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Press Release

Thriving through the reading pandemic, Hong Kong students attain the top three ranking in the world for four consecutive PIRLS cycles

**The Progress in International Reading Literacy Study (PIRLS)
International Report (Hong Kong SAR Section)**

“The Progress in International Reading Literacy Study” (PIRLS) is an international large-scale reading assessment organised by the International Association for the Evaluation of Educational Achievement (IEA). PIRLS has been conducted every five years to assess, compare and track the reading achievement of primary four students globally. Fifty-seven countries and regions participated in PIRLS 2021 study, with approximately 320,000 students, their parents, teachers, and principals. Hong Kong has participated in the study since the first cycle in 2001, and this is the fifth cycle Hong Kong has participated in. The research team of the Centre for The Advancement of Chinese Language Education and Research of the Faculty of Education, The University of Hong Kong (CACLER, HKU) was funded by the Quality Education Fund to participate in the PIRLS 2001 study in 1999. Since then, the research team has continued to be commissioned by the Education Bureau of the Government of Hong Kong Special Administrative Region to conduct PIRLS studies.

A team of researchers led by Dr Lam Wai Ip, Associate Professor, Faculty of Education, The University of Hong Kong (HKU) and Principal Investigator of PIRLS 2021 Hong Kong Section; Professor Tse Shek Kam, Investigator of PIRLS 2021 Hong Kong Section; and Dr Cheong Choo Mui, Assistant Professor, Faculty of Education, HKU and Investigator of PIRLS 2021 Hong Kong Section released the findings of the PIRLS 2021 study this morning (May 17). The latest release results are as follows:

Key research findings

1. Primary four students participated in the fifth PIRLS in 2021 during the COVID-19 pandemic. They scored 573 points (the international centerpoint is 500), placing Hong Kong second in the world’s ranking, and consistently in the top three for four consecutive cycles.
2. Girls performed better in reading than boys, and students achieved better results in reading informational texts than literary texts overall. Compared with previous cycles, the proportion of top-performing students has increased significantly. Hong Kong has always maintained a very low proportion of low-performing students, while in PIRLS 2021, it has the least number of low-performing students globally.
3. Both international and Hong Kong results showed that reading achievement is most directly related to students’ confidence in reading, and students gained their confidence when they are interested and motivated to read more, and cultivate good reading habits.
4. Reading at home and in school is essential for cultivating students’ interest, motivation, and habits in reading, and subsequently building their confidence in their reading ability.
5. The impact of socio-economic status on students’ reading achievement in Hong Kong is less significant than in other countries or regions, demonstrating fairness in reading education in Hong Kong.
6. Hong Kong schools maintains the highest degree of discipline and safety in the world.
7. Hong Kong students, parents, and educators have demonstrated strong reading resilience and are among the few regions globally that have not suffered setbacks in reading literacy due to the COVID-19 pandemic.

Research findings

1. The reading achievement of Hong Kong's primary four students has ranked in the top three in the world for four consecutive cycles

1.1 Hong Kong's primary four students have consistently demonstrated excellent reading achievement, scoring 573 in PIRLS 2021 and ranking second among 43 participating countries and regions in the world (referring to waves 1 and 3 countries and regions, see section 0.5 on the Brief Summary) (see Tables 1, 2 and Figure 1).

Singapore is ahead of Hong Kong and ranked first, with an average reading score of 587. The third-ranking country after Hong Kong is the Russian Federation, with a reading score of 567. In addition to Hong Kong, students from the Chinese Taipei region and Macao SAR also took part in the study using traditional Chinese. The average score of students in the Chinese Taipei region was 544, ranking seventh, while students in Macao SAR scored 536, ranking fifteenth (see Table 1). As for the performance of all 57 participating countries and regions in the combined waves 1, 2, and 3, including the reading scores of fourth and fifth-grade students, please refer to Table 3.

1.2 The PIRLS study measures reading achievement for informational and literary purposes, Hong Kong's fourth-grade students scored 582 points in informational reading and 564 in literary reading. Their performance in both reading purposes was higher than in PIRLS 2016, that is, the last cycle. As in previous years, Hong Kong's primary four students demonstrated higher informational reading ability than literary reading (see Table 4).

