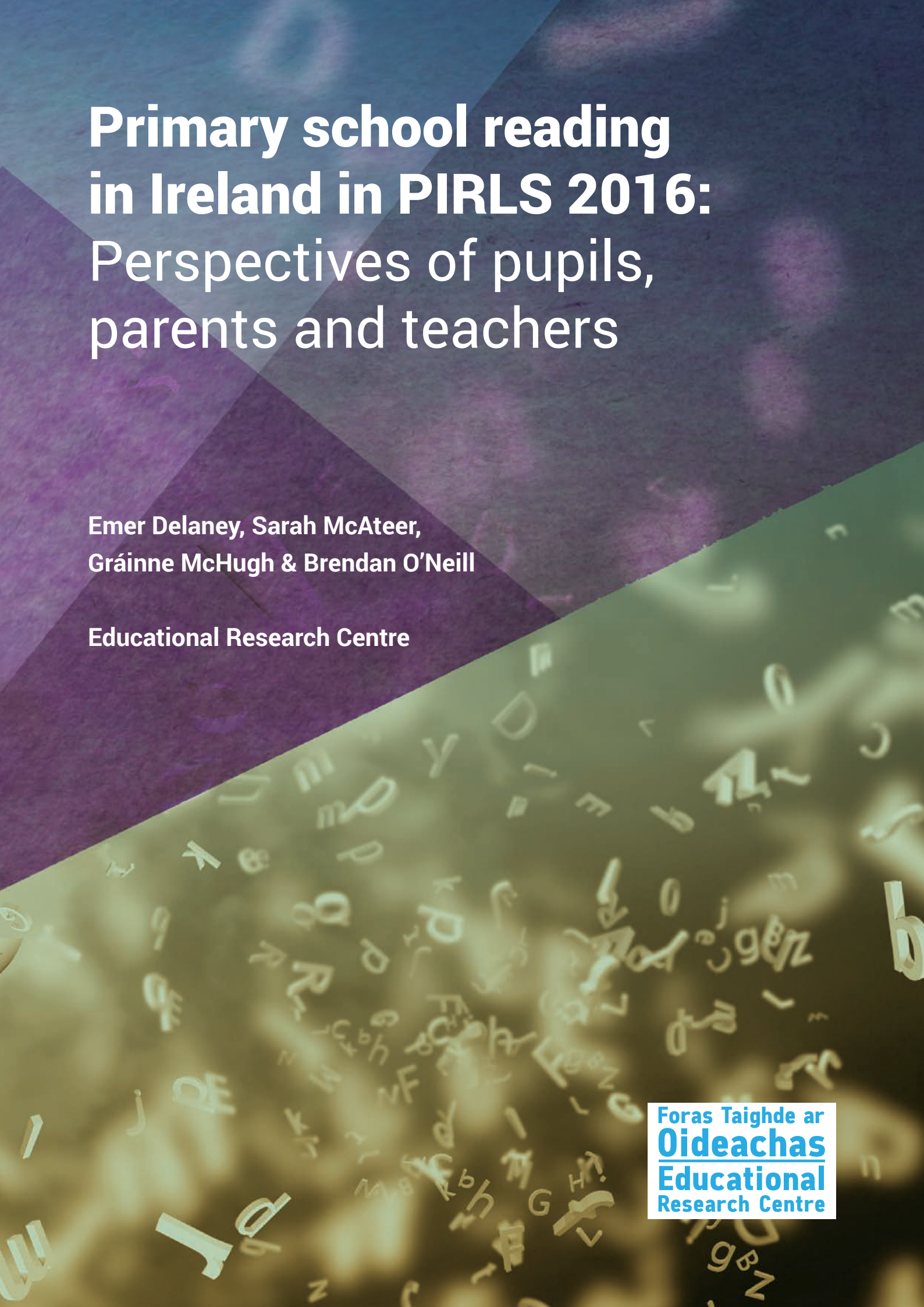
Primary school reading in Ireland in PIRLS 2016: Perspectives of pupils, parents and teachers

Emer Delaney, Sarah McAteer, Gráinne McHugh & Brendan O'Neill

Educational Research Centre



Foras Taighde ar Oideachas
Educational Research Centre

Copyright © 2022, Educational Research Centre, DCU St Patrick's Campus, Dublin 9, D09 AN2F.
http://www.erc.ie

Cataloguing-in-publication data:
Delaney, Emer.

Primary school reading in Ireland in PIRLS 2016: Perspectives of pupils, parents and teachers / Emer Delaney, Sarah McAteer, Gráinne McHugh and Brendan O'Neill.
Dublin: Educational Research Centre.
vii, 143 p.: illustrations, tables, graphs; 30cm.

ISBN: 978-1-911678-07-6 (e-Report)

1. Progress in International Reading Literacy Study (PIRLS)
2. Reading (Primary) – Ireland
3. Reading (Primary) – Study and teaching
4. Reading (Primary) – Ability testing
5. Educational surveys – Ireland
6. School children – Ireland – Attitudes
7. Parents of school children – Attitudes
8. Primary school teachers - Attitudes

2022
I Title. II Delaney, Emer. III McAteer, Sarah. IV McHugh, Gráinne. V O'Neill, Brendan.
372.409417-dc23

Design: Silverbark Creative.

How to cite this report:
Delaney, E., McAteer, S., McHugh, G., & O'Neill, B. (2022). *Primary school reading in Ireland in PIRLS 2016: Perspectives of pupils, parents and teachers.* Dublin: Educational Research Centre.

Findings and opinions expressed in this document are those of the authors. While every effort has been made to ensure the accuracy of the analyses presented in this report, we cannot guarantee the accuracy or completeness of the material. We make every effort to minimise disruption caused by technical errors. If errors are brought to our attention, we will try to correct them. Neither the authors nor the Educational Research Centre are liable for losses, damages, liability or expense arising from the work in this report. Furthermore, we are not responsible for changes in the findings that may occur should underlying data be updated.

Table of Contents

Acknowledgements

The PIRLS study from which most data in this report are drawn was administered in the spring of 2016. PIRLS was administered in Ireland by a team in the Educational Research Centre (ERC) that included Eemer Eivers (National Research Coordinator), Lorraine Gilleece, Emer Delaney, and Brenda Donohue. We thank all colleagues involved for their work in collecting the PIRLS and ePIRLS data.

We also thank the ERC staff who have provided administrative assistance with the preparation of this report, particularly Patricia Gaffney and Lynn Jackson.

Thanks are due to Gerry Shiel for support and guidance in the planning stages, and to Jude Cosgrove and Aidan Clerkin, successive CEOs of the ERC, for their helpful comments.

We would also like to thank all members of the PIRLS National Advisory Committee (NAC) for their support and contributions both during the administration of PIRLS 2016, and during the review of this report. Members who participated during PIRLS 2016, during the preparation of this report, or both, are listed below (in alphabetical order by first name):

- Aedín Ní Thuathail (Irish Primary Principals' Network).
- Áine Lynch (National Parents Council – Primary).
- Arlene Forster (National Council for Curriculum and Assessment) (PIRLS 2016).
- Breda Naughton (Department of Education) (PIRLS 2016).
- Clare Griffin (Department of Education) (PIRLS 2016).
- Deirbhile Nic Craith (Irish National Teachers' Organisation) (PIRLS 2016).
- Eamonn Moran (Department of Education) (PIRLS 2016).
- Eddie Fox (Educate Together).
- Gráinne Egan (Social Inclusion Unit, Department of Education).
- John Mescal (Department of Education).
- Máirín Ní Chéileachair (Irish National Teachers' Organisation).
- Mia Treacy (Professional Development Service for Teachers) (PIRLS 2016).
- Noreen Fiorentini (Department of Education) (Chair – current).
- Nuala Taaffe (Professional Development Service for Teachers).
- Patrick Sullivan (National Council for Curriculum and Assessment).
- Seán Delaney (Marino Institute of Education).
- Seán Ó hArgáin (Gaeloideachas).
- Susan Mulhall (Social Inclusion Unit, Department of Education) (PIRLS 2016).
- Suzanne Cobbe (Catholic Primary School Management Association) (PIRLS 2016).
- Yvonne Keating (Department of Education) (Chair - during PIRLS 2016).

Finally, we extend warm thanks to the pupils, parents and guardians, teachers, and principals who took part in PIRLS 2016.

Acronyms and abbreviations

AONTAS	Aos Oideachais Náisiúnta Trí Aontú Saorálach
CECDE	Centre for Early Childhood Development and Education
CPD	Continuing Professional Development
CSL	Children's School Lives study
DCYA	Department of Children and Youth Affairs (to 2020. Now Department of Children, Equality, Disability, Integration and Youth [DCEDIY])
DEIS	Delivering Equality of Opportunity in Schools
DES	Department of Education and Skills (to 2020. Now Department of Education [DoE] – see below)
DLF	Digital Learning Framework
DLP	Digital Learning Plan
DoE	Department of Education
ECCE	Early Childhood Care and Education programme
ERC	Educational Research Centre
ESCS	economic, social and cultural status (PISA variable)
ESRI	Economic and Social Research Institute
IEA	International Association for the Evaluation of Educational Achievement
IPPN	Irish Primary Principals' Network
GUI	Growing Up in Ireland study
HSCL	Home/School/Community Liaison
NAC	National Advisory Committee
NALA	National Adult Literacy Agency
NAMER	National Assessments of Mathematics and English Reading
NCCA	National Council for Curriculum and Assessment
NPC	National Parents Council
OCO	Ombudsman for Children's Office
PIAAC	Programme for International Assessment of Adult Competencies
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PDST	Professional Development Service for Teachers
PLC	Primary Language Curriculum
PPP	Personalised Pupil Plans
PSEC	Primary School English Curriculum
SET	Special Education Teacher
SPHE	Social, Personal and Health Education
SSE	school self-evaluation
SSP	School Support Programme
TIMSS	Trends in International Mathematics and Science Study

Executive Summary

The Progress in International Reading Literacy Study (PIRLS) assesses reading literacy of primary school children near the end of their fourth year of formal schooling (Fourth class, in Ireland). To date, Ireland has participated in three cycles of PIRLS: 2011, 2016, and 2021 (with results of the 2021 study expected in 2023). This report draws on data from the 2016 study to explore the attitudes and experiences of children in Ireland in relation to reading, both at home and in the classroom.

Background (Chapters 1 and 2)

Reading achievement in Ireland in PIRLS 2016

Detailed information on the achievement of pupils in Ireland in PIRLS 2016 is provided in the initial national report (Eivers et al., 2017). Key findings are summarised in Chapter 1 of the present report.

The overall reading achievement of pupils in Ireland was high (567), with only two of the other 49 countries reporting significantly higher average scores. Within Ireland, there was a significant increase in overall achievement between 2011 and 2016. Girls outperformed boys (in Ireland and in most participating countries), but this gender gap was narrower in Ireland in 2016 than 2011, with mean scores improving for both girls and boys between cycles.

In addition to the paper-based PIRLS test, pupils in 14 participating countries, including Ireland, took part in a new assessment of digital literacy (ePIRLS 2016). The overall performance of pupils in Ireland on ePIRLS was strong (567), and did not differ significantly from overall performance on paper PIRLS. This suggests that pupils in Ireland, on average, could apply their reading skills to texts in print and (simulated) online contexts with more or less equivalent success. Girls in Ireland outperformed boys to a similar extent on ePIRLS and paper PIRLS.

PIRLS 2016 results have not previously been reported by school DEIS status, mainly because the relatively small numbers of sampled pupils within each DEIS category result in wider margins of error for these groups' data. In this report (Chapter 1), mean PIRLS achievement by school DEIS status is reported, **with caveats**. Pupils in both urban DEIS Band 1 and urban DEIS Band 2 schools achieved mean scores significantly lower than that of pupils in non-DEIS schools. The mean score of pupils in DEIS Band 1 schools (the category designated as having the most severe level of disadvantage) was lowest, and was about half a standard deviation lower than that of pupils in non-DEIS schools – a substantial gap. The mean achievement of pupils in DEIS Rural schools did not differ significantly from that of pupils in non-DEIS schools; however, no conclusions about performance in DEIS Rural schools should be extrapolated from this due to the particularly small numbers sampled from this category. Throughout the remainder of this report, the DEIS variable is collapsed into two categories: *urban* DEIS (i.e., pupils attending either DEIS Band 1 or Band 2 schools), and *other* (i.e., pupils attending non-DEIS or DEIS Rural schools). This approach reduces the problem of wide margins of error, but risks eliding differences between pupils in Band 1 versus Band 2 schools, and between pupils in non-DEIS versus DEIS Rural schools. For more reliable, disaggregated estimates about the achievement and other attributes of DEIS pupils, a larger sample of DEIS pupils would be required.[1]

1 The most recent cycle of the National Assessments of Mathematics and English Reading (NAMER), in 2021, has taken the approach of oversampling urban DEIS schools so as to be able to provide more reliable estimates about DEIS pupils in those schools. Results of NAMER 2021 are expected to be published in early 2023.

Policy context

PIRLS 2016 took place roughly midway through the lifespan of the *National Strategy to Improve Literacy and Numeracy* (the Strategy) (Department of Education and Skills [DES], 2011b), a key driver of literacy policy in Ireland from 2011 to 2020. Additionally, PIRLS 2016 took place at a moment when the language curriculum in primary schools was on the cusp of change. This policy context is discussed in Chapter 2.

National Strategy to Improve Literacy and Numeracy

The Strategy reflected, and sought to address, a number of long-term policy concerns regarding literacy education. These included the need to improve outcomes for children from disadvantaged backgrounds (addressed primarily via the DEIS programme), and for boys, who systematically underachieve in reading relative to girls. Practical aspects of the Strategy that directly targeted literacy education in primary schools included: dedicated literacy-related Continuing Professional Development (CPD) for teachers; an increase of one hour per week to mandated instructional time for literacy; and a requirement to administer standardised tests of reading annually and to report aggregated (school-level) results centrally (DES, 2011b).

