

PIRLS 2021:
**Exploring the contexts for reading of
primary school pupils in Ireland**

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CHAPTER 9

Chapter 9: Key Findings and Conclusions

The PIRLS 2021 implementation included three notable changes compared to previous cycles. Two of these changes were planned: a further transition to digital test administration for some, but not all, countries, and the introduction of a “group adaptive testing” approach to enhance the quality of information collected in both the lowest- and highest-achieving countries. The third was unplanned and resulted from the need to adapt procedures to address the global challenges posed by the COVID-19 pandemic. These challenges prevented participating countries from conducting a smooth or complete field trial (normally held a year before the main data collection) and disrupted the main data collection too. Consequently, the main data collection for PIRLS 2021 spanned a year and a half across the participating countries, from autumn 2020 to spring 2022.

In Ireland, the main data collection for PIRLS 2021 was postponed from spring 2021 to autumn 2021, resulting in the pupils initially sampled at the end of Fourth Class (End G4) being assessed at the start of Fifth Class (Start G5). Although the original plan for Ireland was to administer the digital version of PIRLS 2021, the school closures and national restrictions due to COVID-19 led to a decision to administer the paper-based version instead. This approach was deemed safer, as it minimised the risk of COVID-19 transmission and was less disruptive. Despite the changing plans and significant disruption to the education system, the staff, pupils, and parents in sampled schools in Ireland showed remarkable commitment and goodwill towards the study. This dedication is reflected in response rates that are high by the standards of any PIRLS cycle and exceptionally high for a cycle conducted during the pandemic. As Delaney et al. (2023) note, it was evident that teachers recognised the importance of collecting large-scale data on pupils’ reading skills within the context of the COVID-19 pandemic, which included prolonged periods of school closures and remote teaching and learning.

In addition to the general caveat regarding trend comparisons with PIRLS 2021 data, which concerns the impact of COVID-19 on pupils’ instructional experiences, the administrative challenges of the PIRLS 2021 data collection, both internationally and nationally, have introduced specific challenges in interpreting the resultant data. Internationally, certain caveats are necessary for comparisons between End G4 and Start G5 countries, while the distinction between countries that administered PIRLS 2021 on paper and those that administered it digitally should also be borne in mind. This is despite the fact that the PIRLS 2021 scaling methodology accounted for mode effects and allowed for the placement of paper and digital PIRLS data on a single scale. Nationally, as described in Chapter 1, for Start G5 countries, including Ireland, the changes in age, grade, and time of year for the PIRLS 2021 cycle compared to previous cycles must be considered for cross-cycle comparisons. Also, for End G4 countries that tested one year later than planned, comparisons with the previous PIRLS cycle (2016) represent a six-year trend instead of the usual five-year trend (compared to the rest of the countries).

Despite the challenges outlined for both within- and cross-country comparisons, the PIRLS achievement data and the contextual data provided by pupils, their parents, teachers, and school principals, as described in this report, offer a dependable and comprehensive snapshot

of the reading comprehension skills and related experiences of Fifth Class pupils in Ireland, including various subgroups within this population, as of autumn 2021. Furthermore, they provide valuable insights into the context in which these skills were cultivated or impeded.

Chapters 3 to 8 delve into the findings of this report, presenting data for Ireland within an international comparative context. The analyses consider data from previous PIRLS cycles in 2011 and 2016, examine various aspects such as pupil, home, class, teacher, and school characteristics, and address pupils' educational experiences amidst the backdrop of the COVID-19 pandemic. Each of these chapters includes a detailed summary highlighting its main findings. Consequently, an exhaustive overview of all findings presented in this report is beyond the scope of this final chapter. Rather, this chapter consolidates key findings, explores their alignment with the policy context of PIRLS 2021, and outlines potential policy implications and recommendations for future research.