1.3 In terms of reading achievements for two broad categories of comprehension processes, Hong Kong's students scored 572 in advanced reading ability (interpreting, integrating, and evaluating) and 577 in basic reading ability (retrieving and straightforward inferencing). Their performance in both comprehension processes has improved relative to PIRLS 2016. Hong Kong students has always demonstrated similar abilities in both these two comprehension processes, which is a testimony of good development in reading (see Table 5).

1.4 In terms of gender differences, in 2021, girls outperformed boys in reading. Girls in Hong Kong scored 577 points while boys scored 569 points. The reading scores for both girls and boys students were higher in 2021 than in 2016.

Girls have outperformed boys in reading achievement, globally. In Hong Kong's PIRLS 2021 assessment, the difference in reading performance between girls and boys was only 8 points, which is narrower than the international average difference of 16 points (see Table 6), and slightly narrower than in previous Hong Kong assessments (see Table 7 and Figure 2). The gender gap in reading achievement is smaller in informational reading than in literary reading.

1.5 In terms of individual differences, the proportion of top-performing students in reading increased in Hong Kong in 2021. 21% of students achieved the Advanced International Benchmark (625 or above) (i.e. the highest benchmark), while 68% achieved the High International Benchmark (550 or above) and 92% achieved the Intermediate International Benchmark (475 or above). Compared to 2016, there was a 3% increase in the proportion of students who achieved the Advanced and High International Benchmarks respectively (see Tables 8, 9, and Figure 3).

1.6 The proportion of Hong Kong's primary four students with reading scores below 400 points is the lowest in the world, at only 2%, tied with Russian Federation. Since PIRLS 2001, Hong Kong has consistently had one of the lowest rates of low-performing students internationally, indicating a high level of reading equality.

2. Students who have higher confidence in reading tend to perform better in reading

2.1 The three factors most related to the reading performance of Hong Kong students are:

- Confidence in reading (known as “reading self-efficacy”): refers to the belief that students have to do well in reading;
- Attitudes toward reading: include indicators such as Student Like Reading scale and reading motivation outside of schools;
- Reading habit: the frequency of students engaging in reading on their own or as school activities.

2.2 Confidence in their reading ability is the most direct factor affecting students’ reading performance. About 30% of Hong Kong students reported they were “very confident in reading”, and their average score is 605 (32%). Nearly 40% of students reported they were “somewhat confident in reading”, and their average score is 573 (39%). About 30% of students reported they were “not confident”, with an average score of 539 (29%). Compared to international students, Asian students, including those in Hong Kong, Macao SAR and Chinese Taipei, lack confidence in their reading ability (see Table 10).

2.3 Regarding students’ interest in reading, about 30% of Hong Kong’s Primary 4 students responded that they “like reading very much”, and their average score is 590. Around 45% of students reported that they “somewhat like reading”, and their average score is 573 (47%). The remaining 23% of students who “do not like reading” scored below 550 (see Table 11).

The proportion of students who reported “very confident in reading” (32% in 2021; 36% in 2016) and “like reading very much” (30% in 2021; 36% in 2016) was lower in 2021 than in 2016 (see Tables 12 and 13).

2.4 The PIRLS student questionnaire surveyed students about their reading habits in and out of school. Even though the survey was conducted during the pandemic, more than 60% of students reported that they “read quietly on their own at school”, “once or twice a week”, or “every day or almost every day” (66.0%). Their reading scores were higher than those of other students (see Table 14). About 60% of the students (59.6%) spent “30 minutes or more” reading outside of school each day. The average reading achievement is over 585, while those who read outside school for “less than half an hour” each day scored 554.

Reading habits and interests are both important conditions for confidence in reading. The more students read and the higher their interest in reading, the more confident they become, and they gain better reading achievement. Reading habits include both in-school and out-of-school reading. Students who feel a sense of belonging in school tend to read more frequently and enjoy reading more in school, while out-of-school reading habits are related to the family environment (as discussed below). It is important to note that students feel motivated to read because they find pleasure in doing so, and they are happy that they gain knowledge while reading. While both these reasons stimulated enjoyment during, reading for pleasure is a more direct reason. On the other hand, competition can negatively impact reading for enjoyment, leading to weaker reading interest, confidence, and achievement.