The Strategy also specified targets for literacy achievement. At primary level, all targets were met or exceeded in the 2014 cycle of the National Assessments of Mathematics and English Reading (NAMER). The high achievement of pupils in Ireland in PIRLS 2016, relative to 2011, provided further evidence to suggest that an overall improvement in literacy skills at primary level had taken place since the introduction of the Strategy. New targets to 2020 were established following an interim review of the Strategy (DES, 2017c). These included proficiency targets specific to DEIS Band 1 primary schools, and targets related to reading practices and reading enjoyment.

The PIRLS 2016 data in this report, alongside NAMER 2014 data, provide insights into what primary school pupils thought about reading and what their reading habits were like just prior to the introduction of these revised targets. NAMER 2021 will provide (post-2020) feedback on the extent to which these targets have been reached in an educational landscape altered by the experience of the COVID-19 pandemic, while PIRLS 2021 will also provide useful information in this regard. Preparation for a successor to the Strategy is currently underway.

Curriculum development

In spring 2016, the 1999 Primary School English Curriculum (PSEC) was still in place for the Fourth class pupils taking part in PIRLS. However, the new Primary Language Curriculum (PLC) (National Council for Curriculum and Assessment [NCCA], 2015) had recently been introduced to schools for younger pupils as part of a familiarisation phase, prior to implementation from September 2016 onwards. Therefore, there was widespread awareness among teachers and principals of the ongoing development work of the NCCA on the new curriculum. Compared to the 1999 curriculum, the PLC integrates literacy learning across languages, focuses on learning outcomes rather than content objectives, uses very broad-ranging definitions of text and genre, and positions digital literacy as interwoven with other aspects of language learning.

Since PIRLS 2016, an updated version of the PLC for all primary grade levels has taken effect (NCCA, 2019). The classroom experiences of the PIRLS 2016 pupils, therefore, reflect the final days of the 1999 curriculum, although teachers' awareness of the PLC may already have had some impact on their classroom practices. In contrast, the PIRLS 2021 pupils will have experienced literacy instruction almost entirely through the framework of the Primary Language Curriculum.[2]

2 Initial findings from PIRLS 2021 will be published in 2023, with further contextual reporting to follow.

Research context

An overview of previous research on aspects on children's reading-related attitudes, behaviours, and home- and classroom-based experiences is provided in Chapter 2, with particular attention to research in an Irish context.

Pupil characteristics

Previous research on the attitudes to reading, reading confidence, and reading behaviours of children in Ireland suggests that different patterns exist at primary and post-primary levels. In particular, while high overall positivity towards reading and high frequency of reading for fun have been observed among primary school children (e.g. Clerkin & Creaven, 2013; McNamara et al., 2021), post-primary students are less enthusiastic about reading and are less likely to read for enjoyment, and their negativity has increased over time (Shiel et al., 2022). Reading confidence seems more stable across age groups, with both primary and post-primary students in Ireland reporting high confidence in their reading ability (e.g. Kavanagh et al., 2015; Shiel et al., 2022).

Boys have consistently been found to like reading less than girls, and to spend less time reading for pleasure (e.g. McCoy, Smyth & Banks, 2012; McKeown et al., 2019). These differences are more pronounced at post-primary level, and adolescent boys' enjoyment of reading has declined more than that of girls over time (McKeown et al., 2019; Perkins et al., 2010). Reading confidence has not differed greatly by gender in most studies in Ireland, despite the fact that the average reading achievement of girls is typically higher than that of boys (e.g. Kavanagh et al., 2015; Shiel et al., 2022).

Reading behaviour and reading confidence have been shown to vary by socioeconomic status at primary and (especially) post-primary levels, with children from disadvantaged backgrounds less likely to spend time reading or to believe that they are good readers (e.g. Kavanagh, 2019; McCoy, Quail & Smyth, 2012; Shiel et al., 2022). While there is also some evidence that children from disadvantaged backgrounds like reading less than peers from more advantaged backgrounds, this has mainly been observed in a post-primary context (e.g. Gilleece et al., 2020).

Positive associations with reading achievement have been observed for measures of liking reading, reading confidence, and frequency of various reading behaviours, although the relationships between these variables are acknowledged to be complex and not fully understood.

Literacy in the home environment

Considerable research has been conducted on how various aspects of the home environment, including parental support for reading and physical resources such as books, quiet space, and digital devices, contribute to literacy development. When other variables were held constant, reading achievement in Ireland in PIRLS 2016 was positively associated with a number of features of the home environment: these included frequency of early literacy activities, number of books in the home, parental enjoyment of reading, and parental education level (Gilleece & Eivers, 2018).

There is mixed evidence as to the level of impact that various forms of parental literacy support have on children's reading achievement (and reading attitudes). Engagement in early literacy activities is widely viewed as important for subsequent success in reading. This has been shown to occur with high frequency in Ireland, although somewhat less frequently for boys than for girls (with early numeracy activities showing the opposite pattern), and less frequently for socioeconomically disadvantaged children than for others (e.g. Clerkin et al., 2020). Some later forms of parental support that are more easily quantifiable, and therefore more often measured – such as parental assistance with reading homework – display inverse or unclear relationships with reading achievement, perhaps because children who struggle more with reading may require a higher level of parental input (e.g. Kavanagh et al., 2015).

Home resources for learning – which, depending on how they are measured in a given study, may include both physical resources such as books and less tangible ones such as parental education level – are closely related to socioeconomic status, and higher levels of these resources have consistently been shown to be associated with higher reading achievement (e.g. Cosgrove & Creaven, 2013; Gilleece & Eivers, 2018).

Reading in the classroom context

Research has shown that primary school pupils in Ireland tend to be highly engaged in their schoolwork, including reading lessons, although this is less the case for boys than girls (Clerkin & Creaven, 2013; McCoy, Smyth & Banks, 2012). Whole-class teaching has been found to be the most common approach taken in primary reading lessons (e.g. Kavanagh et al., 2015), while concerns have been raised that comprehension skills are not explicitly taught across the board (Concannon-Gibney & Murphy, 2012). Frequent use of reading schemes, workbooks, and worksheets has been reported, with narrative texts used more often than informational ones (Kavanagh et al., 2015). There is evidence to suggest that schools' use of digital technology in teaching and learning, including reading lessons, varies widely, as does schools' access to digital resources and Internet quality (e.g. Cosgrove et al., 2014; Cosgrove et al., 2019; Eivers, 2019; Feerick et al., 2021; Feerick et al., 2022). (It should be noted that PIRLS 2016 data were collected close to the start date of the first Digital Strategy for Schools which ran from 2015 to 2020. PIRLS 2021 data will offer an opportunity to examine use of ICT resources during reading lessons after the end point of this Digital Strategy.)

Assessment includes both formative and summative assessment, with some evidence to suggest that formative approaches are more emphasised by teachers in Ireland (e.g. Devine et al., 2020). Standardised testing – usually conceptualised as very much at the summative end of the spectrum, although it can also be used for formative purposes – has become mandatory in Ireland with the introduction of the National Strategy to Improve Literacy and Numeracy. Teachers have emphasised that standardised tests must be recently-normed and curriculum-linked, and have indicated a widespread need for CPD on the interpretation and use of test results (O'Leary et al., 2019).

The engagement of teachers in Ireland in professional development related to reading was below the international average in PIRLS 2011 (prior to the introduction of the Strategy) (Clerkin & Creaven, 2013).

Analysis (Chapters 3-5)

Chapters 3, 4, and 5 describe findings for Ireland from PIRLS 2016, which are presented with reference to:

- the international average across all PIRLS countries;
- findings for a set of 10 comparison countries, selected as being of interest due to their overall PIRLS achievement, cultural/linguistic similarity to Ireland, and/or participation in both ePIRLS and PIRLS in 2016;
- findings for Ireland from the previous PIRLS cycle in 2011;
- differences by pupil gender and by school DEIS status (*urban DEIS* vs *other*), where relevant.

Chapter 3 draws on the PIRLS Student Questionnaire to describe pupils' attitudes to reading, confidence as readers, and reading behaviours.

Chapter 4 draws on the PIRLS Home Questionnaire to describe parents' attitudes to reading and reading behaviours, pupils' literacy activities and skills in early childhood, and ongoing home resources for literacy learning.

Chapter 5 draws on the PIRLS Student Questionnaire and (mainly) the PIRLS Teacher Questionnaire to describe what pupils experienced during reading instruction in school.

Pupils' attitudes, confidence, and behaviour in relation to reading

Attitude to reading

In PIRLS 2016, pupils in Ireland liked reading about as much as pupils on average internationally, and more than peers in many comparison countries. Just under half of pupils in Ireland (46%) *very much liked* reading and 15% *did not like* it. When presented with a set of specific statements related to reading attitude, very high percentages of pupils in Ireland (85% and upwards) agreed that they enjoyed reading, learned a lot from reading, liked to read things that made them think, and liked when a book helped them to imagine other worlds. A lower percentage, although still a majority (69%), agreed that they liked talking about what they read with other people. The attitudes of pupils in Ireland to reading remained very stable between PIRLS 2011 and 2016.

In PIRLS 2016 in Ireland, there was a significant difference in the extent to which boys, as opposed to girls, liked reading, echoing the findings of other studies. One in five boys in Ireland (20%), and a similar proportion on average internationally, *did not like* reading. This is roughly twice the proportion of girls in Ireland that *did not like* reading (9%), which compares to 12% of girls on average internationally.

No significant difference was observed in the extent to which pupils in urban DEIS schools, compared to those in other schools, liked reading. While comparing subgroups within urban DEIS schools requires considerable caution due to the small numbers involved, it is worth remarking that one-quarter of boys in urban DEIS schools (25%) *did not like* reading.

There was a weak-to-moderate positive correlation between liking reading and reading achievement, both in Ireland (overall, and for both boys and girls), and on average internationally. In Ireland, the mean score of pupils who liked reading *very much* was close to half a standard deviation higher (580) than that of pupils who *did not like* reading (534).

Reading confidence

Pupils in Ireland had more confidence in their ability as readers than did their peers on average internationally, and in most comparison countries. More than half of pupils in Ireland (55%) were *very confident* about reading, while 14% were *not confident*. Reading confidence, like attitude to reading, was consistent in Ireland across the 2011 and 2016 PIRLS cycles.

Boys and girls in Ireland reported similar levels of confidence in their ability as readers, despite the fact that boys' reading achievement in PIRLS was significantly lower, on average, than that of girls. Pupils in urban DEIS schools and other schools also reported similar levels of reading confidence.

There was a moderate-to-strong positive association between reading confidence and reading achievement, in Ireland (overall, and for both boys and girls), and internationally. In Ireland, this manifested as a gap of almost nine-tenths of a standard deviation between the mean scores of *very confident* (593) and *not confident* (505) pupils.

Reading activity

The amount of time that pupils in Ireland spent reading outside school was somewhat higher than that of peers on average internationally, and similar to that of peers in many comparison countries. Three in five pupils in Ireland (60%) spent at least half an hour reading outside school on a typical day. Almost three-quarters of pupils in Ireland (74%) read for fun on at least a weekly basis, with the majority of this group (43% of all pupils) reading for fun on a near-daily basis. Time spent reading outside school and frequency of reading for fun remained mostly stable between 2011 and 2016.

Pupils in Ireland read to find things out less frequently than they read for fun, but a majority (67%) still read to find things out on at least a weekly basis. The frequency of this activity declined between 2011 (when 39% engaged in it daily) and 2016 (when 31% did so).

Library use in Ireland, while slightly more frequent than on average internationally, was much less frequent than in comparison countries such as the US, Australia, and New Zealand (presumably related to school library policies in these jurisdictions). In Ireland, 69% of pupils borrowed from libraries on at least a monthly basis, with a majority of these (41% of all pupils) doing so on at least a weekly basis. The proportion of pupils that used libraries very frequently (at least weekly) declined between 2011 (47%) and 2016 (41%).

Boys engaged in all these reading behaviours less often, on average, than girls. Gender differences were clear-cut in relation to time spent reading on a typical day (less than half an hour for 45% of boys vs 34% of girls), frequency of reading for fun (*never or almost never* for 17% of boys vs 9% of girls), and frequency of borrowing from a library (*never or almost never* for 17% of boys vs 11% of girls). The difference was subtler in relation to frequency of reading to find things out (*never or almost never* for 15% of boys vs 11% of girls).

On average, pupils in urban DEIS schools spent somewhat less time reading outside school than pupils in other schools, and read for fun less often. However, reading to find things out was slightly more common for pupils in urban DEIS than other schools. No significant difference in frequency of library use was observed between urban DEIS and other pupils.

Reading achievement was positively associated with time spent reading outside school and with frequency of reading for fun. In particular, pupils who *never or almost never* read for fun scored nearly three-quarters of a standard deviation lower, on average, than those who read for fun on a near-daily basis (516 vs 589). However, the relationship of reading achievement with frequency of reading to find things out and frequency of borrowing from a library was less clear-cut. Pupils who engaged in each of these activities *moderately* frequently had higher achievement, on average, than those who did so very frequently. It is possible that this reflects specific types of homework activities and library programmes assigned more often to lower-achieving than higher-achieving pupils (see also Gilleece & Eivers, 2018).

Patterns of association

Relationships between attitude to reading, confidence as a reader, and reading behaviour were explored. Liking reading was positively associated with reading confidence and with time spent reading on a typical day. Reading confidence was also positively associated with time spent reading on a typical day and with frequency of reading for fun. However, the fact that only bivariate analyses are reported here limits the extent to which the complexity of these inter-relationships can be understood.

Reading and the home environment

Questionnaires completed by pupils' parents and guardians provided information about various literacy-related aspects of pupils' home environments. In Ireland, women were involved in the completion of the majority (87%) of these questionnaires, while men were involved in the completion of 20%. (In some households, a female parent and male parent completed the questionnaire together, which accounts for the fact that these proportions sum to more than 100%.)