Factors associated with reading achievement

The gap in PIRLS achievement between pupils born in Ireland and those born outside Ireland, favouring the former group, narrowed between 2016 and 2021, resulting in a not statistically significant difference in overall reading achievement.⁴¹ This finding aligns with data at the post-primary level (PISA 2022; Donohue et al., 2023). Despite this progress, which should be interpreted in light of the caveats associated with the PIRLS 2021 data outlined earlier, the statistically significant gaps on the Literary and Retrieve/Infer reading subscales favouring pupils born in Ireland indicate that efforts to further enhance inclusion within the Irish education system remain crucial. These remaining differences justify the relevant objectives of the *Literacy, Numeracy and Digital Literacy Strategy 2024-2033* under Pillars 1 and 5, focusing on supporting diverse learners, including immigrant pupils, to achieve their potential (Department of Education, 2024b, 2024c). Moreover, as noted by P. Burke and Lehane (2023), linguistically and culturally responsive assessment tools are necessary to ensure that valid inferences can be drawn about the proficiency and needs of pupils from diverse backgrounds.

The previous Literacy and Numeracy Strategy and its interim report (Department of Education and Skills, 2011b, 2017d), alongside other publications (e.g., Donohue et al., 2023), have highlighted considerable progress in meeting the needs of low achievers in Ireland across various subjects, including reading. This progress is also echoed in the PIRLS 2021 results as described by Delaney et al. (2023). However, despite efforts that have led to this progress, particularly for specific subgroups of pupils (see, for example, Nelis and Gilleece, 2023, for more information about DEIS schools), the more in-depth investigation of the profiles of low-, medium-, and high-achieving pupils presented in this report has identified certain groups of pupils to be at a higher risk of lower achievement compared to their peers. Specifically, boys, pupils who were not very confident in reading and those who did not particularly like reading, pupils in the middle and lower socioeconomic groups, and those attending DEIS Urban schools were statistically significantly more likely to be low achievers and statistically significantly less likely to be high achievers in reading compared to girls, pupils who were very confident in reading, those who very much liked reading, those in the higher socioeconomic group, and

⁴¹ It is important to clarify that this comparison does not account for the language(s) spoken by the pupils. Therefore, being *born outside Ireland* does not necessarily imply that a pupil does not speak the language of the test at home, though some overlap between these groups is likely. Separate findings, detailed in Chapter 3, show that pupils who *almost always speak the language of the test* at home tend to achieve the highest mean reading scores among their peers.

those attending non-DEIS schools, respectively.⁴²

On the other hand, there is acknowledgement that the needs of high achievers have not been met to a similar extent, necessitating additional efforts to enhance educational provision across the full spectrum of ability within the Irish education system. This is also identified as a key theme in the *Literacy, Numeracy and Digital Literacy Strategy 2024-2033* (Department of Education, 2024b), which explicitly outlines the need to further support high-achieving learners in reaching their full potential. While relevant research (e.g., Pitsia, 2021; Pitsia et al., 2024; Shiel & Pitsia, 2022) has indicated that challenges in meeting the needs of high achievers are more pronounced in mathematics, followed by science, and to a lesser extent, reading, targeting relevant policy initiatives towards supporting these groups of pupils across subjects—while ensuring attention to all pupils—is essential for promoting more equitable educational outcomes. In this context, providing teachers with guidance on how to effectively challenge these learners using outcome-based curricula could prove highly beneficial.

Attitudes towards and engagement in reading

In 2021, a decrease in the proportion of pupils reporting being very confident in reading and an increase in those reporting not being confident were observed compared to 2016. Concurrently, the achievement gap between these two groups widened between the two PIRLS cycles. On the other hand, the achievement gap between pupils who very much liked reading and those who did not like reading narrowed; while this seemed initially encouraging, it was accompanied by a decline in the proportion of pupils who very much liked reading and an increase in the proportion of pupils who did not like reading, a pattern also noted among pupils' parents. Regarding pupils' engagement in reading lessons, a decrease was noted in the proportion of pupils who reported being very engaged in reading lessons in 2021 compared to 2016 (although this could be related to the period during which PIRLS 2021 took place, i.e., autumn 2021, following prolonged periods of school closures and remote learning), while the achievement gap between very engaged and less than engaged pupils slightly increased between the two PIRLS cycles. Furthermore, fewer pupils had parents who frequently read for their own enjoyment in 2021 compared to previous years. This may reflect the impact of COVID-19, which probably limited parents' opportunities for leisure reading, particularly for those balancing remote work, homeschooling, childcare, and household responsibilities. Against this background, it is worth noting that the time spent by pupils' parents reading at home (including books, magazines, newspapers, and materials for work) seemed to have a stronger association with pupils' reading achievement in 2021 compared to previous PIRLS cycles – notably, the strongest among the selected reference countries.