The difference in reading performance between boys and girls is not directly related to biological gender but rather to differences in their reading practices. Part of the gender differences in reading habits and interests can be explained by boys using electronic devices more frequently for non-academic purposes, which lower their reading interest and habits. On the other hand, girls are more likely to use libraries and feel a greater sense of belonging in school, leading to more positive reading interest and habits than boys.

3. Building a reading family and cultivating children to become excellent readers from an early age

3.1 The most closely related factors between Hong Kong family factors and student reading achievement are as follows:

- Student’s early literacy tasks and early home literacy activities;
- “Home resources for learning”, “parental expectations for their children’s education level”, and “student’s socio-economic status” (including parents’ education level and occupation);
- “Parent’s reading interests and attitudes”.

3.2 According to parents’ reports, their children’s literacy performance at the start of primary school has predicted their reading achievement in primary four since PIRLS 2001. Such finding is also found in PIRLS

2021, where approximately 45% of parents reported that their children could do early literacy tasks “very well” when they began primary one. These students scored an average of 596 (45.8%) in reading, higher than those could do the early literacy tasks “moderately well” (42.8%) and “not well” (11.4%) (see Table 15). Chinese character learning includes learning to recognise and learning to write, and only the former that is directly related to later reading achievement, not character writing.

Students’ home early literacy activities before primary school are based on parents’ reports, including how often their children engage in reading storytelling, singing, playing character recognition and word games and talking about daily activities and reading. 16.5% of parents and their children engaged in early literacy activities frequently, and these students achieving an average reading score of 591. It is worth noting that a very small number of parents never or almost never engaged in reading activities with their children before starting primary school, and their children’s reading performance in primary four was below average of the overall Hong Kong student population (3.0%).

3.3 The number of books in students’ homes and the results were consistent. Since PIRLS 2001, students with “26-100 books” at home have reached the average reading score for Hong Kong students. A similar finding was found for PIRLS 2021, where 36.0% of Hong Kong students reported having “26-100 books” at home. Their reading score was 578 points, higher than the Hong Kong average (see Table 16). Overall, the number of books in students’ homes has increased since 2016, possibly related to the pandemic (see below).

Similarly, according to the home questionnaire, regardless of the “books at the home” and “children’s books at the home”, the more books there are, the higher the students’ average reading score. Students whose homes have “26-100 books” or more, including children’s books, have average scores that are approximately equal to or higher than the Hong Kong students’ average reading score (573) (see Tables 17 and 18).

The home resources for learning is a determining factor for students’ reading interests. The more books there are in the home, the more positive the reading habits and interests, leading to higher reading confidence and better reading performance.

3.4 About two-thirds of Hong Kong parents expected their children to complete a “university degree” (66.0%), and about one-fourth of parents expected their children to complete a postgraduate (master’s or doctoral degree) (26.3%). The higher the education level that parents expect their children to achieve, the better their children’s reading achievement.

3.5 The socio-economic status of student’s family, including family income, parental education level, and occupation, is consistently related to academic performance, including reading, globally. Therefore, reading research places great emphasis to study on the correlation between socio-economic status and reading performance. The lower the correlation, the less impact of socio-economic status on reading performance, indicating a higher level of reading equity.

As reported by parents in PIRLS 2021 survey, about 35% of students were classified as having “higher” home socio-economic status, with an average reading score of 592 (35.8%); about 45% of students were classified as “middle” home socio-economic status, with an average reading score of 572 (46.4%). The remaining approximately 15% were in the “low” home socio-economic category, with an average reading score of 545 points (17.8%).

Nearly 30% of Hong Kong schools reported that “economically more affluent” students attended their schools, with an average reading score of 588 (28%). About 45% of schools reported that “economically more disadvantaged” students attended their schools, with an average reading score of 564 (45%). The difference in reading achievement between the two categories of students is 24 scale score points, on average.

The international average score difference between schools that admit students from “economically more affluent” and “economically more disadvantaged” is 42, while Singapore is 48 points and Chinese Taipei’s difference is 37 points. Hong Kong’s difference (24 points) is half of Singapore’s (48 points) comparably (see Table 19.)