Parental attitudes to reading and reading behaviour

Parents in Ireland were more positive about reading than parents on average internationally, and in most of the comparison countries, with close to half of parents in Ireland (47%) *very much liking* reading. Parental attitudes to reading remained fairly similar from 2011 to 2016, although marginally more parents in 2016 indicated that they only read when they needed information and that they would like to have more time for

reading. Parents of children in urban DEIS schools were less positive about reading than parents of children in other schools. The extent to which parents liked reading was moderately positively associated with their children's reading achievement in PIRLS, while there was a weaker positive association between the extent to which parents liked reading and the extent to which their children liked reading.

Parents in Ireland also reported reading for themselves on a fairly frequent basis. Nearly half of parents in Ireland (48%) read for at least six hours per week (for work and/or leisure), while about one in ten (11%) read for less than one hour per week. Four out of five parents in Ireland (80%) read specifically for enjoyment on at least a weekly basis, while only 8% *never or almost never* did so. The average reading achievement of pupils whose parents read for less than an hour per week was lower, by close to half a standard deviation, than that of pupils whose parents read for six hours or more.

Early literacy and preparation for school

The vast majority of parents in Ireland reported carrying out a range of literacy activities with their children in early childhood either *often* (55%) or *sometimes* (45%). Parents were particularly likely to report that they and their children had *often* talked about things they had done and read books together. However, they were less likely to report having *often* talked about things they had read. There was a moderate positive relationship between engagement in early literacy activities and reading achievement in PIRLS.

Some differences by pupil gender and school DEIS status were observed. Parents were less likely, overall, to have engaged frequently in early literacy activities with boys than with girls, and this was particularly the case for singing songs, writing letters of the alphabet, and talking together about things they had read. Also, parents of pupils in urban DEIS schools engaged less frequently in early literacy activities than parents of pupils in other schools, with differences most apparent in relation to reading books, telling stories, and talking about things they had done.

A majority of parents in Ireland (61%) reported that their children had been *very well* able to carry out a range of literacy tasks, such as recognising and writing letters, reading and writing words, reading sentences, and reading stories, at the start of First class. Parents viewed boys as slightly less likely than girls to have been *very well* able to do these tasks, with the largest gender gaps on tasks involving written production. Pupils in urban DEIS schools were also less likely than those in other schools to have been *very well* able to accomplish the tasks; here, the largest gaps related to recognising and writing letters of the alphabet, as well as reading words. There was a moderate positive association between ability to complete early literacy tasks (as reported retrospectively by parents) and reading achievement in PIRLS.

Parents were also asked about the language(s) their children had spoken prior to starting school. Most pupils (85%) had only spoken English. A further 8% spoke English and another language; by the time they reached Fourth class, a strong majority of this group of pupils *always or almost always* spoke English at home. Six percent of pupils did not speak either English or Irish at home before starting school; it was less common for these pupils *always* to speak English at home by the time they reached Fourth class, but most did so at least *sometimes*. Pupils who had not spoken English at home in early childhood had lower PIRLS reading achievement, on average (by roughly one-third of a standard deviation), than peers who had spoken English (whether alone, or with another language or languages).

Ongoing support for learning

The *Home Resources for Learning* scale in PIRLS was created based on a number of pieces of information: number of books and number of children's books in the home, whether pupils had an Internet connection and/or a room of their own at home, parents' highest level of education, and parents' occupation. In Ireland, about one-third of pupils (33%) had *many* of these resources, two-thirds (66%) had *some*, and 1% (compared to 7% on average internationally) had *few*. It should be noted that having *few* resources typically included not having

an Internet connection, something available to nearly all pupils in Ireland (95%) in 2016. In Ireland, there were increases from 2011 to 2016 in the availability of the Internet and the level of education completed by parents.

As expected, pupils attending urban DEIS schools were more likely than peers in other schools to have *few* resources (6% vs 1%). In particular, pupils in urban DEIS schools had fewer books and children's books in their homes than those in other schools, with less than half of urban DEIS pupils (46%) reporting more than 25 books at home.

Parents in Ireland reported that their children completed homework very frequently, with virtually all (99%) doing so at least three times a week. Parents of this group also reported that they very frequently asked whether homework was completed (98% doing so at least three times a week). More hands-on forms of support for homework (helping with it; reviewing it for correctness) were offered less often, although still with high frequency compared to the international average. Homework support was provided with similar frequency to boys and girls, and to pupils in urban DEIS and other schools. Reading achievement tended to be higher among pupils whose parents offered support moderately often than among those whose parents did this very often, perhaps reflecting a greater need for parental supervision on the part of pupils who struggled with literacy.

Reading in the classroom

Questionnaire responses from both pupils and teachers provide a picture of what reading lessons were typically like for the Fourth class pupils who participated in PIRLS 2016 in Ireland.

Pupil engagement in reading lessons

A majority of pupils in Ireland (62%) were *very engaged* in their reading lessons, with few (4%) being *less than engaged*. This was roughly in line with the average internationally, and represented a higher level of engagement than that seen in many comparison countries. Boys were less engaged than girls, although more than half of boys in Ireland (and internationally) were still *very engaged*. No significant differences in engagement levels were observed between urban DEIS and other school contexts. Between 2011 and 2016, there was no notable change in engagement levels in Ireland.

Pupils' engagement in reading lessons was not significantly associated with reading achievement in Ireland, unlike their attitudes to reading or reading confidence. It is worth noting that many of the statements that fed into the Engagement scale had to do with pupils' perceptions of their teachers' behaviour – e.g. *My teacher gives us interesting things to read*; *My teacher does a variety of things to help us learn.* It may be that strong agreement with some of these statements had more to do with being generally well-disposed to a teacher than with feeling engaged during reading instruction specifically.

Time spent on English language instruction and reading instruction

Teachers provided very varied responses regarding how much time per week they spent on (i) English language instruction, and (ii) reading instruction. This variation may be due to differences in how the questions were interpreted, and suggests that caution is needed to interpret the resulting data. Nevertheless, some patterns of interest are identifiable.

A majority of pupils in Ireland had teachers who indicated that the time they spent on English language instruction per week met or exceeded the time allocation required by the 1999 curriculum and the National Strategy to Improve Literacy and Numeracy. A small proportion (7% in English-medium schools) had teachers who reported spending less time on English language than was originally required by the 1999 curriculum.

About two-thirds of pupils in Ireland had teachers who spent between two and six hours per week on *reading* instruction specifically. A significant minority (16%) had teachers who spent less than two hours per week on this, while a similar proportion (17%) had teachers who spent six hours or more on it.

While there was an increase in time spent on English language instruction between 2011 and 2016, which is likely to reflect implementation of the Strategy, there was no significant change in time spent on reading instruction across PIRLS cycles. This suggests that, while most teachers allocated additional time for literacy instruction, this time may often have been focused on language and literacy activities other than reading instruction. No differences were observed between urban DEIS and other schools in the time spent on either English language or reading instruction.

Organisation of reading activities

Whole-class instruction was the most frequently used approach to organising reading lessons. In 2016, almost three-quarters of pupils, in Ireland and internationally, experienced reading instruction as a whole-class activity either *often* or *always or almost always*. This was less common in urban DEIS than other schools.

Group work was less often used in Ireland, whether it involved same-ability or mixed-ability groups. Roughly two-fifths of pupils experienced each of these formats either *often* or *always or almost always*.

While it was relatively common in Ireland to assign independent work on an assigned plan or goal, teachers reported providing individualised reading instruction much more rarely.

Text types

Literary texts (short stories; longer fiction books) were used more frequently than informational texts in reading lessons in Ireland, and the frequency of use increased from 2011 to 2016. While non-fiction subject area books (such as textbooks) were also used very regularly (and this frequency increased between PIRLS cycles), other forms of informational texts were less common. For example, a majority of pupils (63%) in 2016 accessed non-fiction articles either *once or twice a month* or *never or almost never*, which represented a decline in use from 2011. Plays were hardly ever used in reading instruction in Ireland, in either cycle of PIRLS (and were also rarely used internationally). There were no significant differences observed between text types used in urban DEIS versus other schools.

Digital devices[3]

A majority of pupils in Ireland (61%) did not have digital devices available during reading lessons, according to their teachers. This represents a decrease in the availability of digital devices in Ireland between 2011 and 2016. There was no significant difference in mean PIRLS or ePIRLS achievement associated with the availability of digital devices during reading lessons.

Where pupils did have access to devices during reading lessons, the activities most frequently initiated by teachers involved looking up information and researching particular topics or problems. Asking pupils to read digital texts was less common, as was teaching pupils how to be critical when reading on the Internet.

Teaching and learning activities

On a roughly daily basis, large majorities of pupils in Ireland were asked to read aloud (85%), to read silently on their own (71%), and to listen while their teacher read aloud (68%; this was more common in urban DEIS than other schools). Most pupils received systematic vocabulary instruction at least weekly, which represented a significant increase from 2011. It was not as common to teach decoding strategies or how to summarise the main ideas of a text, but virtually all pupils in Ireland still received this kind of instruction at least monthly. However, a significant minority (10%) were *never or almost never* taught to use skimming or scanning strategies.

Teachers in Ireland were above or close to the PIRLS average in the frequency with which they

3 Note: data in this section have also been reported on by Eivers (2019).

encouraged pupils to discuss texts, develop understanding of texts, read materials tailored to their individual needs (especially frequent in urban DEIS schools), read books of their own choosing, and challenge opinions expressed in a text. However, they were well below the PIRLS average in the frequency with which they provided individualised feedback to each pupil (19% of pupils in Ireland experienced this on a roughly daily basis, compared to 32% on average internationally).

When building comprehension skills, almost all pupils in Ireland (96-99%) were asked at least weekly to identify main ideas, locate information, explain or support their understanding, and make predictions about what would happen next. Large majorities (82-90%) were also asked at least weekly to make generalisations and draw inferences, and to compare what they read with experiences and with other texts. (The frequency with which pupils were asked to compare different texts increased substantially between 2011 and 2016, whereas other changes in relation to comprehension-building activities were small across cycles.) Pupils were less commonly asked to engage in tasks requiring evaluative and critical approaches, such as describing the style or structure of a text (66% at least weekly) or determining the author's perspective (62% at least weekly).

Post-reading activities

The most frequent post-reading activities reported by teachers in Ireland involved asking pupils to respond orally to what they had read by answering questions, or summarising. Asking pupils to produce a written response and to talk with each other about the text were the next most common activities. It was relatively uncommon for teachers in Ireland to assign a written test about what pupils had read, with almost one-quarter of pupils (24%) having teachers who *never or almost never* did this (although written quizzes and tests were somewhat more frequently reported in urban DEIS schools).

Resources for pupils who struggle with reading

In Ireland, most pupils (98%) were in classes which either *always* or *sometimes* had a specialised professional (such as a Learning Support teacher, now referred to as a Special Education Teacher [SET]) available to help pupils experiencing reading difficulties, which was well above the average internationally. However, the percentage of pupils whose teachers reported that a specialised professional was *always* available fell between 2011 (78%) and 2016 (63%). Classroom assistants were marginally less available in Ireland than on average internationally, while adult or parent volunteers were rarely available. All these resources were more frequently present in urban DEIS than other schools.

If a pupil began to fall behind in reading, the most popular strategies of teachers in Ireland were to ask parents to help the pupil with reading, and (particularly in urban DEIS schools) to work individually with the pupil. The next most common strategy (reported by teachers of 85% of pupils) was to assign the pupil to work with a specialised professional. It was less common (reported by teachers of 28% of pupils) to recommend that the pupil enrol in a specialised reading programme.

Reading homework

Teachers in Ireland (and especially in urban DEIS schools) reported assigning reading homework very often, compared to the international average. This was consistent with parents' reports of how often their children completed homework in general. However, teachers in Ireland also expected pupils to spend a relatively short time on reading homework daily (often less than 15 minutes, whereas on average internationally the most common duration was 16-30 minutes). Teachers of a large majority of the pupils who received reading homework (90%) *always* monitored completion of homework, although this declined from 2011 (while remaining near-ubiquitous in urban DEIS schools).

Assessing reading

Teachers in Ireland were very likely to place emphasis on assessing pupils' ongoing work (although this decreased from 2011 to 2016). They were relatively less likely to place emphasis on classroom (e.g. teacher-made) tests and on national achievement tests, despite the introduction of mandatory standardised testing in 2012.

Teacher professional development

There was a substantial and significant increase in Ireland in teachers' participation in professional development related to reading between 2011 and 2016, with nine out of 10 pupils in 2016 having a teacher who had completed at least some reading-related professional development in the preceding two years. This is likely to be linked in part to literacy-focused CPD rolled out as part of the Strategy, and perhaps to early CPD offered to help teachers become familiar with the Primary Language Curriculum.

Discussion and implications (Chapter 6)

In Chapter 6, key findings from Chapters 3, 4, and 5 are discussed in relation to policy context, previous research, and future directions. Five implications are identified, as follows:

1. Enjoyment of reading: **the probable decline between primary and post-primary is a cause for concern**

The widespread positivity, and stability over time, of Fourth class pupils' attitudes to reading in Ireland is welcome. However, this must be examined in conjunction with findings at post-primary level, where PISA data suggest that reading for enjoyment is comparatively rare and that its frequency has declined over time (Shiel et al., 2022). There is a need to explore what is happening to reading attitudes and behaviours between the ages of ~9-11 (PIRLS) and 15 (PISA). In particular, the role of the transition to post-primary school, increasing access to digital technology, and homework experiences may merit investigation.

We echo the recommendation of Shiel et al. (2022, p. 148) that a 'sustained, focused strategy to foster and promote enjoyment of reading and attitudes to reading' is needed, and suggest that there is a particular motivation to attend to what is happening during the final grades of primary and the early grades of post-primary education.