More in-depth analyses of pupils' attitudes towards and engagement in reading lessons revealed that the extent to which pupils felt confident in reading did not vary by gender; however, boys tended to like reading and be engaged in reading lessons less than girls. Additionally, pupils from higher socioeconomic backgrounds and those attending non-DEIS schools were more likely to be more confident in and like reading compared to their peers from lower socioeconomic backgrounds and DEIS Urban schools, respectively. Similar patterns were observed in Ireland in PIRLS 2016 (with the exception of the analysis by individual socioeconomic status, which was not available) (Delaney et al., 2022).

42 It is important to note that these findings are based on bivariate analysis, which examined the relationships between each individual variable and achievement one at a time. This type of analysis does not account for the role of multiple variables in predicting pupils' chances of belonging to the three performance groups simultaneously and should be interpreted considering this limitation.

Taken together, these findings indicate less positive attitudes towards reading and less frequent engagement in reading lessons in 2021 compared to previous years both among pupils themselves and their parents, with more negative attitudes being more pronounced for certain subgroups of pupils. Notwithstanding national actions outlined in the *2011 National Strategy* and subsequent efforts, including those reflected in its interim report (Department of Education and Skills, 2011b, 2017d), aimed at improving the attitudes towards reading and promoting engagement in reading activities for all pupils and specific subgroups, pupils' and parents' attitudes towards and engagement in reading seemed to deteriorate in 2021 compared to previous years. These findings are in contrast with the very high stability in these variables between 2011 and 2016 (Delaney et al., 2022) but in line with other relevant, more recent research within the Irish context (e.g., McKeown et al., 2019; Shiel et al., 2022; Smyth, 2024).⁴³ These findings need to be interpreted considering the period during which PIRLS 2021 took place (i.e., autumn 2021, following prolonged periods of school closures and remote learning), as it is likely that the COVID-19 context may have had an important role in shaping pupils' and parents' attitudes towards and engagement in reading, among other outcomes.

In light of these findings, though, the continued emphasis on pupils' and parents' attitudes towards and engagement in learning in the *Literacy, Numeracy and Digital Literacy Strategy 2024-2033* (Department of Education, 2024b) appears wise. Specifically, maintaining and increasing focus on the attitudes of young learners is crucial, as these constructs are highly malleable early in life, and positive developments during these formative years are likely to yield long-term benefits for pupils. Within this context, supporting teachers and school principals in raising parents' awareness of their pivotal role as partners in shaping their children's learning from the early years is imperative. ITE and CPD programmes could be tailored to equip educators with the skills and knowledge necessary to effectively collaborate with parents in fostering a supportive learning environment both at home and in school. Such efforts align with the emphasis on partnerships in the principles of learning, teaching, and assessment that underpin the Primary Curriculum Framework (NCCA, 2023).

Reading activities and instruction

Early years' education and parental involvement in children's learning from a young age have been key priorities of the *2011 National Strategy* and its interim report (Department of Education and Skills, 2011b, 2017d), and remain central in the new Strategy (Department of Education, 2024b, 2024c). In line with this focus, Early Years Education Inspections (EYEI) were introduced in April 2016, guided by a quality framework informed by Aistear, Síolta, and national and international research. EYEI reinforced policymakers' commitment to ensuring that all children have enriching early childhood experiences, with a strong focus on language and literacy in ELC settings (Inspectorate - Department of Education, 2024).

The findings presented in this report point towards positive relationships between reading achievement and i) the frequency with which pupils engaged in a range of early literacy activities before starting First Class with their parents or someone else at home and ii) pupils' literacy readiness at the beginning of First Class. Notably, the latter relationship was among the strongest observed across the selected reference countries, noting, though, that the Irish context is different in the sense that pupils start First Class after two years of schooling.

43 It is worth noting that directly comparable between-cohort data on reading attitudes are not available in Smyth's (2024) study due to changes to question phrasing.