Further analysis showed that, socio-economic status of Hong Kong families does not directly affect students' reading achievement. Instead, it is more closely related to the number of books at home and parental expectations. In other words, a family with a higher socio-economic status also requires abundant reading resources, so that their children are more likely to have higher reading interest and cultivate better reading habits. Similarly, higher expectations from parents, also leads to better reading performance. Therefore, it is not the socio-economic status of the family that directly brings about better reading performance of the students, but the allocation of resources to reading and reading activities at home, as well as the parent's expectations for their children. Therefore, it is important to support families with lower socio-economic status, to bring up to a similar level of reading resources and expectations for their children as families with higher socio-economic status (see section 3.3 above). This will offset the impact of socio-economic status on students' reading achievement.

As mentioned in section 1.5, Hong Kong has the lowest percentage of low-performing students internationally. The correlation between socio-economic status and reading performance in Hong Kong is also lower than the international average. Primary schools in Hong Kong have relatively higher reading equity compared to the international average.

3.6 Analysis of the PIRLS 2021 results indicated that another parental factor that also affected to children's reading performance, that is parents' reading interests, attitudes, and habits, although this factor is indirectly related to reading performance. When parents enjoy reading, they will have more books at home, and they will engage in more reading activities with their children. These home literacy environment factors in turn improves their children's reading performance. However, Hong Kong parents have a relatively low interest in reading, with only about 14.0% of parents reporting that they like reading very much. Hong Kong comes in last of the 53 countries and regions worldwide, the percentage of parents' reading interest is lower than Singapore (21%), Macao SAR (17%), Chinese Taipei (15%), and the international average (31%) (see Table 20).

In PIRLS 2021, 70.7% of parents reported that they engage in home "reading for enjoyment" activities with their children "once or twice a week" or more frequently. There is a slight increase from PIRLS 2016 (67.9%). However, the percentage of parents who reported "do not like reading" has gradually increased over the cycles. In PIRLS 2021, nearly a quarter (24%) of parents reported having poor reading interest.

4. Factors contributing to the success of schools and classrooms

4.1 Following are the key factors relating to schools and classrooms, as found in the school, teachers, parents, and student surveys in the Hong Kong's PIRLS 2021:

- "Students' sense of school belonging", including "students like school" and "students engaged in reading lessons";
- "Parents' sense of school belonging", including "parents' perceptions of their child's school";
- "Teacher job satisfaction"; and
- "School discipline and safety".

4.2 The degree to which students like their school is highly related with their level of engagement in reading lessons, which in turn arouse higher interest in reading and gain better reading achievement. Nearly 40% of Hong Kong Primary 4 students reported that they are "very engaged" during reading lessons, with an average score of 581 (39.0%). About half of the students reported that they are "somewhat engaged", with an average score of 572 (50.1%). The remaining 10.9% of students reported that they are "less than engaged", with an average score of 550. Overall, there is an improvement in level of engagement in reading lessons in PIRLS 2021 when compared to 2016. However, when compared with 57 countries and regions worldwide, students in Asia were less likely to be "very engaged" in reading lessons, with Chinese Taipei ranked 44th (49%), Singapore ranked 45th (48%), Macao SAR ranked 50th (45%), and Hong Kong ranked 56th (39%).

4.3 Parents' perceptions of home-school cooperation, school climate, and education quality were also investigated in PIRLS. Over two-thirds of Hong Kong parents (67.1%) were "very satisfied" with the school their child attends, and their children had an average reading score of 578. About 30% of parents were

“somewhat satisfied” with their children’s school, and their children had an average reading score of 569. Overall, Hong Kong parents have a quite positive evaluation of their child’s school, with less than 3% of parents being “somewhat unsatisfied”, and their children had an average reading score of 551 points.