2. Gender differences: **there is scope for a critical-literacy-based focus on boys' enjoyment of reading**

The findings of this report are in line with previous research: boys were consistently less enthusiastic about reading, and less involved in reading activities, than girls (in addition to achieving lower reading achievement scores, on average). A policy approach that addresses this – without reifying gender stereotypes or losing sight of variation within groups – is needed.

A project to raise parents' awareness of how gendered norms may influence their interaction with children in early childhood could be of value. Building on the inclusion of learning outcomes associated with critical literacy in the Primary Language Curriculum (NCCA, 2019), it may also be useful to develop resources for teachers to help pupils become curious about how gendered identities are constructed in texts, and how texts can be marketed as 'for' specific groups. This might in turn help young readers to develop a vocabulary and framework with which to challenge gendered norms they encounter in daily life, including those that relate to reading habits. There may be links to be made here with other areas of the curriculum that support critical engagement with gender stereotyping, such as Social, Personal and Health Education (SPHE).

While a particular focus on improving the reading experiences of boys is merited, it is also important to continue to monitor the reading engagement of girls, which, along with that of boys, appears likely to decline substantially as they move from primary to post-primary education.

3. Pupils in urban DEIS schools: there is potential to build on positive attitudes and target early literacy supports, but more detailed data are needed

It would be appropriate to treat pupils in urban DEIS schools as a priority group within a strategy to promote reading engagement, and to attempt to build on positive reading *attitudes* to support the embedding of positive reading *habits*.

Differences by DEIS status in parents' reports of pupils' early literacy skills (at the start of First class) suggest that it may be worth exploring targeted additional supports for early literacy activities (including alphabet learning) for children from more disadvantaged backgrounds.

However, all DEIS findings in this report must be interpreted with caution, since (i) the subsample of pupils attending DEIS schools was relatively small, and (ii) findings are not disaggregated by DEIS band – so, for instance, it is possible that there are true differences between the attitudes of pupils in DEIS Band 1 schools and non-DEIS schools which have not been captured here. The incorporation of larger samples of DEIS schools in large-scale assessments (as implemented in NAMER 2021) will be important in allowing comparisons to be made with greater confidence.

4. Literacy in the home: strengthening links between education policy and other policies (e.g. housing, immigration) is needed to address inequity

The relationship between home resources for learning and reading achievement is clear, in the findings of this report and in previous research.

A continued focus on provision of resources for parents to help them support their children's literacy learning will be important in future policy. In particular, the provision of accessible resources for parents who do not speak English or Irish should be a priority. As of 2022, the importance of this is heightened by the increased numbers of children from Ukraine and other countries who are joining schools in Ireland.

In relation to physical resources – e.g. books, paper, writing/drawing implements, digital infrastructure, a quiet and spacious environment, and a print-rich environment outside the home – enduring structural inequalities result in specific groups of children having reduced or minimal access to these. It is important that education policy aimed at improving literacy learning is informed by, and helps to inform, other policy strategies relating to housing, immigration, social supports, etc. (Lynch & Crean, 2018).

5. Classroom instruction: the picture is broadly positive, although an increased focus on digital, critical, and social aspects of literacy is desirable

Teachers in Ireland presented a generally positive picture of reading instruction, with a wide range of text types, pedagogical approaches, reading tasks, and post-reading activities deployed, and an increase in time spent on English language instruction and on reading-related CPD since 2011.

However, the fact that digital devices were rarely available during reading lessons (*never* for three-fifths of pupils) is notable (Eivers, 2019). Additionally, there appears to be scope for an increased focus on critical and evaluative reading skills, across both print and digital modes. Pupils' experiences of talking about reading with teachers and peers could also be explored in order to understand how social aspects of reading are integrated with more private aspects in the primary classroom.

Looking ahead

Further investigation of the relationships between reading proficiency, reading attitudes, and reading behaviours is merited. Future research in this area might draw on PIRLS data to identify different profiles of readers, which could inform how specific policy approaches and instructional practices might be targeted.

The PIRLS 2016 data described in this report are drawn from a pre-COVID-19 world. In contrast, PIRLS 2021 took place in a landscape re-shaped by the effects of the pandemic. Participating pupils, and their families, will have experienced the effects of prolonged periods of school closures and remote learning in 2020 and 2021, which may have had different impacts on different groups. Significant policy developments also took place between the 2016 and 2021 cycles, e.g. the Interim Review and final years of the Strategy, and the rollout of the revised Primary Language Curriculum.

All of this means that it will be challenging to interpret the PIRLS 2021 data, and especially to identify causes for any changes in trend. However, these data will provide important insights as to whether and how pupils' reading achievement and broader experiences of reading may have changed during the turbulent period since 2016. The present report provides a pre-COVID-19 touchstone to which we can refer when exploring the 2021 data.

Chapter 1: Overview of PIRLS 2016

This report describes the reading-related behaviours, experiences, and attitudes of Fourth class children in Ireland and some of the significant adults in their lives, drawing on background and achievement data from the 2016 cycle of PIRLS (Progress in International Reading Literacy Study).

This first chapter provides a brief overview of what PIRLS entails, how it was implemented in Ireland in 2016, and what the overall outcomes were for Ireland. This chapter also outlines the scope and structure of the rest of this report. For more detail on the results of PIRLS 2016, readers are referred to the national report for Ireland, which focuses on achievement (Eivers et al., 2017), and to the international report (Mullis et al., 2017). An e-Appendix to accompany this chapter can be downloaded from www.erc.ie/pirls/reports.

What is PIRLS?

PIRLS is a large international comparative study of the reading literacy of primary school children towards the end of their fourth year of formal schooling (Fourth class, in Ireland). In the terms of the study's framework, this marks a stage at which many children across many cultural contexts have started to transition from *learning to read* to *reading to learn* (Mullis & Martin, 2015). PIRLS has taken place every five years since 2001, and Ireland has participated in the 2011 and 2016 cycles. Ireland has also taken part in PIRLS 2021, with results due for release in 2023.

Internationally, PIRLS, like TIMSS (Trends in International Mathematics and Science Study), is a project of the International Association for the Evaluation of Educational Achievement (IEA), a non-profit cooperative of research institutes. In Ireland, the Educational Research Centre (ERC) has coordinated Ireland's participation in PIRLS on behalf of the Department of Education (DoE).

Each pupil participating in PIRLS in 2016 was asked to read two passages in a paper test booklet. One passage was classified as Literary (likely to be read primarily for literary experience; typically narrative fiction), and the other as Informational (likely to be read primarily to acquire and use information; typically fact-based, and often involving non-continuous elements such as timelines, charts, and diagrams) (Mullis & Martin, 2015). There were a number of questions based on each passage; some were multiple-choice, while some required a written answer. Pupils had 40 minutes to read each passage and answer the questions related to it. Their responses were used to estimate levels of reading proficiency within and across countries (Martin et al., 2017).

In 2016, a new 'add-on' assessment called ePIRLS was introduced, designed to assess pupils' *digital* reading literacy – i.e., their ability to navigate and understand information presented in a hyperlinked, Internet-like environment that included multimedia as well as written and image-based components. A subset of participating countries, including Ireland, chose to administer ePIRLS as well as PIRLS. In these countries, the same pupils who had already taken the paper-based PIRLS assessment (or a random subsample, as was the case in Ireland) were asked to complete the ePIRLS assessment on computers or tablets on a different morning. In ePIRLS, pupils were asked to complete two 'projects', both classified as Informational, in a simulated online environment. Within the 40 minutes allocated to each project, pupils were required to navigate through a number of hyperlinked 'websites' linked by a central theme of environmental, historical, scientific, and/or sociological interest. To assess their level of digital reading proficiency, pupils were asked to answer questions on what they read, and to select relevant paths through the hyperlinked environment (Mullis & Martin, 2015).

As well as the PIRLS and ePIRLS reading assessments, pupils were asked to complete questionnaires, as were their parents/guardians, their teachers, and their principals. The background data provided by these questionnaires offer a rich and detailed picture of aspects of the pupils' attitudes, habits, home environments, and classroom experiences, and allow for exploration of whether and how these variables may be associated with reading achievement. This report will focus mainly on the reading behaviours and attitudes of pupils in Ireland (as reported by themselves), the role of literacy in their home environments (as reported by their parents/guardians), and their experiences of reading lessons in the classroom (as reported by their teachers).

Which countries participated in PIRLS and ePIRLS 2016?

Fifty countries participated in PIRLS in 2016. Fourteen of the 50 PIRLS countries also administered ePIRLS. A full list of countries that participated in each assessment, and of benchmarking entities that also took part,[4] can be found in Appendix Table A1.1.

In this report, international comparisons will refer to the 'PIRLS average' or 'Overall PIRLS' result for a given variable – i.e. the average across all 50 participating countries. Comparisons will also refer to a subset of 10 countries selected as being of particular interest from an Irish perspective. These comparison countries have high PIRLS achievement scores, linguistic/cultural similarity to Ireland, or both. Participation (and high achievement) in ePIRLS as well as PIRLS was also taken into account. The comparison countries are listed in alphabetical order in Table 1.1, along with the main reason(s) for their selection.

Table 1.1: Selected comparison countries for PIRLS

Country	Main reason(s) for inclusion
Australia	Linguistic and some cultural similarity
England	Linguistic and some cultural similarity; high performance *(below Ireland's)*
Finland	High performance *(similar to Ireland's)*
Hong Kong SAR	High performance *(similar to Ireland's)*
New Zealand	Linguistic and some cultural similarity
Northern Ireland	Linguistic and cultural similarity; high performance *(similar to Ireland's)*
Norway	High performance *(below Ireland's)*; ePIRLS as well as PIRLS
Poland	High performance *(similar to Ireland's)*
Singapore	High performance *(above Ireland's)*; ePIRLS as well as PIRLS
United States	Linguistic and some cultural similarity; ePIRLS as well as PIRLS

4 Benchmarking participants in PIRLS may be subnational entities (e.g. Andalusia, Madrid) or, occasionally, an additional grade level in a country (for example, Denmark participated in PIRLS 2016 as a country at Grade 4, but also as a benchmarking participant at Grade 3). The data from benchmarking participants are not included in the calculation of international averages (Martin et al., 2017).

What were Ireland's outcomes in PIRLS and ePIRLS 2016?

PIRLS results for each country are expressed on a scale that was developed during the first cycle of the study in 2001. This scale has a centrepoint of 500 (corresponding to the international average in that first cycle), and a standard deviation of 100.

In PIRLS 2016, pupils in Ireland achieved a mean score of 567. Only two of the 50 participating countries (Russia and Singapore) achieved scores that were significantly higher than this, while Ireland's score was similar to that of four other countries: Hong Kong, Finland, Poland, and Northern Ireland. The scores of all other participating countries were significantly lower (Eivers et al., 2017). Table 1.2 shows the mean scores of Ireland and selected comparison countries in descending order, with the significance of differences from Ireland's score noted using arrow symbols (▲ indicates significantly higher, ▼ indicates significantly lower, and ◀▶ indicates not significantly different).

Table 1.2: Mean scores of Ireland and comparison countries in PIRLS 2016

Country	Mean PIRLS score	Significance of difference from Ireland's score
Singapore	576	▲
Hong Kong SAR	569	◀▶
Ireland	**567**	
Finland	566	◀▶
Poland	565	◀▶
Northern Ireland	565	◀▶
Norway	559	▼
England	559	▼
United States	549	▼
Australia	544	▼
New Zealand	523	▼

Note. Although comparison countries will usually be listed in alphabetical order throughout this report, in this table they are ordered by decreasing mean score, for clarity.

In the previous PIRLS cycle in 2011, Ireland had achieved a mean score of 552 (Eivers & Clerkin, 2012). The 15-point increase in 2016 represented a significant improvement in average reading proficiency in Ireland (Eivers et al., 2017).

In Ireland, as in almost all PIRLS countries,[5] the mean score of girls in 2016 was significantly higher than that of boys (572 vs 561). However, this gender gap was relatively narrow in the context of a wider gap of 19 points on average internationally – and, among the comparison countries, wide gaps in Norway (21 points), Australia, Finland, and New Zealand (all 22 points). The mean scores of both girls and boys in Ireland improved significantly between 2011 and 2016, by 13 points for girls and 17 points for boys (Eivers et al., 2017).

Of the pupils tested in Ireland in 2016, 82% attended non-DEIS schools, while 18% attended DEIS schools. More specifically, 7.4% of pupils attended Urban Band 1 DEIS schools, 6.1% attended Urban Band 2 DEIS schools, and

5 In Portugal and Macao SAR, there was no significant difference between the mean achievement of boys and that of girls in PIRLS 2016.

4.5% attended DEIS Rural schools.[6] DEIS status was used as a stratification variable in the PIRLS sampling frame, meaning that the sampling and weighting procedures were designed to ensure that the proportion of pupils in each DEIS/non-DEIS category in the weighted sample would reflect that of the broader population (LaRoche & Foy, 2017). Nevertheless, the small percentages of pupils within each DEIS subcategory, and particularly in DEIS Rural schools, mean that results for these groups must be interpreted with caution due to high error margins.

That caveat notwithstanding, the difference in mean reading achievement between pupils in DEIS Band 1 schools and non-DEIS schools was both statistically significant and meaningfully substantial (523 vs 572, a difference of about half a standard deviation). Pupils in DEIS Band 2 schools also achieved a mean score (548) significantly lower than that of pupils in non-DEIS schools, although this gap was narrower. The mean achievement of pupils in DEIS Rural schools is not reported here due to the small percentage of pupils in this group (and resultant high standard error). It did not differ significantly from that of pupils in non-DEIS schools, but no conclusions about performance in DEIS Rural schools specifically should be drawn on this basis. (See also Appendix Table A1.2.)

In the remainder of this report, PIRLS data are analysed by DEIS status on the basis of whether a pupil attended an urban DEIS school (Band 1 or Band 2) or another school (DEIS Rural or non-DEIS). From a statistical standpoint, this allows for more robust comparisons than could be made if the strata of DEIS schools were analysed separately, as the pupils attending urban Band 1 and Band 2 schools together account for nearly 14% of the total sample. However, readers should note that some important differences may be elided by this approach, including differences between the experiences of pupils in DEIS Band 1 and DEIS Band 2 schools, as well as between those of pupils in DEIS Rural and non-DEIS schools.