While causal relationships cannot be inferred from the bivariate analyses conducted here, further research could usefully explore the extent to which early literacy activities and early literacy readiness predict reading achievement when other variables, such as socioeconomic status, are accounted for. That caveat notwithstanding, these findings indicate that the continued emphasis on early childhood education and parental involvement appears justified, while the slightly higher frequency of pupil engagement in early literacy activities at home reported by parents in 2021 compared to previous years may be linked to this emphasis. These findings also suggest the potential value of increased availability of up-to-date and culturally appropriate screening and diagnostic tests for literacy difficulties and the implementation of interventions during these formative years to further support prevention at primary level (NEPS, 2016), which comprises an action under Pillar 5 of the *Literacy, Numeracy and Digital Literacy Strategy 2024-2033* (Department of Education, 2024c). The ERC is currently redeveloping its screening and diagnostic tests of early literacy, with versions in both Irish and English to be available.

The PIRLS 2021 data indicated that, broadly speaking, classroom practices have not greatly changed compared to previous PIRLS cycles and other relevant studies. While such continuity may seem unexpected under normal circumstances given the introduction of the PLC (Department of Education and Skills & NCCA, 2019), through which the PIRLS 2021 cohort received most of their education, the prolonged school closures and remote teaching and learning due to COVID-19 likely disrupted the smooth rollout of the new curriculum, which may, in turn, have had a bearing on classroom practices. Although classroom practices remained relatively consistent, a few notable differences emerged in 2021 compared to previous cycles. Specifically, more pupils were asked by their teachers to talk with each other about what they had read and to write something in response to what they had read, while fewer pupils were provided with materials that matched their interests and with time for reading books of their choosing, and fewer pupils were asked to read texts that included multiple perspectives. While these differences may be attributable to adjustments stemming from the new curriculum, such as initial emphasis on oral language in its implementation, and/or adaptations necessitated by the move to remote teaching and learning due to COVID-19, untangling these relationships presents challenges.

Use of digital devices for reading and other activities

The proportions of pupils owning a computer/tablet and a smartphone varied to some extent across the selected reference countries, as did the magnitude and direction of achievement differences between pupils who owned these devices and those who did not. In Ireland, pupils' access to their own computer/tablet and smartphone was associated with lower achievement. These inconsistent patterns of mean differences across countries suggest that owning such devices may not be necessarily associated with lower achievement, and that the way(s) in which pupils utilise such devices may be more critical. While limiting primary pupils' access to such devices in accordance with recent guidelines by the Department of Education (Department of Education, 2023) seems reasonable for policymakers, teachers, and parents alike, efforts to understand and guide pupils' digital device usage may also be valuable. Further research in this area, though crucial, can be challenging due to the rapid evolution of digital device use over time. For example, Smyth (2024), using data on Growing Up in Ireland (GUI) Cohorts '98 and '08 to explore changes in the lives of adolescents over the period 2011-2012 to 2021-2022, revealed that two-thirds of the Cohort '98 reported having used the internet for homework and that half of the Cohort '08 reported minimal usage of smartphones or tablets for homework purposes.

Within the context of the increased technology usage during the COVID-19 pandemic (e.g., Milosevic et al., 2021) and the ever-expanding integration of technology in education, pupils in Ireland reported a preference for reading on paper over reading on a screen. Additionally, they expressed a tendency to remember things read on paper more easily than things read on a screen. Given that these questions were national additions, comparisons with other countries to determine whether pupils in Ireland are an outlier in this regard are not possible. Nevertheless, monitoring these attitudes towards reading in different modes remains essential. Given that the next cycle of PIRLS in 2026 in Ireland will be administered digitally, it could be valuable to examine how these attitudes and their relationships with reading achievement evolve over time. Tracking these patterns can provide insights into the relationship of digitalisation with reading behaviours and achievement among pupils in Ireland, particularly within the context of the predominantly paper-based instruction and assessment that has characterised Irish schools to date.

According to teachers' reports in 2021, levels of access to digital devices during reading lessons remained similar to those reported in 2011. Also, according to school principals, Ireland had the lowest proportion across all selected reference countries of pupils attending schools in which digital learning resources were available. Furthermore, less than one-tenth of pupils in Ireland had teachers who taught digital literacy skills (e.g., reading, writing, and communicating using digital tools and media) on a daily or near-daily basis, while one-fifth of pupils had teachers who never or almost never taught digital literacy skills. Tasks aimed at developing digital comprehension skills, such as determining the usefulness of a website for a specific purpose or evaluating its credibility, were also used less frequently than a range of other tasks used to help pupils develop comprehension skills.