Further analysis of the PIRLS study delved into issues on the association between parents’ perception of the school and their children’s reading achievement, and the interaction between children’s achievement and parents’ evaluation. On the first issue, it is found that there is no direct relationship between parents’ perception of the school and their children’s reading achievement. Therefore, it is reasonable to believe that parents’ perception is not a major factor in children’s achievement. Further analysis revealed that the more positive parents’ perception of the school, the higher their children’s literacy skills at the beginning of primary school, and the higher the parents’ reading interest. These are the characteristics of families that value reading (as discussed in section 3.2). In other words, families that prioritise reading tend to have a better perception of the school and a stronger sense of school belonging. Moreover, their children tend to have better reading achievement.

4.4 Teachers’ perceptions of school climate and job satisfaction are also indirectly associated with students’ reading achievement. Raising teachers’ recognition of the school’s goals and job satisfaction, and working conditions at school can enhance their teaching motivation and ability to organise instruction. Teachers are also more willing to engage in class, indirectly improving the effectiveness of reading instruction and positively associated with students’ reading achievement. About one-third of Hong Kong teachers (37.3%) were “very satisfied” with their profession, which is higher than the same category when compared with PIRLS 2016 (34.2%).

4.5 Reading is not just a standalone subject; all subjects involve reading and require reading skills. Therefore, in addition to reading lessons, there is a need to establish a school climate that emphasises reading and to cultivate a school literacy culture that “every teacher is a reading teacher.”

Almost all Chinese Language teachers used “textbooks” as teaching materials “every day or almost every day” (95.2%) in reading lessons, and about 55% used “homework and worksheets” as teaching materials “every day or almost every day” (56.4%). Looking into the use of reading materials, more than half of the teachers used “short stories” as literary reading materials “once or twice a week” or more frequently (54.9%), while about 40% used “non-fiction area books or textbooks” as informational reading materials “once or twice a week” or more frequently (41.1%).

Regarding promoting reading across the curriculum, about 80% of schools conducted such activities “once or twice a month” or more frequently (78.9%). Over 90% of schools have “morning or afternoon reading time” (96.5%). Additionally, nearly two-thirds of schools “set science, technology, engineering, and mathematics education (STEM) as a concern” in their school development plan (73.9%).

4.6 As reported by principals, Hong Kong schools have the best discipline and order in the world, providing a safe learning environment for students and teachers. Most Hong Kong school principals stated that there is “hardly any problems” in discipline and student behaviour in their schools (93.2%), ranking first among the 57 participating countries and regions in PIRLS 2021 (see Table 21).

Teachers also shared their perceptions about their schools’ school environment and student discipline. Most Hong Kong teachers agreed that their schools are “safe and orderly” (99.5%). Teachers highly agreed that they “feel safe at school” (99.6%), “the school’s security policies and practices are sufficient” (98.3%), and “the school is located in a safe neighborhood” (98.1%).

Internationally, schools with better safety and order tend to have better student reading achievement. Since Hong Kong schools are very safe and orderly, there are almost no cases where poor discipline affects students’ reading achievement. Therefore, the association between school discipline and safety and reading performance in Hong Kong schools is very low when compared internationally.

5. Hong Kong students' reading resilience triumphs over the pandemic

5.1 Of the 57 countries and regions participating in PIRLS 2021, thirty-five have participated in the previous cycle in 2016. Students from five countries or regions obtained higher reading achievement scores significantly than their counterparts in 2016. Nine countries and regions, including Hong Kong, did not decline. However, more than 60% of countries and regions had significantly lower student scores (21 countries or regions, 60.0%) (see Table 22).

5.2 Hong Kong students experienced multiple occasions of school suspensions during the pandemic. Schools flexibly switched to various learning modes to enable students to continue learning at home, achieving the goal of "Suspending classes without suspending learning". In the 2019/20 school year, primary four students had to learn from home for approximately 40% of the total number of school days (41.5%), and in the 2020/21 school year, students were required to study remotely for about 30% of school days (31.8%).

5.3 One-third of Hong Kong parents (33.1%) reported that their children's learning progress has been "adversely affected a lot" during the pandemic, and their children attained an average reading score of 567. About half of the parents (50.8%) perceived that their children's learning progress has been "somewhat adversely affected", and their children's reading score is 581. Only 5.2% of parents perceived their children's learning progress was "not at all adversely affected", and their children achieved the highest reading score of 594.