Because the pupils who took the ePIRLS test had also taken the paper PIRLS test, ePIRLS results were placed on the PIRLS scale,[7] meaning that results from the two assessments could be directly compared. Pupils in Ireland achieved a mean score of 567 in ePIRLS, which was virtually identical to the PIRLS score of 566 achieved by the subset of pupils who sat both assessments (Eivers et al., 2017). Only Singapore achieved a significantly higher mean ePIRLS score (588) than Ireland, while the scores of Norway (568) and Ireland were significantly above those of all remaining participants. Ireland and Canada were the only ePIRLS countries to report no significant difference between their own results in PIRLS compared to ePIRLS. Among the rest of the countries, some, including the comparison countries of Singapore, Norway, and the US, scored higher on ePIRLS than on paper PIRLS. Others, including Taiwan, Italy, and Slovenia, scored higher on paper PIRLS than on ePIRLS. Table 1.3 shows the mean ePIRLS scores of Ireland and the selected comparison countries, with the significance of differences from Ireland's score noted using arrow symbols.

Table 1.3: Mean scores of Ireland and comparison countries in ePIRLS 2016

Country	Mean ePIRLS score	Significance of difference from Ireland's score
Singapore	588	▲
Norway	568	◀▶
Ireland	**567**	
United States	557	▼

6 Schools designated as disadvantaged under the DEIS programme are allocated to one of three categories. Urban Band 1 schools are those city/town-based schools where the level of disadvantage is deemed most acute. Urban Band 2 schools are considered less acutely disadvantaged, but are still eligible for many although not all of the supports provided to Urban Band 1 schools. Disadvantaged schools in rural areas are classified as DEIS Rural, and are eligible for some of the same supports provided to Urban DEIS schools. For information on current supports provided to DEIS schools in the various categories, see https://www.gov.ie/en/policy-information/4018ea-deis-delivering-equality-of-opportunity-in-schools/#supports-to-deis-schools.

7 This was done by including PIRLS items in the calibration of ePIRLS item parameters, but fixing the parameters of the PIRLS items at those that had already been estimated through the concurrent calibration of PIRLS 2011 and 2016 data. For more detail, see Foy & Yin, 2017.

Girls achieved higher mean ePIRLS scores than boys in the majority of participating countries[8] – including Ireland, where the gender gap of 11 points between the mean scores of boys (561) and girls (572) was similar to that seen in paper PIRLS (and similar to the average 12-point gap across the 14 ePIRLS countries) (Eivers et al., 2017). Among comparison countries, the gender gap in the US was smaller (6 points), while those in Norway (18 points) and Singapore (21 points) were larger.

In Ireland, pupils in urban DEIS schools (Band 1 and Band 2 combined) achieved a significantly lower mean score in ePIRLS (540) than pupils in other schools (571).

Scope and structure of this report

This report uses information collected in the PIRLS 2016 questionnaires to provide a detailed description of the place of reading in the lives of Fourth class children. Data from questionnaires completed by pupils, parents/guardians, and teachers are used to investigate reading attitudes and behaviours, literacy in the home environment, and reading instruction in the classroom. Ireland's data are contextualised within a cross-national comparative context, and within a trend comparative context (with reference to data collected in Ireland in the previous cycle of PIRLS in 2011). Differences in reading experiences are analysed by pupil gender, where appropriate,[9] and by school DEIS status (urban DEIS or other).

While the primary purpose of this report is to describe reading attitudes, behaviours and contexts, associations between some of these questionnaire variables and reading achievement are also presented. It is important to note that these associations result from bivariate analysis only. That is, the relationship of each background variable with achievement is analysed *without* controlling for the possible effects of other background variables, and this limitation should be borne in mind when interpreting the results. Readers interested in multivariate analysis of Ireland's PIRLS 2016 dataset are referred to Gilleece & Eivers (2018), who constructed multilevel models of variables associated with achievement in paper PIRLS and ePIRLS respectively, and whose findings are referenced at various points in this report.

A further constraint arises from the fact that this report is based on data collected six years prior to publication. Thus, while we can (for example) describe what gender differences in pupils' attitudes to reading were like in 2016, we cannot say whether these remain similar now. The intervening period has been an eventful one for primary schools. Among other developments, it has seen the interim review and concluding phase of the National Strategy to Improve Literacy and Numeracy (DES, 2011b; DES, 2017c); the rollout of a new Primary Language Curriculum for all grade levels (NCCA, 2019); the launch of a new DEIS Plan (DES, 2017a); the implementation of a Digital Strategy for Schools, 2015-2020 (DES, 2015); and, from 2020 onwards, the disruption to schooling and to wider society caused by the COVID-19 pandemic. It is necessary to be mindful of both the time lapse and the changes that occurred within it when translating findings from this report to policy implications for today. Nevertheless, these data provide an important resource for understanding the broader context of Ireland's strong reading achievement in PIRLS and ePIRLS 2016. They also offer insights into how literacy manifested in children's lives both inside and outside the primary classroom at a midpoint in the lifespan of the National Strategy to Improve Literacy and Numeracy, and in the final days of the 1999 Primary School English Curriculum (DES/NCCA, 1999b). Further, the data provided can help to inform the direction of some of the analyses that will emerge from the PIRLS 2021 study, which was administered in a landscape altered by COVID-19 and for which initial findings will be published in 2023.

8 In Italy, Portugal, and Denmark, there were no significant differences by gender in ePIRLS results.

9 In Chapter 5, data provided by teachers are analysed at the pupil level (for example, we report that X% of pupils had teachers who responded to a question in a particular way, rather than reporting that X% of teachers responded in that way). Due to the random variation of gender balance in classes in mixed-sex schools, it is not considered meaningful to analyse teacher data by pupil gender.

Readers may find it helpful to consult a number of other ERC reports in conjunction with this one. Those seeking to learn more about contexts for reading at post-primary level should consult a recent report by Shiel et al. (2022), which examines data from the Programme for International Student Assessment (PISA) 2018. Readers seeking further analysis of PIRLS 2016 data are referred to the national report (Eivers et al., 2017), to Gilleece & Eivers (2018) for a multilevel modelling approach, as already mentioned, and to Eivers & Delaney (2018), who examine how pupils in Ireland engaged with various text and item types in the study. Several ERC Research Series reports draw on TIMSS data to examine contextual variables similar to those examined here, such as attitudes, home environments, and characteristics of schools and instructional practices, in relation to mathematics and science achievement (e.g. Clerkin et al., 2017; Clerkin et al., 2020; Eivers & Chubb, 2017; Perkins et al., 2020). Finally, readers interested in the DEIS analyses in this report may wish to refer to reports by Gilleece et al. (2020) and Nelis et al. (2021), which explore post-primary (PISA 2018) data related to reading through the lens of school DEIS status.

The remainder of this report is structured as follows:

Chapter 2 establishes a policy context for the PIRLS 2016 study, and a research context for the analyses that will follow. At the end of the chapter, the key questions of interest for the present report are set out.

Findings are presented in Chapters 3, 4, and 5. Data for Ireland are generally considered: (i) in international comparative context; (ii) in relation to the previous PIRLS cycle in 2011; (iii) by pupil gender, where appropriate; and (iv) by school DEIS status (urban DEIS or other).

Chapter 3 focuses on the perspectives of the Fourth class pupils themselves, describing their own views about reading: the extent to which they liked it, their level of confidence as readers, and their typical reading activities outside school.

Chapter 4 examines reading within pupils' home environments. It draws on the reports of parents/guardians about their own reading attitudes and typical reading activities, their early literacy activities with their children, and the resources and support for learning that are available in their homes.

Chapter 5 explores the teaching and learning of reading in primary classrooms in Ireland, presenting pupils' accounts of what typically happens in their reading lessons, along with teachers' accounts of their usual practices in relation to literacy instruction.

Chapter 6 draws the results of the preceding three chapters together, and discusses them in the context of existing literature, future research directions, and potential policy implications.

A note on the analysis

The analyses in this report were generated from the international databases for PIRLS 2011 and 2016 (with specific national variables, such as DEIS status, merged in). The data were analysed using the IDB Analyzer (IEA, 2019) with standard errors calculated to reflect the structure of the data and account for sampling and measurement error. Each PIRLS achievement scale uses five plausible values. Mean PIRLS reading scores in this report are drawn from the Overall Reading scale. The internationally generated sampling weights (student weights and teacher weights) were used to weight data for the analysis in this report.

Tests of statistical significance are conducted to establish how likely it is that the differences observed between estimates are attributable to true differences rather than to chance. Statistical significance tests are reported at the 95% confidence level, with the alpha adjusted to take account of multiple comparisons where relevant. Using this confidence level, if an observed difference is statistically significant, we can deduce that there is a 95% probability that it reflects a true difference. Groups which were compared across cycles (2011 to 2016) or across countries within a cycle were treated as independent samples. Groups compared within a

country within a cycle (e.g., boys and girls in Ireland in PIRLS 2016) were treated as dependent samples, with the necessary adjustments made to allow the standard errors of the difference to be computed by the IDB Analyzer.

Where correlation coefficients are presented, they are classified as follows:

- smaller than .10 in magnitude: weak correlation;
- between 0.11 and 0.25 in magnitude: weak to moderate correlation;
- between 0.26 and 0.40 in magnitude: moderate correlation;
- between 0.41 and 0.55 in magnitude: moderate to strong correlation;
- 0.56 or larger in magnitude: strong correlation.

Finally, figures are constructed using data which are not rounded, but the labels are rounded to whole percentage points. This accounts for instances where some bars may share a label but differ slightly in length. For the same reason, reported percentages may not always add to 100%.

Chapter 2: Reading literacy in primary schools: policy and research contexts

This chapter begins by setting Ireland's experiences in PIRLS 2016 within their wider policy context, while also considering relevant policy developments that have taken place since the study. Next, existing research linked to the main themes of this report is considered. Findings, with a focus on the Irish context, are outlined in relation to three interlinked aspects of pupils' reading lives (beyond their reading achievement): their own reading attitudes and behaviours; literacy in their home environments; and their experiences of reading instruction in the classroom. Lastly, a chapter summary is provided, and key research questions for this report are described.

PIRLS 2016: Policy context

In Ireland, the timing of PIRLS 2016 was interesting in light of two key policy developments. Firstly, 2016 marked a midpoint in the lifespan of the *National Strategy to Improve Literacy and Numeracy*, which had been introduced in 2011 and would remain in place until 2020 (DES, 2011b). Secondly, it was a time at which there was significant discussion and awareness around curricular reform in the area of literacy, as the National Council for Curriculum and Assessment (NCCA) had recently completed a consultation on the draft Primary Language Curriculum, and would shortly roll out this curriculum in the lower grade levels (NCCA, 2014; NCCA, 2015).

The introduction of the *National Strategy to Improve Literacy and Numeracy* (henceforth 'the Strategy') was motivated partly by concern at the reduced achievement of Ireland's post-primary students in PISA 2009, particularly in reading literacy (DES, 2011b; see also Perkins et al., 2010). The Strategy took a multi-pronged approach to raising literacy standards, and included targeted actions to assist parents, teachers and other education practitioners, school leaders, and curriculum developers in supporting literacy learning. Two concrete steps implemented in primary schools shortly after the publication of the Strategy included a mandated increase of one hour in the weekly instructional time allocated to literacy, and a requirement for standardised tests of reading to be administered annually at three grade levels, with results reported to parents and (in aggregate form) to Boards of Management and the Department (DES, 2011a). Other provisions included, for teachers, dedicated continuing professional development (CPD) with a focus on literacy; and, for parents and communities, a publicity campaign and online resources for supporting children's literacy (DES, 2011b; DES, 2017c).

The Strategy included specific literacy achievement targets, to be measured at primary level via the National Assessments of Mathematics and English Reading (NAMER), and at post-primary level via PISA. The targets for primary level were all met or exceeded in NAMER 2014 (Shiel et al., 2014).[10] The results of PIRLS 2016, and specifically the significant increase in Ireland's reading achievement relative to PIRLS 2011 (and significant increases in the proportions of pupils in Ireland reaching the intermediate, high, and advanced international benchmarks) (Eivers et al., 2017), offered further confirmation of what NAMER 2014 had indicated: that literacy skills appeared to be improving at primary level, and that at least some aspects of the Strategy seemed likely to be effective in this regard.

10 At post-primary level, the targeted increase in the proportion of students at the highest proficiency levels was exceeded in PISA 2015, although the targeted decrease in the proportion at the lowest proficiency levels was not achieved (Shiel et al., 2016).

An interim review of the Strategy (DES, 2017c) established revised targets to 2020, in light of the fact that many of the original targets had already been achieved. New targets were also added, including several relating to proficiency levels in DEIS Band 1 primary schools specifically. While the Strategy had always sought to improve *attitudes* to literacy as well as outcomes, with a stated ambition to 'foster an enjoyment of reading among children and young people' (DES, 2011b, p. 17), there were originally no quantifiable targets set in this regard. However, at the interim review, targets were added to increase the proportion of parents at primary level who set aside daily time for their child to read for fun (to 45%); to increase the proportion of Sixth class pupils borrowing books from a library at least monthly (to 60%); and to increase the proportion of post-primary students reading for enjoyment on a daily basis (to 60% of male students and 70% of female students) (DES, 2017c). Some of the PIRLS 2016 data explored in the present report (Chapters 3 and 4) may enrich the 'baseline' information available (i.e., information from the mid-point of the Strategy's lifespan) about these affective and experiential aspects of reading in children's lives and home environments.