These findings are noteworthy, especially considering that substantial proportions of the same pupils had teachers who reported participating in formal professional development programmes on integrating technology into reading instruction and on instruction relating to digital literacies. This is further corroborated by data related to primary school teachers from the *Digital Learning Framework national longitudinal evaluation* (Donohue et al., 2024). However, despite the relatively limited exposure of pupils to digital devices during reading lessons, approximately four out of 10 pupils indicated high digital self-efficacy, with only approximately one out of 10 reporting low digital self-efficacy. This relatively high level of digital self-efficacy among pupils may be partly associated with their use of digital devices outside of school.

Against this background, the recognition of digital literacy as fundamental for learners' development and its prioritisation alongside literacy and numeracy in the *Literacy, Numeracy and Digital Literacy Strategy 2024-2033* (Department of Education, 2024b, 2024c) seem warranted. While supporting pupils to become confident and competent digital learners and develop the necessary skills to navigate an increasingly digital world in a safe and ethical manner is a priority in the Strategy, continuing to equip schools with appropriate digital resources and maintenance, and support teachers themselves in the integration of technology into teaching and learning remain crucial. As outlined in the Strategy, guidelines provided by the *Digital Strategy for Schools to 2027* (Department of Education, 2022b) and the *Digital Learning Framework for Primary Schools* (Department of Education and Skills, 2017c) are deemed useful towards this end.

Wellbeing

Approximately half of pupils reported that they sometimes felt tired when they arrived at school, while more than one out of four pupils reported feeling that way every or almost every day, with only a minority reporting never feeling that way. However, the PIRLS 2021 pupil questionnaire did not ask pupils about the reasons behind this fatigue (e.g., early school start times, lengthy commutes, insufficient sleep, stress). Incorporating a follow-up question in future PIRLS cycles could shed light on these factors, facilitating the development of targeted policy initiatives to address this fatigue among pupils. Similarly, approximately half of pupils reported that they sometimes felt hungry when they arrived at school, about one-fifth reported that they felt that way every or almost every day, and one-third that they never felt that way.

The frequency with which pupils arrived tired or hungry at school varied by certain characteristics. Specifically, boys, pupils in the middle and lower socioeconomic groups, and those attending DEIS Urban schools were more likely to feel tired upon school arrival compared to the rest of their peers. Additionally, pupils in the lower socioeconomic group were more likely to feel hungry upon school arrival compared to the rest of their peers.⁴⁴ Analysing data from the Irish *Health Behaviour in School-aged Children* (HBSC) study 2022, Gavin et al. (2024) also found statistically significant differences in the frequency with which primary school pupils felt hungry upon school arrival by their social group, favouring those from higher social classes. Although there were no statistically significant differences in the frequency with which pupils arrived at school hungry by school DEIS status, it is important to note that many DEIS schools offer breakfast clubs or vouchers, which may, at least partly, address this issue. The recent expansion of the *School Meals Programme* (see Department of Social Protection, 2024), aimed at providing regular, nutritious meals to primary school pupils to support them in taking full advantage of their education, to an additional 900 primary schools, bringing the total number of schools able to benefit from hot meals to 2,000 since April 2024, is likely to mitigate the issue of hunger, at least for a portion of the affected pupils. The increased likelihood of feeling hungry on arrival at school across the PIRLS cycles may suggest that further expansion of the programme may benefit even more pupils.

