never' or 'almost never' engaged in at least five of the nine activities, and 'sometimes' engaged in the remaining four, scored at or below the 'cut score'.

Before your child began primary/elementary school, how often did you or someone

Figure 42: Early literacy questionnaire

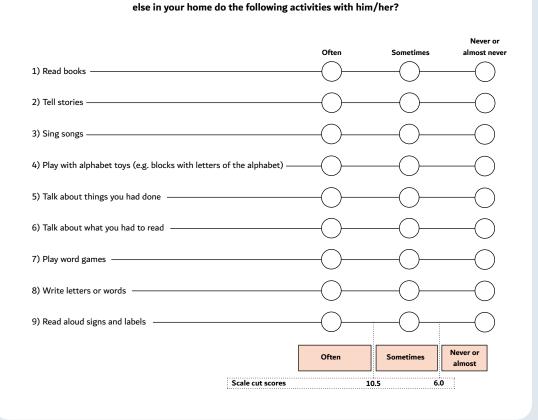
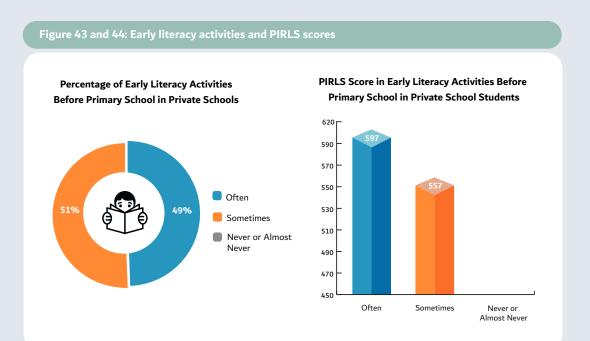


Figure 43,44 shows that children whose parents 'often' engaged them in early literacy activities scored 40 points higher than children whose parents who only 'sometimes' engaged them in literacy activities, scoring 597 and 557 points respectively. These compare favourably with this measure's international average score of 518.







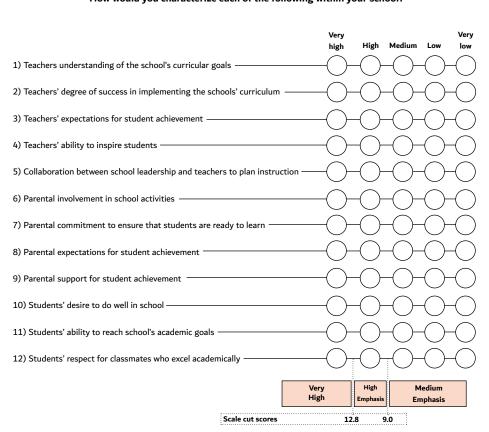
6.6 SCHOOL EMPHASIS ON ACADEMIC SUCCESS

Figure 45: School emphasis on academic success questionnaire

School emphasis on academic success is a contributing factor to students' achievement in PIRLS. The Context Questionnaire included 12 aspects for principals - focusing on the roles and expectations of teachers and parents - to determine the level and impact of academic support offered by their school.

Students in schools who placed a 'very high emphasis' on academic success in at least six out of 12 aspects, and a 'high emphasis' in the remaining six aspects, scored at or above the 'cut score'.

Students in schools with 'high emphasis' on academic success in at least six out of 12 aspects, and 'medium emphasis' in the remaining six aspects, scored at or below the 'cut score'.



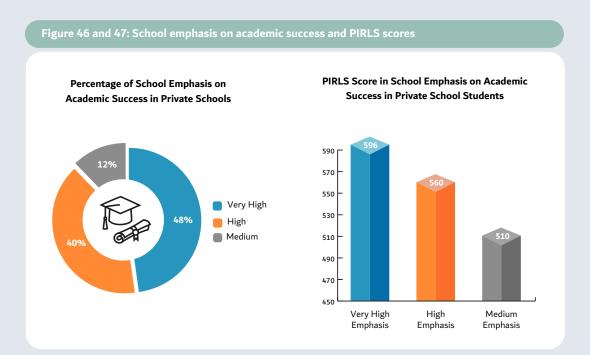
How would you characterize each of the following within your school?