The Strategy, and the concerns that had motivated it, also spurred the accelerated redevelopment of the language curriculum at primary level. While the 1999 curriculum specifications in English and Gaeilge were still in place for the Fourth class pupils who participated in PIRLS in 2016, there was widespread awareness among teachers and principals of ongoing work by the NCCA on a new Primary Language Curriculum, which would integrate learning outcomes in the two languages. An initial version of this new curriculum (NCCA, 2015) was in the process of being introduced for Junior Infants to Second class at the time that PIRLS took place, with the understanding that similar principles, emphases, and structures were likely to apply for older grade levels later. Some notable aspects of the new curriculum included: the approach of integrating literacy across languages, which also entailed recognition of the value of *all* language knowledge that children brought with them to the classroom; a combined focus on developmental steps and learning outcomes; a heightened emphasis on the importance of engagement and motivation in literacy development; a broad-ranging definition of 'text' to include all products of language use; and the incorporation of ICT and digital literacy as an ongoing aspect of language learning (NCCA, 2015; NCCA, 2019). The accounts given by teachers in PIRLS 2016 of their typical classroom practices during reading lessons (Chapter 5 of this report) may indicate whether teachers were to some extent anticipating aspects of the new curriculum in literacy instruction that took place during its inception.

A long-term policy concern has been to reduce inequalities in literacy achievement by improving outcomes for groups that tended to find reading more challenging. As mentioned, the interim review of the Strategy led to a sharper focus on reducing the effects of educational disadvantage, with DEIS-specific targets that sought to link with the new DEIS Plan (DES, 2017a). At the time when PIRLS 2016 took place, the previous DEIS Plan (DES, 2005), under which schools were identified for a School Support Programme (SSP) due to their comparatively high intake of pupils from socially disadvantaged backgrounds, was still in operation and had been a key feature of Irish educational policy for roughly a decade. The DEIS programme differed from previous programmes with similar aims in its emphasis on school-level planning (including target-setting and measurement of outcomes), and in its strong focus on literacy and numeracy (Weir & Archer, 2011). For urban DEIS schools, some literacy-specific measures included support and professional development to implement programmes such as First Steps and Reading Recovery; homework clubs and (for DEIS Band 1 only, prior to 2020) summer programmes with a focus on literacy; and access to a Home School Community Liaison (HSCL) scheme that sought to involve parents and families in literacy learning through initiatives such as paired reading and Reading for Fun (DES, 2005; Weir & Archer, 2011; Weir et al., 2018).[11] Evidence from several waves of an evaluation of DEIS (Kavanagh et al., 2017) indicated that, in participating urban schools, reading achievement at each observed grade level improved modestly between 2007 and 2016,

11 There are some differences between the provisions for schools in the SSP depending on their DEIS subcategorisation as Urban Band 1, Urban Band 2, or Rural. For example, while the HSCL programme was initially available for DEIS Rural schools as well as those in the Urban bands, this was no longer the case from 2011 on (Weir et al., 2018).

with reductions in the proportion of pupils scoring at or below the 10th percentile. However, given that this improvement coincided with a national improvement in reading achievement, as observed in NAMER 2014 (Shiel et al., 2014) and indeed in PIRLS 2016 (Eivers et al., 2017), it is difficult to disentangle changes that may be due to the DEIS programme from those attributable to wider societal factors. Following Kavanagh et al.'s (2017) observation that attitudes to school also improved in urban DEIS schools over the course of the evaluation, the PIRLS 2016 data provide an opportunity to compare reading attitudes and behaviours, home literacy environments, and literacy instruction in urban DEIS and other schools (Chapters 3 – 5 of this report). However, as noted in Chapter 1, caution is necessary when interpreting these comparisons, due to the relatively small proportion of the PIRLS sample attending urban DEIS schools.

The importance of the home environment for learning has been emphasised in a number of policies that include the broader home and community setting of children's early lives. Since 2011, the role of parents and guardians in the development of children's literacy has been a key focus of the Strategy (DES, 2011b), with the Interim Review (DES, 2017c) framing the enablement of parents and community to support children's learning as a first pillar of literacy and numeracy development. The *National Policy Framework for Children and Young People (Better Outcomes, Brighter Futures)* (DCYA, 2014, p. 27) outlined the government of Ireland's key commitments for children to 2020 and noted the importance of supporting parents, stating that 'a supportive home learning environment is positively associated with children's early achievements and wellbeing, and influences social mobility'. The implementation of such policies has generated resources that are available to parents to help improve children's literacy development, such as the *help my kid learn* website (www.helpmykidlearn.ie), developed by the National Adult Literacy Agency (NALA). The National Parents Council (NPC) also supports parents in their role as providers and carers for children throughout their early years and primary education. The Council provides resources for parents, e.g. online training, a telephone helpline, and informational booklets such as 'Supporting your child's learning at home' (NPC, n.d.-b). The NCCA also provides resources for parents, such as tip sheets and informational booklets, e.g. '*The what, why and how of your child's learning*' (NCCA, n.d.-b). In urban DEIS schools, the HSCL scheme mentioned above seeks to promote partnership between parents, teachers, and community family support services, with a view to supporting improved attendance, participation, and retention. A HSCL Coordinator is a teacher from a participating school who is released from teaching duties, for a maximum of five years. The overarching goal of the HSCL Coordinator is to improve educational outcomes for children through acknowledging and developing the role of the parent as prime educator. This is achieved through targeting the families of pupils most at risk of educational disadvantage and putting in place a range of appropriate support interventions.

Another long-standing concern in literacy policy internationally relates to improving the reading achievement of boys, as well as fostering their enjoyment of reading and development of reading habits (Brozo et al., 2014). In Ireland, this is a recurring theme in policy documents over the last decade, but has not so far been the focus of a sustained policy initiative. The Strategy emphasised a need for curricula and syllabi to cater for the reading tastes of 'all students, including boys' (DES, 2011b, p. 49). However, beyond a reference to 'non-literary texts and other texts in which boys show interest' (p. 51), it did not further develop this point, nor interrogate the potentially problematic conceptualisation of reading tastes as homogeneous within gender groups (e.g., Scholes et al., 2021). The *Better Outcomes, Brighter Futures* framework (DCYA, 2014, p. 68) stated that 'particular attention needs to be paid to developing boys' literacy skills', but did not specify how this should be done. The Interim Review of the Strategy (DES, 2017c, p. 58) aimed to 'develop specific guidelines and resources to strengthen the achievement of boys in reading' between 2017 and 2020, but these have not yet emerged – at least, not in the form suggested. However, the Primary Language Curriculum (PLC) (NCCA, 2019), although not explicitly referencing gender, does emphasise the importance of a broad range of text types, of linking reading to children's interests, and of a critical literacy approach that allows for an analysis of how identities impact on text creation and can be constructed through text. In this sense, the PLC may offer a means of operationalising the Strategy's original ambition to cater for 'the reading tastes of

boys', without assuming or oversimplifying what these may be.[12] In the present report, the contextual data from PIRLS 2016 are used to explore the extent to which reading attitudes and behaviours, home literacy environments, and engagement in reading lessons vary between gender groups at primary level. The results, along with those of other studies, may help to inform the potential place and focus of gender in future literacy policy developments. When interpreting comparisons by gender, however, it is important to retain sight of the diversity within gender groups, and of the intersection of gender with other aspects of identity.

The increasing role of digital technologies in all aspects of life has prompted a heightened emphasis in policy documents on digital literacy skills as an intrinsic part of literacy development. The Strategy defined literacy in relation to 'various forms of communication including spoken language, printed text, broadcast media, and digital media' (DES, 2011b, p. 8), and specified the need for digital texts to be incorporated into curricula and syllabi – which has since been implemented at primary level via the Primary Language Curriculum (NCCA, 2019). However, some related ambitions of the Strategy, including expanding national assessments to include assessment of digital reading at both primary and post-primary level (DES, 2011b), have not yet been realised. Reports on school ICT infrastructure have tended to indicate that, at least up to and including the time that PIRLS 2016 was conducted, this has been generally insufficiently maintained and unevenly distributed (Cosgrove et al., 2014; Eivers, 2019). However, the introduction of the Digital Strategy for Schools (DES, 2015) has sought to address these concerns and to provide for the integration of ICT into all aspects of teaching and learning. Within the Digital Learning Framework (DLF) for primary schools (which follows from the Digital Strategy), *highly effective practice* is understood as resulting in pupils developing critical and evaluative skills when using ICT for learning (DES, 2017b), and these skills may be viewed as intertwined with those of critical literacy. Initial indications suggest that, during the first year of implementation of the DLF, teachers' and pupils' engagement with digital technologies has increased in primary schools, although there was no overall change to infrastructure (including connectivity) or technical support in this phase. Moreover, while the need for technical support and maintenance has been identified in the DLF evaluation as a widespread issue, there is evidence to indicate that smaller primary schools face more significant challenges with respect to digital infrastructure and connectivity (Feerick et al., 2021). There is also variation in the extent to which teachers demonstrate a holistic understanding of what embedding digital technology in teaching and learning entails, although, interestingly, primary school teachers tended to have a richer and more nuanced approach to this than their post-primary counterparts, despite the wider availability of ICT infrastructure in post-primary schools (Feerick et al., 2022). While PIRLS 2016 took place before the Digital Strategy had become embedded in the system, and before the DLF was developed, PIRLS 2021 can be expected to provide additional indications of whether these measures have altered the extent to which digital technologies and literacy learning are integrated in Irish classrooms. Indeed, the results of PIRLS 2021, along with other data sources, may be helpful in guiding the implementation of the new Digital Strategy for Schools, which runs from 2022 to 2027 (DoE, 2022).

In sum, literacy policy in Ireland in recent years has sought to promote positive dispositions towards reading, the integration of literacy into home life, best practices in reading instruction in the classroom, reduction of demographic inequalities in how reading is accessed and experienced, and recognition of digital and critical literacies as crucial aspects of reading development. The next section traces some existing research that is relevant for understanding how children in Ireland feel about reading and behave as readers; how literacy manifests in their home environments; and what their experiences of literacy instruction in school are like.

12 Recent guidance from the Professional Development Service for Teachers (PDST) on literacy in the primary classroom avoids advice specific to pupil gender, but notes the importance (for all children, it is implied) of engaging with texts that portray both people who are like themselves and people who are different, across various dimensions of identity: 'Children can have access to a range of genres to meet a variety of interests, a variety of abilities, with characters and content reflecting different people, cultures, genders and experiences' (PDST, 2020, p. 35).

Beyond reading achievement: A research context for this report

Pupil characteristics: Reading attitudes, confidence, and behaviours

Across a wide range of contexts, positive attitudes to reading, confidence in one's own reading ability, and frequency of some reading behaviours, especially reading for pleasure, have been shown to be associated with improved reading ability (e.g. McGeown et al., 2015; Petscher, 2010). The relationship of motivational constructs with achievement is frequently theorised as reciprocal (e.g. Morgan & Fuchs, 2007), with frequency of behaviour sometimes posited as a mediating variable (e.g. Kavanagh, 2019). For example, it may be suggested that the satisfaction gained through increased reading proficiency is likely to foster greater enjoyment of reading, which in turn, perhaps through motivating more frequent reading, is likely to foster opportunities to develop even stronger skills, and so forth.

However, liking reading and being confident as a reader may also be viewed as inherent 'goods', irrespective of their relationship to achievement (e.g., Clark & Teravainen-Goff, 2018; Wilkinson et al., 2020). This is reflected to some degree in the important position afforded to positive dispositions towards reading in recent curricular and policy developments in Ireland, described above (DES, 2011b; DES, 2017c; NCCA, 2019). Here, recent research on children's reading attitudes, confidence, and behaviours in Ireland is outlined in relation to two main themes: differences between primary and post-primary settings, and differences based on demographic factors such as gender and socioeconomic status.

Differences between primary and post-primary settings

At primary level in Ireland, existing data paint a broadly positive picture of children's attitudes to reading – particularly notable when considered in the context of a decline internationally in primary school children's enjoyment of reading (Hooper, 2020).[13] Reporting on the previous cycle of PIRLS in 2011, Clerkin and Creaven (2013) observed that Fourth class pupils in Ireland liked reading more than their counterparts in most other participating countries. In NAMER 2014, about nine out of ten Second class pupils and about three-quarters of Sixth class pupils agreed that they liked reading (Kavanagh et al., 2015).[14] More recently, the Growing Up in Ireland study (GUI) found that about three-fifths of nine-year-olds said that they *always* liked reading (McNamara et al., 2021). That said, the Children's School Lives (CSL) study (Devine et al., 2020) has reported that while a majority of Second class pupils thought the school subject of 'English/Reading' was extremely *useful*, less than half (48%) thought it was extremely *interesting* –which may suggest that the nuances of young pupils' attitudes to reading merit further attention.

Reports from a number of studies also suggest that leisure reading is fairly common among primary school pupils in Ireland. For example, in NAMER 2014 (Kavanagh et al., 2015), nearly half of Second class pupils read books on their own for fun most days (associated with higher reading achievement), while one-fifth read magazines and comics on their own for fun most days (associated with lower reading achievement). About one-third of Second class pupils read with an adult at home most days (associated with lower reading achievement relative to pupils who never did this – perhaps suggesting that the more advanced readers

13 Hooper (2020) observed that, of the 18 countries that have participated in all four cycles of PIRLS to date, 13 have seen an overall reduction in the extent to which pupils like reading between 2001 and 2016, while nine have seen a reduction between the two most recent cycles of 2011 and 2016 (and none saw an increase within this latter period).

14 The apparent decline in positivity between these grade levels may be attributable, at least in part, to the different response options presented. While Second class pupils responded to a simple Yes/No question, Sixth class pupils had the option to choose Not sure, and 14% did so. At both grade levels, just 11% indicated that they did not like reading (by selecting 'No' at Second class or 'Disagree' / 'Strongly disagree' at Sixth class).

preferred to read independently at this stage, and/or that their parents viewed them as capable of this).[15] Examining a slightly older age group, the GUI study found among successive cohorts of nine-year-olds in 2007-08 (McCoy, Quail & Smyth, 2012) and 2017-18 (McNamara et al., 2021) that more than 70% consistently reported reading for fun at least a few times a week, with about one-third reading for fun on a daily basis. Moving towards the end of primary schooling, NAMER 2014 found that a slight majority of Sixth class pupils spent at least half an hour reading for fun on an ordinary day, although 40% did not (and this rose to 50% on a weekend day). Sixth class pupils who spent less time reading for fun performed less well, on average, in reading (Kavanagh et al., 2015).