Aligned with findings from the *Children's School Lives* study collected between 2019 and 2023 (Sloan et al., 2024), three-quarters of pupils in PIRLS 2021 reported never or almost never experiencing bullying at school, one out of five reported experiencing bullying about monthly, and 6% reported experiencing bullying about weekly, indicating a slightly increased frequency of various bullying behaviours compared to 2016 (a finding that should be interpreted considering the caveats associated with the PIRLS 2021 data described earlier in this report). Pupils who reported never or almost never being bullied performed statistically significantly better in reading than those who reported being bullied on a monthly or weekly basis. In contrast to relevant findings from the Irish HBSC study 2022 focusing on primary school pupils, which showed no statistically significant gender differences in bullying victimisation (Gavin et al., 2024), PIRLS 2021 data indicated that boys were statistically significantly more likely to experience weekly bullying than girls, whereas girls were statistically significantly more likely than boys to almost never experience bullying.⁴⁵

⁴⁴ It is important to note that these findings are based on bivariate analysis, which examined the relationships between each individual variable and achievement one at a time. This type of analysis does not account for the role of multiple variables in predicting the frequency with which pupils arrived tired or hungry at school simultaneously and should be interpreted considering this limitation.

⁴⁵ Differences in the measures used to capture bullying may at least partly account for these contrasting findings; hence, they need to be interpreted with caution.

Regular access to education and to the social aspects that come with school life may also be viewed as contributing to children's wellbeing. While direct comparisons between rates of pupil absence in 2016 and 2021 are problematic due to changes to the questionnaire, it appears likely that absence rates were higher in 2021—perhaps unsurprising given the context of a global pandemic. Additionally, absence rates in 2021 were statistically significantly higher in DEIS Urban Band 1 schools than in non-DEIS schools, suggesting that a continued focus on attendance, health permitting, in DEIS Urban Band 1 schools may be important.

While other aspects of pupils' well-being, school-related experiences, and reading attitudes and behaviours did not vary by pupils' country of birth, pupils born in Ireland were statistically significantly more likely to almost never experience bullying compared with pupils born outside of Ireland. There were also large and statistically significant differences in the proportions of pupils experiencing bullying about weekly by their socioeconomic status, with pupils in the higher socioeconomic group being statistically significantly less likely to experience bullying compared to those in the middle and lower groups. Additionally, the proportion of pupils in DEIS Urban Band 1 schools experiencing bullying about weekly was more than double the proportion reported in non-DEIS schools. Addressing bullying necessitates a systemic and prevention-focused approach for all pupils, driven by such actions as those provided in the Department of Education's whole education approach to preventing and addressing bullying in schools, *Cineálta: Action Plan on Bullying* (Department of Education, 2022a). However, relevant initiatives can explicitly target those who are most at risk, as identified in this report. These groups include boys, pupils born outside Ireland, pupils from lower socioeconomic backgrounds, and pupils attending DEIS Urban Band 1 schools. It is important to note that the analyses presented in this report are limited to the variables available in PIRLS, which, for example, does not collect data on ethnic background, including Traveller or Roma identity, which could have been useful within this context.

Overall, the PIRLS 2021 data indicate a decline in at least some aspects of pupils' wellbeing since 2016. While it is plausible that COVID-19 and the associated prolonged school closures and remote teaching and learning may well be linked with these findings, maintaining a policy focus on wellbeing in primary schools, including measures to address tiredness, hunger, and bullying, seems warranted. Under the Department of Education's *Wellbeing Policy Statement and Framework for Practice* (Department of Education and Skills, 2019), schools are expected to initiate a wellbeing promotion review and development cycle as part of their SSE process, with the timeline for this having been extended to 2025 due to the pressures associated with COVID-19 (Department of Education, 2021a). Implementation of *Bí Cineálta (Be Kind)*, the updated anti-bullying procedures for schools in Ireland, published in June 2024, are expected to further support a prevention-focused approach to bullying behaviour (Department of Education, 2024a). Although individual components of wellbeing, such as the ones described in this report, can provide valuable insights, future research in this area could employ more integrative analyses of wellbeing components. For instance, latent class analysis techniques could provide a more comprehensive understanding of wellbeing, considering that "contemporary well-being theories embrace multidimensionality as inherent to understanding an overall state of well-being" (Reynolds et al., 2024, p. 18). Such approaches could offer a more nuanced understanding of pupils' overall wellbeing and inform targeted interventions to support their holistic development.

COVID-19: Learning from a unique moment in educational history

Although Fourth Class teachers reported drawing on supports from a range of organisations, such as the Department of Education, PDST, and NCCA, to help facilitate remote learning during the second period of school closures from January to March 2021, the most frequently used supports originated from their immediate working environment. This included assistance from colleagues within their school, as well as other teachers offline and online, and their school management. Data from the *Children's School Lives* study, collected during the first period of school closures in 2020, corroborate these findings, suggesting that schools also benefitted from exchanges with other schools during the first lockdown (Symonds et al., 2020). This underscores the importance of within- and cross-school support systems, even during challenging circumstances.