Dubai private school principals reported one of the highest levels of school emphasis on academic success among all PIRLS participants. When 'very high' and 'high' levels are combined, Dubai schools placed greater emphasis on academic success than any other PIRLS participants.

In Dubai, 88% of students attend schools in which the emphasis on academic success is reported as 'high' or 'very high'.

Students in schools with a 'very high' emphasis on academic success scored 596 points in PIRLS; students in schools with 'high' emphasis scored 560 points; while those in schools with 'medium' emphasis on academic success scored 510, all higher than this measure's international average of 525 for 'very high' ,509 for 'high' emphasis and 486 for 'medium' emphasis on academic success.





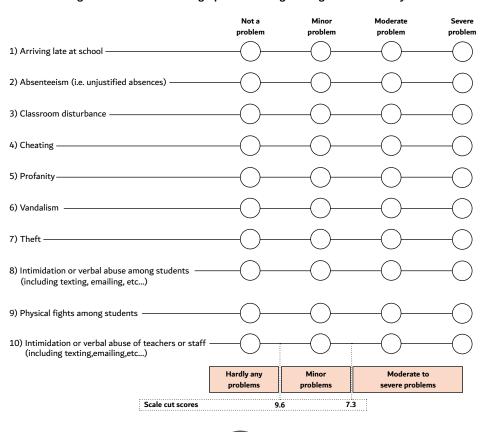
6.7 SCHOOL DISCIPLINE

Figure 48: School discipline questionnaire

Alongside questions asked of the students and their parents, school principals were asked a question relating to school discipline. The school climate – its environment, and the extent to which students feel safe and well looked after is well known to influence students' academic performance. The context questionnaire asked school principals to report the degree to which 10 behavioural issues – such as absenteeism, vandalism and bullying – were present at their schools. Based on their responses, students were categorised into attending schools with 'no problems', 'minor problems' or 'moderate to severe Problems'.

Students in schools whose principals reported at least five out of 10 issues as 'not a problem', and the remaining five as a 'minor problem' scored at or above the 'cut score'.

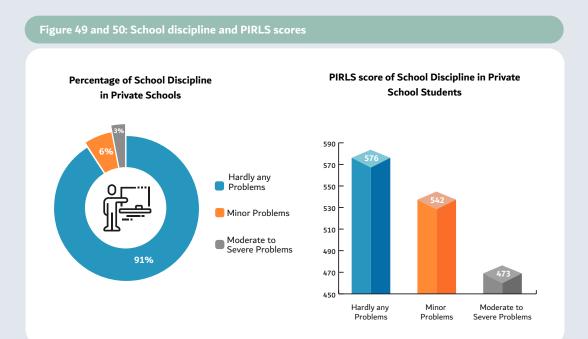
Students in schools whose principals reported at least five out of 10 issues as a 'minor problem' and the remaining five as a 'moderate or severe problem' scored at or below the cut score.



To what degree is each of the following a problem among fourth grade students in your school?

Overall, responses of principals indicated that 91% of students in Dubai attended schools with 'hardly any problems', compared with 64% of students internationally.

In PIRLS, on average, students attending Dubai schools with 'hardly any problems' scored 576 points, compared to this measure's international average of 512.





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CONCLUSION

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The importance of reading extends beyond personal enrichment; it contributes to the well-being and progress of societies. A literate society is a empowered society, as it equips individuals with the critical skills necessary for active citizenship, informed decision-making, and social engagement. Reading fuels innovation and creativity, inspiring breakthroughs in science, technology, arts, and humanities. It is the foundation of a literate workforce, enabling economic growth, social mobility, and sustainable development.