The home environment of this group of students (parents perceived that learning is "not at all adversely affected", 5.2%) is further analysed, and found three common characteristics: a higher socio-economic status, children having better literacy skills at the beginning of primary school, and higher parental perception of their child's school. These qualities are also found in reading families, which is directly associated with students' reading achievement.

5.4 Home survey results indicated that more than half of parents provided additional educational resources for their children to learn at home, including "books" (61.9%), "digital devices" (61.9%), and "online instruction or tutoring" (63.1%). For families providing books as additional resources, their children achieved a higher score 592, while families which did not provide additional books, their children achieved a lower score of 565.

5.5 Hong Kong schools made every effort to support students and teachers to continue learning and teaching using various methods during the pandemic. Almost all schools reported they provided "remote instruction or distance learning resources" for students (98.5%). In terms of supporting students, most schools "provided internet-based resources for students" (98.5%) and "access to digital devices for students" (87.7%). In terms of supporting teachers, over 90% of schools provided "recommendations for teachers about how to provide online instruction" (98.5%), "technical support for teachers" (98.5%), and "access to digital devices for teachers" (95.8%).

5.6 Comparing internationally and examining closer to look into the case of Hong Kong, two significant insights are worth noting:

Firstly, countries and regions that have higher reading achievement, including Hong Kong, have achieved better learning outcomes at home during the pandemic as compared to those who did not do well in PIRLS 2021. Our analysis found a lower association between reading achievement and learning from home outcome is less significant among countries and regions with lower reading achievement. Participating countries and regions have very different education systems, and varies greatly in their measures coping with the pandemic. Therefore, the information on this association must be carefully interpreted according to the social context. It cannot be simply generalised as a worldwide phenomenon, nor can it be misinterpreted as a direct causal relationship between staying at home and reading achievement.

Further analysis of the situation in Hong Kong is conducted. During the pandemic, according to parents' reports, 90% of students were affected by the pandemic and had to learn from home, and they scored 577, representing most of the student population. 10.8% of students did not stay home due to the pandemic, and they attained a reading score of 554. Most likely, these students come from dual-income families. Breaking

down this 10.8% of children further, only 7.0% comes from higher socio-economic status families, 12.6% from medium socio-economic status families, and 14.4% from lower socio-economic status families did not stay home during the pandemic. It shows that many students who did not stay home during the pandemic came from families with relatively limited resources (see Table 23).

Secondly, providing electronic devices and online resources from schools is more effective in low performing countries and regions, while families providing books is more effective in high performing countries and regions, including Hong Kong.

It may be related to the “base effect”. In low performing countries and regions, families have limited learning equipment and resources. When schools provide digital devices or other learning resources in low-performing countries or regions, it is like a timely help, and the effect is more significant. As for countries and regions with higher reading performance, families have more learning resources, so further school support is of less effect when compared with low-performing countries and regions. Ultimately, it is the promoting children’s reading habits and interests at home that greatly impacted on the reading achievements.

The excellent reading achievement of primary four students in Hong Kong during the pandemic should be attributed to the collective efforts of reading families and reading schools. The essential factors for successful reading achievement are developing students’ character recognition skills at an early age, providing a safe or orderly school environment where students can engage in lessons, building a sense of school belonging, cultivating reading habits, motivations, and interests, and building confidence in reading. Despite the challenges of the pandemic, these factors are crucial for Primary 4 students, their parents, and teachers in Hong Kong to maintain their resilience in reading.

6. Conclusion and Suggestions

6.1 In PIRLS 2021, Hong Kong’s primary four students continue to excel from the past three PIRLS cycles. This outstanding achievement is not possible without the collective efforts of Hong Kong students, parents, educators, and societal stakeholders. Especially during the pandemic, Hong Kong’s primary four students exhibited strong reading resilience. Reading resilience is built on the solid and profound foundation of Hong Kong’s reading schools and reading families. Strengthening and developing the quality of reading schools and reading families is the overall direction of reading education.

6.2 The reading achievement of Hong Kong girls outperformed boys in previous PIRLS studies. In 2021, although girls still perform better than boys in reading, the gap between boys and girls has narrowed slightly. Gender per se is not related to reading ability but rather the difference in reading practices between girls and boys. Boys tend to use the library less and have less interest in reading, preferring to use electronic devices more.