It is useful to look at the estimates provided by both Fourth Class and Fifth Class teachers regarding the proportion of pupils whose literacy development was negatively affected by challenges due to COVID-19. Fewer pupils were deemed to be negatively affected by these challenges in the autumn of 2021 (the time of the PIRLS assessment) according to Fifth Class teachers than in the previous school year (2020-2021) according to Fourth Class teachers. Additionally, overall, Fifth Class teachers perceived that COVID-19 restrictions had less of an impact on literacy teaching and learning in the autumn of 2021 (the time of the PIRLS assessment) than that perceived in the previous school year (2020-2021) by Fourth Class teachers.

It is of interest to consider these findings in light of data from parents as presented in the *Remote teaching and learning: Summary of Inspectorate research* report for the period January - February 2021 (Department of Education, 2021b). Comparisons of data from parent surveys completed in April 2020 and February 2021 indicated that schools were able to adapt to a great extent and to enhance their capacity to provide remote teaching and learning following the first lockdown. Notably, improvements were more pronounced at primary level, where, overall, provision for remote teaching and learning had been less positive relative to that at post-primary level during the initial school closures in 2020.

The relatively more optimistic perspectives of Fifth Class compared to Fourth Class teachers seem encouraging, suggesting that some pupils at least were able to quickly "catch up". A series of communications to schools from the Department of Education, beginning with guidance on curriculum implementation within the context of the COVID-19 pandemic (Department of Education and Skills, 2020e), which emphasised the importance of promoting language and literacy on the return to school following COVID-19 closures, and initiatives like the expansion of the summer programmes funded by the Department of Education, although attended by only a minority of participating pupils, may have contributed to these positive outcomes. Further research could delve into the perceived impact of COVID-19 among specific pupil subgroups, such as those from lower vs higher socioeconomic backgrounds or those attending DEIS vs non-DEIS schools, to gain deeper insights into the differential perceived effects of the pandemic on literacy development.

Looking ahead

This report has presented extensive findings derived from descriptive and bivariate analyses of PIRLS data for Ireland, selected reference countries, and on average across all PIRLS countries, using achievement data from the PIRLS test and contextual data from the PIRLS pupil, parent, teacher, and school questionnaires. The robustness of the PIRLS 2021 database allows for a

multitude of analytical approaches, which could incorporate achievement and contextual data or focus solely on contextual data. Multivariate analyses examining the simultaneous contribution of a range of factors towards the prediction of PIRLS achievement and/or other non-cognitive outcomes (e.g., pupils' wellbeing) would provide useful insights and would complement the findings presented in this report. Despite the need to consider certain caveats in interpreting the PIRLS 2021 data, further multivariate analyses could elucidate whether predictors of primary school pupils' outcomes in relation to achievement or other important variables have shifted following the prolonged periods of school closures and remote teaching and learning in 2020 and 2021 due to the COVID-19 pandemic. Such investigations could inform targeted policies, initiatives, and instructional practices.

Additionally, while parents' role in shaping their children's academic outcomes has long been acknowledged, research examining their role in shaping children's attitudes and behaviours is scarcer. Considering the pivotal role parents play in their children's development and the importance of children's attitudes and behaviours for academic and other outcomes, future research examining the relationships between pupils' and parents' reading attitudes and behaviours and the extent to which these relationships vary by certain pupil or other contextual characteristics would be worthwhile. Such research could offer valuable insights into the dynamics of parent-child interactions and their implications for educational outcomes.

An in-depth analysis of pupils with special educational needs has not been included in this report. Although information about special educational needs at the individual level is not available in PIRLS, the teacher questionnaire collects some class-level information that could be relevant for future exploration. This includes information on the number of pupils facing challenges in understanding spoken English, the number of pupils with difficulties in reading, as well as the extent to which the needs of pupils requiring additional support—such as those facing mental, emotional, or psychological challenges—affect classroom instruction. While these data have not been analysed in this report, they present opportunities for further exploration in future publications, potentially offering a deeper understanding of the learning environments and needs of pupils with special educational needs.