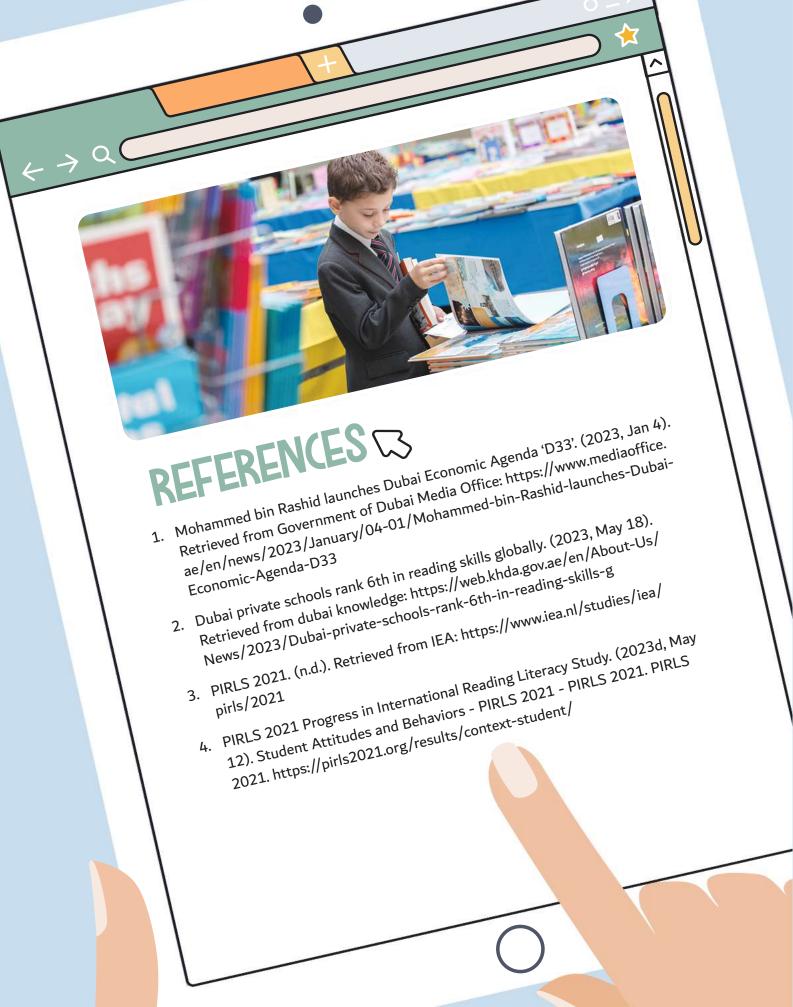
The PIRLS 2021 reading proficiency reporthighlights the significant improvements in student performance across schools in Dubai. Dubai schools as a group would now rank 12th (and Dubai private schools, 6th) internationally alongside all participating countries a marked improvement on 34th (and 31st) in the last PIRLS (2016) assessment window.

For the first time, both Emirati and non-Emirati students surpass the international average for reading literacy as measured by this assessment. Furthermore gender gap in reading proficiency, almost always observed globally (with girls outperforming boys), is narrowing, both in the Emirati and non-Emirati student cohorts.

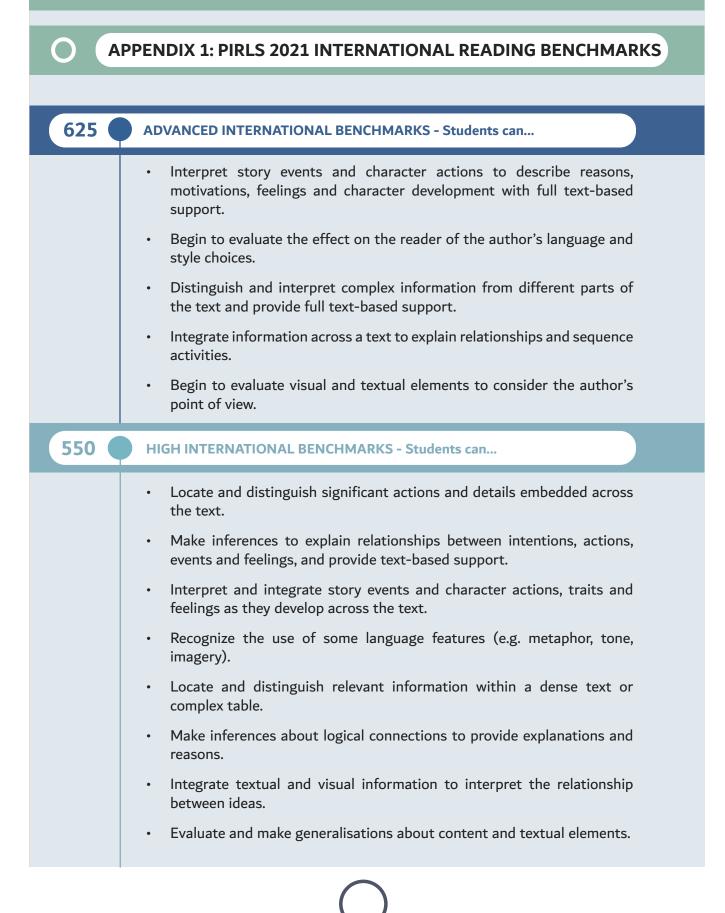
Additionally, the increasing number of schools rated as good to outstanding correlates strongly with higher levels of reading proficiency. This is indicated by the average scaled score of schools and a growing proportion of students achieving intermediate, high, and advanced international benchmarks.