Cultivating boys’ habits of balancing paper-based reading with electronic device use, as well as their literary reading achievement, and enhancing their interest in reading, is key to further narrowing the gap in reading achievement between boys and girls, and ultimately improving the overall reading achievement of Hong Kong’s primary four students.

6.3 The proportion of Hong Kong’s top-performing students has steadily increased. Concurrently, the proportion of low-performing students has remained low. The proportion of Hong Kong students achieving “Advanced” and “Higher” international benchmarks has increased compared to PIRLS 2016. Hong Kong has only 2% of students with very low reading achievement, one of the two countries with the lowest rates in the world, along with the Russian Federation.

Compared to Singapore, which ranks first, the proportion of Singapore’s “Advanced” and “Higher” international benchmark students has continued to increase over the years, while the proportion of students with “Intermediate”, “Low”, and very low reading levels has continued to decline. It is the main reason why Singapore’s students ranked first in PIRLS 2021.

Continuing to increase the proportion of Hong Kong's top-performing readers and further reducing or maintaining the extremely low proportion of students with low reading achievement is the goal of Hong Kong's reading education.

6.4 Students' reading confidence (self-efficacy) is the factor that is most closely related to reading achievement, both internationally and in Hong Kong. Reading self-efficacy is related to reading interest and habits. The more positive the reading interest and habits, the higher the reading self-efficacy.

There is still room for improvement in Hong Kong students' reading self-efficacy, attitudes, and habits. It is the top priority for future reading education in Hong Kong.

6.5 The family socio-economic status of Hong Kong students has a relatively low impact on their reading achievement, reflecting the continued fairness of reading education in Hong Kong. Regarding reading, there should not be and must not be a notion of "winning at the starting line."

Family socio-economic status of students is still indirectly related to their reading achievement through the distribution of family reading resources. For high socio-economic status families, parents should provide their children with rich reading resources, while parents from lower socio-economic backgrounds can arrange for sufficient reading resources for their children through various methods and channels, including the use of school and public libraries. In both cases, Hong Kong children can still achieve well in reading.

6.6 Parents should actively cultivate reading by enhancing habits and interest before primary education, which will subsequently enhance their reading self-efficacy. Engaging in reading activities with children during the early years will enhance their future reading achievement. However, PIRLS 2021 indicated that Hong Kong parents tend to engage in fewer reading activities with their children during their early childhood.

Societal stakeholders are also encouraged to provide for a friendly pre-school environment for children to learn reading, which is essential for further enhancing Hong Kong's reading level.

6.7 Hong Kong parents have the lowest reading interest in the world, ranked the same as Egypt at the 50th place. Parental reading interest is indirectly related to reading activities and the use of family reading resources, which can influence their children's reading attitudes and achievement. Parents must lead by example, and encourage their children to read, and also read themselves. Designing and conducting training for parent-child reading activities is also a key focus of reading education in the future.

6.8 Hong Kong schools enjoys a safe and orderly environment with excellent student discipline. More than 90% of principals report that their schools are safe and orderly, ranking first among 57 countries and regions. Teachers hold the same view on school safety and discipline. School environment safety is closely related to students' reading achievement internationally. In Hong Kong, the overall safety of school environments means that it does not affect students' reading achievement. Additionally, high classroom participation will improve students' enjoyment in school and promotes their reading interest. Therefore, in addition to maintaining good discipline and order in Hong Kong schools, developing a reading-friendly environment that students enjoy should also be a focus for future school development.

6.9 Hong Kong students, parents, teachers, schools, and all education stakeholders have demonstrated outstanding resilience in learning and teaching, allowing Hong Kong to overcome the disruptions caused by the pandemic and successfully tide over the three years of "suspending classes without suspending learning". Hong Kong's top-three ranking in global reading achievement for four consecutive cycles is highly remarkable.

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For more details about PIRLS 2021 study, please visit <https://pirls.hku.hk>.

To view the e-version of this press release, download photos and further reference materials, please visit <http://web.edu.hku.hk/press>.

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