Continued monitoring of digital literacy and its relationship with reading achievement appears crucial. Building upon the insights gleaned from the findings of the PIRLS 2021 cycle, which highlighted various aspects related to availability of digital resources, digital literacy among pupils and teachers, and attitudes towards digital reading, and in light of the enhanced emphasis on digital skills within the new *Literacy, Numeracy and Digital Literacy Strategy 2024-2033* (Department of Education, 2024b, 2024c), ongoing monitoring could provide critical insights into how well primary schools are adapting to digital learning environments and inform necessary adjustments to educational initiatives in an effort to ensure that primary school pupils are adequately prepared to thrive in an increasingly digital learning environment. Within this context, and as Donohue et al. (2024) highlight, there is no direct assessment of digital literacy in Ireland, in the way that assessments like NAMER, PIRLS, TIMSS, and PISA assess reading, mathematical, and scientific literacy. In light of the findings related to digital literacy presented in this report, consideration should be given to Ireland's participation in digital literacy assessments at both student (e.g., International Computer and Information Literacy Study [ICILS]) and teacher (e.g., Nguyen & Habók, 2024) levels.

In 2024 and 2025, a number of national reports presenting findings for Ireland from NAMER 2021, PISA 2022, and TIMSS 2023 will be published by the ERC. These reports, along with the current report, provide a wide-ranging corpus of information about the experiences of primary

school pupils and post-primary school students in Ireland following the prolonged periods of school closures and remote teaching and learning in 2020 and 2021. They also serve as a valuable touchstone for interpreting the 2021 data and for exploring the broader impacts of the COVID-19 pandemic on learning and wellbeing, enabling a nuanced understanding of how different cohorts of pupils have navigated the challenges posed by COVID-19. As we approach the digital administration of PIRLS 2026, these findings will collectively offer valuable insights into how the educational landscape has evolved and inform strategies to support pupils and teachers in adapting to the increased emphasis on digital literacy and learning, both nationally and internationally.

Besides the extended periods of school closures and remote teaching and learning in 2020 and 2021 due to the COVID-19 pandemic, which caused unprecedented disruption to education systems worldwide, significant policy developments have taken place in Ireland between the PIRLS 2016 and 2021 cycles (e.g., interim review and final years of the *2011 National Strategy*, the rollout of the PLC, the launch of a revised DEIS Plan and expansion of the number of schools with DEIS status, and the completion of the lifetime of the first *Digital Strategy for Schools*). There have also been significant policy developments between the administration of PIRLS 2021 and the publication of the PIRLS 2021 national report for Ireland (Delaney et al., 2023) and the current report (e.g., new *Digital Strategy* launched a few months after the PIRLS 2021 data collection, launch of the *Literacy, Numeracy and Digital Literacy Strategy 2024-2033*). Given that data for PIRLS 2026 will be collected two years into the implementation of the *Literacy, Numeracy and Digital Literacy Strategy 2024-2033*, they will, along with other databases, comprise a very useful resource to evaluate progress and identify any necessary adjustments.

In conclusion, the findings from PIRLS 2021 provide a comprehensive overview of the state of literacy-related outcomes in Ireland, revealing both progress and ongoing challenges. The data highlight the impact of the prolonged school closures and remote teaching and learning during the COVID-19 pandemic, as well as the influence of significant policy developments over the past decade. While there have been notable advancements, challenges remain in areas such as digital literacy, pupil wellbeing, and socioeconomic disparities, with the latter also explicitly highlighted in the *Children's School Lives* report that focuses on the impact of social background on children's academic and other outcomes (Devine et al., 2024). PIRLS 2026 will be an important opportunity to evaluate the progress related to literacy made under the new *Literacy, Numeracy and Digital Literacy Strategy 2024-2033*. These forthcoming data, along with insights from other assessments like NAMER, PISA, and TIMSS, will inform the refinement of educational strategies designed to ensure that all pupils in Ireland can achieve their full potential in an increasingly digital world. Continued monitoring and integrative analyses of these data will be crucial for informing targeted policies and practices aimed at enhancing educational outcomes and equity.