Compared to the average responses of their peers internationally, students in Dubai both enjoy more and have higher levels of confidence in their reading proficiency at this age.

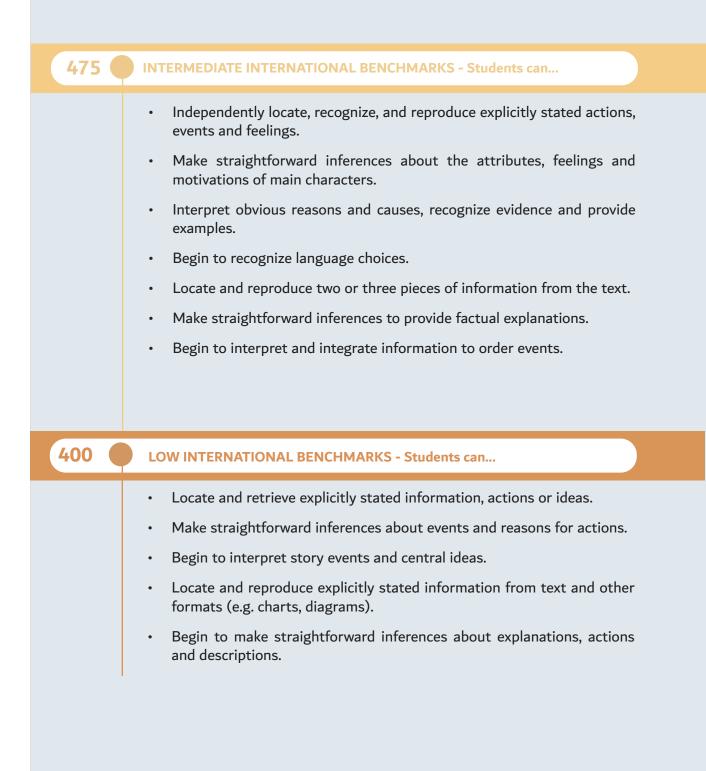
In summary, reading holds immense importance in Dubai as a catalyst for the knowledge economy, a promoter of intercultural understanding, a driver of educational excellence, a source of personal growth, and a means of cultural preservation. By nurturing a culture of reading, Dubai aims to empower individuals, foster innovation, and build a vibrant and knowledgeable society that embraces lifelong learning. This report really is a celebration of the continued success of Dubai schools in meeting and surpassing the aspirational expectations set out in the UAE National Literacy Strategy, first established in 2015.















APPENDIX 2: DSIB INSPECTION LEVELS

The six levels of quality on the scale are defined as follows:

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Outstanding	Quality of performance substantially exceeds the expectation of the UAE.
Very Good	Quality of performance exceeds the exepctation of the UAE
Good	Quality of performance meets the expecation of the UAE (This is the expected level for every school in the UAE)
Acceptable	Quality of performance meets the minimum level of quality required in the UAE (This is the minimum level for every school in the UAE)
Weak	Quality of performance is below the expectation of the UAE
Very Weak	Quality of performance is significantly below the expectation of the UAE