A contrasting picture emerges at post-primary level, where attitudes to reading are considerably more negative than at primary, and where reading behaviour, especially reading for fun, is less frequent. In PISA 2018, students in Ireland had a mean score below the OECD average on a composite index of reading for enjoyment, and post-primary students' attitudes to reading and frequency of leisure reading have also declined over time. Slightly more than half of students in Ireland in PISA 2018 reported that they read only if they had to, and/or only to get the information they needed, while more than a quarter (27%) viewed reading as a waste of time; each of these proportions increased significantly since PISA 2009[16] (Shiel et al., 2022; see also McKeown et al., 2019). In terms of frequency of leisure reading, almost half of students in Ireland in PISA 2018 said that they *never* read for enjoyment – a significant increase from PISA 2009 – while about another quarter spent less than half an hour per day reading for enjoyment. In both PISA 2009 and 2018, reading achievement decreased significantly as frequency of reading for enjoyment decreased (McKeown et al., 2019; Perkins et al., 2010). Shiel et al. (2022) have also reported in detail on the specific types of reading in which PISA 2018 students typically engaged, compared to their predecessors in PISA 2009. The percentage that read fiction several times a week dropped very slightly between these cycles, while the percentages reading magazines and newspapers a few times a week dropped dramatically. However, the frequency of various forms of online reading increased sharply from 2009 to 2018. One interpretation could be that students may still be reading news-type content to a similar extent as before, but are now more likely to access this content in digital rather than paper format.

While the data suggest that positivity towards reading and frequency of reading decline between primary and post-primary education, with this decline perhaps growing steeper over time, a different pattern is evident for reading confidence. Both primary and post-primary students in Ireland have reported relatively high levels of belief in their own ability as readers. In PIRLS 2011, pupils in Ireland were among the more confident internationally when asked about their views of themselves as readers (Mullis et al., 2012, Exhibit 8.3). In successive cycles of NAMER, a stable three-fifths of Sixth class pupils agreed (*a little* or *a lot*) that they were good readers (Eivers et al., 2010; Kavanagh et al., 2015). More recently, three-fifths of Second class pupils in the CSL study described themselves as *extremely good* at English/Reading – a higher level of confidence than they showed for any other subject except Physical Education and Art (Devine et al., 2020). At post-primary level, 80% of students in Ireland in PISA 2018 *agreed* or *strongly agreed* that they were good readers; Ireland also scored above the OECD average on a composite measure of students' perception of their own reading competence, although close to the OECD average on a measure of students' perceptions of their difficulties with reading (Shiel et al., 2022).

Demographic differences: Gender and socioeconomic status

Motivational factors relating to reading and patterns of reading behaviour have been shown to vary, in Ireland and internationally, by gender and socioeconomic status.

15 More recently, the CSL study (Devine et al., 2020) found that just 12% of Second class pupils were read to at home every day, which may suggest a slight attenuation of the time spent reading with adults at this grade level – although the different question phrasings and response options across studies should be taken into account.

16 PISA 2009 is used as a trend reference point as reading literacy was the major domain in both 2009 and 2018.

At both primary and post-primary levels, boys in Ireland have been consistently less likely than girls to report liking reading (e.g. Clerkin & Creaven, 2013; Kavanagh et al., 2015; McCoy, Smyth & Banks, 2012; McKeown et al., 2019; McNamara et al., 2021; Perkins et al., 2010; Shiel et al., 2022). Another consistent finding is that girls are more likely than boys to read for fun on a regular basis (e.g. McCoy, Quail & Smyth, 2012). Interestingly, however, some evidence suggests that the relationship between reading for fun and reading achievement may differ across gender groups. Constructing a multilevel model of reading achievement in Ireland in PIRLS 2011, Cosgrove & Creaven (2013) found that, when other explanatory variables were accounted for, frequency of reading for enjoyment by Fourth class pupils was a strong predictor of reading achievement for girls, but not for boys. There may also be subtleties related to choice of text type during leisure reading: in NAMER 2014, for instance, frequently reading comics or magazines negatively predicted Second class boys' reading achievement, but had no predictive effect on the achievement of their female peers (Kavanagh et al., 2015).

Gender differences in attitude to reading and in reading behaviour tend to be more pronounced at post-primary than primary level. In PISA 2018, in Ireland, substantially more male students (56%) than female students (39%) said that they *never* read for fun (McKeown et al., 2019). In PISA 2009, the equivalent percentages were 47% of male students and 37% of female students (Perkins et al., 2010), suggesting that the gender gap has widened over time because boys' engagement in leisure reading has declined more rapidly than that of girls.

Despite displaying higher reading achievement and more positive attitudes to reading, girls in Ireland have not typically reported higher reading *confidence* than boys (e.g. Kavanagh et al., 2015; Kavanagh, 2019). In fact, Shiel et al. (2022) found that male students were less likely to report difficulties with reading than female students in PISA 2018, despite the fact that females, on average, had higher reading achievement – a pattern replicated across many participating countries (OECD, 2019).

Children and young people from disadvantaged backgrounds in Ireland have been somewhat less likely to report enjoyment of reading and reading frequently than their peers from more affluent backgrounds. This gap appears less noticeable at primary level. Kavanagh et al. (2017) found that sizeable majorities of pupils at three grade levels in urban DEIS primary schools either *agreed* or *strongly agreed* that they liked reading. In GUI, nine-year-olds in DEIS Band 1 schools liked reading only marginally less than their peers in non-DEIS schools, although they also read for fun less often (McCoy, Quail & Smyth, 2012; McCoy, Smyth & Banks, 2012). Additionally, comparing the reading behaviours of a cohort of 9-year-olds in 2007-08 with those of a new cohort of 9-year-olds a decade later, GUI researchers found that while there were minimal differences overall, 'children in families with lower income or lower levels of maternal education in the later cohort were more likely to report reading infrequently than their counterparts in the earlier cohort' (Growing Up in Ireland Study Team, 2018, p. 4). This raises a question as to whether the impact of socioeconomic status (or aspects thereof) on reading behaviour may have grown more pronounced over time. In post-primary schools, a clear relationship between reading for enjoyment and economic, social and cultural status (ESCS) was observed in PISA 2018. A majority of almost three in five students in the lowest ESCS quartile, and a similar proportion in DEIS schools, *never* read for enjoyment. In contrast, 33% in the highest ESCS quartile, and 44% in non-DEIS schools, reported this (Gilleece et al., 2020; Shiel et al., 2022).

There is some evidence to suggest that reading confidence also varies in association with socioeconomic status in Ireland. At primary level, Kavanagh (2019) reported that NAMER 2014 pupils with high socioeconomic status had a more positive reading self-concept than those with medium or low socioeconomic status, although the latter two groups did not differ from one another on reading self-concept. At post-primary level, Gilleece et al. (2020) found that students in DEIS schools had lower perceived reading competence in PISA 2018 than their peers in non-DEIS schools. On average, students in the lowest ESCS quartile also scored below those in other quartiles on the index of perceived reading competence, and scored higher on the index of perceived difficulty with reading (Shiel et al., 2022).

Literacy in the home environment

The home environment has long been established as a strong influence on development, attitudes, and outcomes in regard to learning. Studies such as PIRLS, NAMER, TIMSS, PISA, and GUI have highlighted the influential nature of the home (e.g., Clerkin et al., 2020; Gilleece & Eivers, 2018; Kavanagh et al., 2015; McCoy, Quail & Smyth, 2012; Shiel et al., 2016). Within the home, how parents interact with their children, in relation to learning and literacy, has frequently been associated with how children develop literacy skills in early childhood. The resources available to children, as well as their interactions and activities in their childhood, can help form the habits and skills that continue into their educational career and beyond.

There is mixed evidence as to precisely what aspects of literacy practices in the home are most effective. Some studies suggest that parents' own views of literacy are influential (Kent & Pitsia, 2018), while others suggest that parents' education level can play an important role in developing children's literacy skills (Bracken & Fishel, 2008). It has been argued that parental engagement, e.g. what parents say and do in relation to literacy, could be even more influential in the development of children's literacy motivation than material resources or family income (Baker & Scher, 2002; Gilleece, 2015). Some research suggests that even the more passive activities that parents may carry out, such as the amount of time they spend reading themselves, can play a significant role in the literacy development of children (van Tonder et al., 2019; Yang et al., 2018). However, other studies argue that how frequently a parent reads is not as important to pupils' literacy as material resources such as the number of books in the home (van Bergen et al., 2017). In their multilevel model of reading achievement in PIRLS 2016, Gilleece & Eivers (2018) found that several of these aspects of the home environment functioned as predictors of reading achievement in Ireland, even when other variables were held constant: achievement was positively associated with frequency of early literacy activities, number of books in the home, and the extent to which parents liked reading, as well as with level of parental education.

As parents' own attitudes to reading can have a positive association with children's reading achievement (Park, 2008), ensuring that parents' own literacy skills are developed has been a key focus in Ireland. Parental literacy skills may both benefit parents themselves, and ensure that parents gain confidence to be active in their children's literacy development. Organisations such as SOLAS, AONTAS, and NALA work to engage with adults across the country to strengthen literacy skills.

The types of support that parents provide for their children within the home can vary. One form of support that is often captured in studies is the extent to which parents assist pupils in completing their homework. The amount of homework assigned to pupils can vary across countries; however, in Ireland, most pupils in primary education are assigned homework regularly (Eivers & Creaven, 2013). Parents can support pupils with homework by encouraging and observing their work, as well as being consistent in monitoring, checking, and signing homework nightly (NPC, n.d.-a). Studies have found that supporting pupils in completing their homework can, however, have mixed relationships with pupil achievement. Regular parental oversight of the completion of homework can have a positive outcome: for example, pupils whose parents ensured that time was set aside daily for homework attained higher reading achievement in PIRLS 2011 (Cosgrove & Creaven, 2013). However, other studies have noted that more frequent parental engagement with homework can have a negative association with achievement (Eivers et al., 2010; Yang et al., 2018). This may be due to a number of reasons, such as parents' varying levels of confidence in assisting with homework, and/or that lower-achieving pupils may require more support from parents to complete their homework (Kavanagh et al., 2015). To disentangle the relationships between parental support for homework and achievement, a longitudinal study design would be required; most of the available evidence relies on cross-sectional studies.

There are many physical factors within the home environment that may contribute to a child's literacy development. These range from the tangible resources available to them (such as books and digital devices), to their physical environment (e.g., whether they have their own room or space to study), and can be positively

associated with pupils' reading achievement (Molfese et al., 2003; Yang et al., 2018). Organisations such as the NPC note the importance of the home environment and recommend that children should have a quiet space to do their studies at home (NPC, n.d.-a). Both nationally and internationally, studies have described the effects of home resources such as the number of books in the home as being positively associated with achievement (Clerkin et al., 2020; Cosgrove & Creaven, 2013; Eivers et al., 2010; Park, 2008; van Bergen et al., 2017). Other types of resources, such as owning a computer or having an Internet connection, have also been found to have a positive relationship with pupil achievement, although this has been found to be based on moderate use, with high technology use at home at least sometimes being associated with significantly lower reading achievement (Eivers et al., 2005; see also Gilleece & Eivers, 2018). The number of books in the home has long been used as an indicator for the quality of the home learning environment (Kavanagh et al., 2015; Martin et al., 2013); however, the move to digital devices, e.g. reading apps and e-readers, 'may reduce the explanatory power of this variable in future studies' (Gilleece, 2015, p. 33). In fact, home resources in general have often been used as indicators of socioeconomic status, which itself can influence the home learning environment of pupils as well as their educational outcomes (this will be discussed in more detail below).

A child's early life (before entering primary school) is a critical time to develop the foundations for literacy skills (Skibbe et al., 2013). At this stage, their home environment is crucial for their literacy development, with many studies reporting that children's engagement in early literacy activities in the home has a significant positive association with achievement later in life, in Ireland and internationally (Clerkin et al., 2020; Gilleece & Eivers, 2018; Park, 2008; van Tonder et al., 2019). Direct parent and child engagement in early literacy activities was found to be a strong predictor of children's subsequent reading interest as well as literacy skills (Kavanagh et al., 2015; Yeo et al., 2014). Parents have typically been the main drivers in their children's early literacy development, with their engagement and teaching directly related to early literacy skills (Sénéchal, 2006; Sénéchal & LeFevre, 2002). Literacy activities such as reading story books, singing songs, and writing letters or words can drive development, as children are able to interact with more skilled adults, which can result in children transitioning into mainstream education prepared to succeed in literacy learning (Skibbe et al., 2013).

Children's competency in early literacy activities, as perceived by their parents, can play a part in the type of support children receive at home. Studies have reported that how parents perceive their child's competency in tasks can, indirectly, impact their engagement or the type of support that they offer to their children (Saçkes et al., 2016). Nevertheless, there is also a risk that some parents may overestimate their children's skills. Parents in Ireland were found to be somewhat overly positive in their view of their children's performance (Kavanagh et al., 2015). This may be due in part to the level of parent-school communication in relation to children's performance, as in Ireland feedback from schools on pupils' performance has, historically, been comparatively limited (Eivers & Creaven, 2013), although the Strategy has sought to increase the frequency and specificity of schools' reports to parents (DES, 2011b). In Ireland, a number of frameworks and strategies have been developed to guide the early development of children and to support both parents and early childhood care and education organisations. For the PIRLS 2016 cohort, *Síolta* (The National Quality Framework for Early Childhood Education) (Centre for Early Childhood Development and Education [CECDE], 2006) and *Aistear* (The Early Childhood Curriculum Framework) (NCCA, 2009) were implemented during their early years. The main principles of both frameworks address 'How children learn and develop' and the curriculum framework emphasises key themes, such as *Communicating* and *Exploring and Thinking* (NCCA, 2009), through which children's emergent literacy can be fostered. The development of further strategies in Ireland has continued for subsequent generations of children with the recent implementation of the *First 5* strategy (DCYA, 2019), which includes measures aimed at improving the Early Learning and Care system and addressing poverty in early childhood.

Previous studies have indicated that there can be a difference in the frequency with which parents engage in literacy activities and tasks depending on children's gender (Saçkes et al., 2016). TIMSS data have shown that, in Ireland, parents engaged more frequently in activities such as reading books, writing letters, telling

stories, or singing songs with girls than with boys, while playing with building blocks and construction toys more frequently with boys than with girls (Clerkin & Gilligan, 2018; Clerkin et al., 2020). Furthermore, studies have shown that parents' estimations of their children's competence in completing such tasks or activities can also be influenced by their child's gender (Eccles et al.,1990). Some findings have suggested that parents tended to rate girls as having a higher interest in literacy (e.g. Baroody & Diamond, 2013; Saçkes et al., 2016). This may be due to gendered stereotypes, i.e. the perception that girls generally are more interested in reading, and may not be based on children's actual interest level. Interestingly, Ozturk et al. (2016) noted that parents who had more strongly gendered views of literacy predicted more negative attitudes to reading on the part of *both* boys and girls.

Family socioeconomic status (SES) has consistently been found to be strongly associated with pupil achievement (Kavanagh et al., 2015). The number of resources available to children in their home environment, and the frequency and type of support that parents provide for literacy development, can also be affected by a family's socioeconomic level (Neuman, 2016). Within an Irish context, literacy activities, such as parents reading to their child, or parent/child reading together, singing songs and nursery rhymes, are engaged in less frequently, on average, in families with lower SES (Clerkin et al., 2020; Kent & Pitsia, 2018). However, Neuman (2016) reported (in an Australian context) that the time spent on literacy activities per week was similar for both low and high SES home environments. Neuman also noted that differences between low and high SES families were found for certain types of literacy activities, with parents with lower SES engaging less frequently in teaching their child using printed texts that parents with higher SES. Gilleece (2015) observed that some effects of low socioeconomic status were mitigated with informal parent involvement. In Ireland, the importance of home environment, and the influence of parental interaction, has also been highlighted with the implementation of the HSCL scheme within urban DEIS schools. The scheme concentrates on building connections with the adults in pupils' lives, with the overall aim being 'to raise awareness in parents of their own capacities to enhance their children's educational progress and to assist them in developing relevant skills' (Weir et al., 2018, p. 52). Reflecting on outcomes of this scheme, 66% of coordinators found that, to a great extent, parents became more aware of their contribution to their children's education, while 38% of coordinators reported that parents had become more involved in their children's schoolwork (to a great extent) (Weir et al., 2018).

Reading in the classroom context

Primary schools play an integral role in the development of pupils' literacy skills. During these years, pupils need to develop crucial skills within a broad, balanced, and enjoyable curricular experience (DES, 2011b). All children progress at different rates. This requires a planned and organised approach throughout primary and post-primary school to support them in developing the necessary literacy skills and to equip them for the future (DES, 2011b). Therefore, teachers play a vital role in the development of pupils' literacy skills. The Primary Language Curriculum (PLC) (NCCA, 2019), which builds on the 1999 English and Irish curricula that were in place when PIRLS 2016 was administered, outlines that teachers are expected to help children develop as communicators, readers, writers, and thinkers through providing them with a variety of learning experiences, fostering a love of language and learning, and encouraging pupils to engage and think critically about various types of texts (PDST, 2020).

Engagement in learning reading has been linked to reading achievement (Brozo et al., 2007). Teachers play an important role in promoting pupils' engagement in reading lessons in the classroom. McGeown (2013) outlines the importance of reading motivation and engagement to acquire the necessary life skills to function in a literate society, and promotes the importance of fostering intrinsic and extrinsic reading motivation by encouraging curiosity, involvement, challenge, competition, recognition, and social engagement. The GUI study (McCoy, Smyth & Banks, 2012) outlined pupils' engagement with their school activities and school work. High levels of engagement were reported, with almost all pupils indicating that they liked school (*always or*

sometimes – 93%), looked forward to school (*always or sometimes* – 89%), and liked their teacher (*always or sometimes* – 94%). PIRLS and TIMSS 2011 reported similarly high levels of engagement in lessons in Ireland, with most pupils classified as being *engaged* or *somewhat engaged*. Interestingly, it was found that some of the best performing countries in PIRLS and TIMSS 2011 had large percentages of *not engaged* pupils (Clerkin & Creaven, 2013). This is similar to the idea of the 'attitude-achievement paradox' which is often observed in large-scale international studies of achievement, whereby high-achieving countries report some of the lowest scores on measures of academic self-concept and enjoyment (Min et al., 2016; Perkins et al., 2020). The GUI study also reported a substantial divide in school engagement by gender. Boys were two and a half times more likely to report that they *never* liked school and three times more likely to indicate that they *never* liked their teacher (McCoy, Smyth & Banks, 2012).

The 1999 curriculum specified a minimum weekly time for instruction dedicated to the first language (4 hours) and second language (3.5 hours) of the school (DES/NCCA, 1999b). In NAMER 2009, Eivers et al. (2010) reported that teachers spent an average of 4 hours and 25 minutes per week on English at Second class and 4 hours 35 minutes at Sixth class. Similarly, the GUI study reported that teachers of nine-year-olds spent an average of 4.3 hours per week on English (McCoy, Smyth & Banks, 2012). These findings suggested that teachers were generally meeting the minimum requirement. Additionally, a substantial proportion of classrooms (40%) spent five or more hours on English. DEIS status was reported to be related to the time spent on particular subjects, with nine-year-old pupils in DEIS Band 1 schools spending significantly more time on English than pupils in non-DEIS schools (McCoy, Smyth & Banks, 2012). Using data from PIRLS and TIMSS 2011, Cosgrove and Creaven (2013) reported that there was no significant association between teacher-reported time spent on each subject (including English) and achievement in that subject. As has been described, Circular 0056/2011 outlined the initial steps to be taken as a result of the introduction of the Strategy. These included the requirement to increase the time spent on the development of literacy skills by one hour overall per week with a particular emphasis on literacy in the first language of the school (DES, 2011a).

The 1999 curriculum outlined the need for different forms of classroom organisation to complement the variety of learning offered by the curriculum. Different organisational approaches such as whole-class teaching, working individually, and working collaboratively in groups are all considered appropriate in different learning contexts (DES / NCCA, 1999b). Whole-class teaching has been the most dominant approach in Ireland. The GUI study found that 84% of teachers taught pupils as a whole class most days or every day (McCoy, Smyth & Banks, 2012). Similarly, Eivers et al. (2010) reported that, in NAMER 2009, over 80% of both Second and Sixth class pupils were taught in classes where most English lessons involved whole-class teaching. In NAMER 2014, 70% of pupils in Second class were in classes that used whole-class teaching in most English lessons, while more than half experienced individual or independent work in most English lessons (Kavanagh et al., 2015). The use of small group or team teaching approaches was less likely at both grade levels in both NAMER 2009 and NAMER 2014. The GUI study highlighted that teachers varied somewhat in the frequency with which they used approaches such as pair-work or group-work. Teachers who had qualified more recently were more likely to use varied organisational approaches: 'nearly three-quarters of children with recently qualified teachers (less than two years experience) work in pairs frequently, while this compares to just one-third of 9-year-olds with a teacher of more than 30 years experience' (McCoy, Smyth & Banks, 2012, p. 25). This may result from exposure to a wider variety of approaches during their initial teacher training.

Pupils need to experience the most effective teaching and learning approaches and strategies consistently to ensure all pupils develop the necessary literacy skills (DES, 2011b). Concannon-Gibney and Murphy (2012) reported that only 62% of senior primary teachers reported that they specifically taught reading comprehension in their lessons, which indicated that almost two-fifths of teachers surveyed either did not teach comprehension, did not know how to teach comprehension, and/or felt that comprehension did not need to be taught. However, a majority of teachers (58%) also reported recognising the importance of reading

comprehension (Concannon-Gibney & Murphy, 2012). As part of NAMER 2014, teachers were asked about their priorities for CPD in English. Twenty-nine percent of pupils were taught by teachers who listed reading comprehension/comprehension strategies as a priority area (Kavanagh et al., 2015).

Children encounter a range of texts in different forms and modes on a daily basis. The Primary Language Curriculum (NCCA, 2019) outlines the idea of critical literacy, which, as discussed earlier, involves more than the traditional conception of literacy: it includes actively identifying, analysing, and challenging the perspectives offered in texts. To facilitate the development of these skills, teachers should expose pupils to a variety of texts from multiple perspectives (NCCA, 2019). There is also an awareness, as outlined by the Strategy, that the classroom experience should reflect the reading interests of the pupils, allowing them to access a broad balance of text types (DES, 2011b). In NAMER 2014, over three-quarters of Second class pupils were in classes which used published reading schemes most days in English lessons, while two in five pupils were in classes which used workbooks or worksheets most days. Text types including real-life texts or documents, e-books or texts authored by children were reported to be used less frequently. Interestingly, more than half of pupils (57%) were in classes that used informational texts in English lessons once or twice a month or less (Kavanagh et al., 2015).

The Strategy (DES, 2011b) highlighted the importance of increasing awareness of the importance of digital literacy at primary level, as referenced above. Various studies have found that the use of ICT varies substantially across primary schools in Ireland for a variety of reasons, including limited resources and lack of a suitable Internet connection (Cosgrove et al., 2014; Cosgrove et al., 2019; Eivers, 2019; Eivers et al., 2010; Feerick et al., 2021). During the lifetime of the Strategy, the extent to which digital technology has permeated other aspects of children's lives, including home and social lives, has continued to increase.

The *Digital Strategy for Schools, 2015-2020* (DES, 2015), which commenced shortly before the PIRLS 2016 data collection, included an action plan for integrating ICT into teaching, learning, and assessment practices. It included four key themes: teaching, learning, and assessment using ICT; teacher professional learning; leadership, research, and policy; and ICT infrastructure (DES, 2015). It acknowledged the need to provide progressive learning opportunities to equip students with sufficient digital literacy skills. During the lifespan of the Digital Strategy, related documents were also published including the *Digital Learning Framework for Primary Schools* (DES, 2017b) followed by the *Digital Learning Planning Guidelines for Primary Schools* (DES, 2018). The Digital Learning Framework provided a roadmap to help schools manage the transformation of teaching and learning in line with the Digital Strategy (DES, 2018). The Digital Learning Planning Guidelines were published to support schools in embedding digital technologies into all areas of school activity, including the development of a Digital Learning Plan (DLP) (DES, 2018). Initial indications from an ongoing evaluation of the Digital Learning Framework showed that the majority of primary schools (over 90%) had begun or completed their DLP, with almost three-quarters of primary schools having incorporated digital technologies into school self-evaluation (SSE) activities (Cosgrove et al., 2019; Feerick et al., 2021). However, only a small proportion (6%) of primary school teachers reported that they were at an Advanced/ Highly advanced level of embedding of digital technologies in teaching, learning, and assessment (although primary teachers demonstrated a richer understanding of what embedding meant thant their post-primary counterparts) (Feerick et al., 2022). One-quarter of primary schools rated the availability of digital devices as Excellent, while just one-tenth of primary school teachers rated the broadband speed as Excellent (Feerick et al., 2021).

The Primary School Curriculum states that 'assessment is integral to all areas of the curriculum and it encompasses the diverse aspects of learning' (DES, 1999b, p.18). The *Assessment Guidelines for Primary Schools* outline that 'assessment is about building a picture over time of a child's progress and/or achievement in learning' (NCCA, 2007, p. 7). It also allows teachers to plan for future learning and identify the learning needs of the pupils. Assessment goes beyond summative assessment (assessment of learning) such as tests and includes formative assessment (assessment for learning), which is an ongoing process enabled

through the frequent interactions between teachers and children including questioning and observation (NCCA, 2007). Based on reports from NAMER 2014, pupils' English reading was assessed most frequently using teacher-designed tests, documented observations, and self-assessment by children, while teachers of 87% of pupils reported never using computer-based tests (Kavanagh et al., 2015). The recent CSL study asked teachers how often they used specific assessment practices. Teachers' observation with immediate feedback was reported to be *always* used by 30% of teachers, while providing students with a score or letter grade was reported least often (Devine et al., 2020). The 2011 Strategy highlighted the role of standardised tests in the assessment of literacy and numeracy skills (DES, 2011b). It included the new requirement that all primary schools must administer standardised tests of English reading (and mathematics) to all eligible students at the end of Second, Fourth, and Sixth class, and report aggregated results to the Department of Education and Skills. The standardised tests used are normed for the Irish population and allow pupils' performance to be compared with the performance of a nationally representative sample of children of that class level. The results of standardised tests can help teachers to identify pupils at risk of learning difficulties. In a survey of primary school teachers relating to standardised tests, teachers highlighted the importance of tests being up to date and in line with the curriculum and also highlighted the need for CPD in relation to standardised testing, particularly as regards the interpretation and use of results (O'Leary et al., 2019). Some of the standardised tests widely used in Ireland were recently updated and re-normed and these have been available since 2019.

The 2011 Strategy highlighted the need for CPD for teachers throughout their careers to enhance the quality of pupils' learning (DES, 2011b). In PIRLS and TIMSS 2011, 37% of pupils in Ireland were taught by a teacher who had not engaged in *any* reading-related CPD over the previous two years, which was a larger proportion than the average internationally (25%). Eleven percent of pupils were taught by a teacher who had completed 16 hours or more of reading-related CPD, which was below the average internationally (24%) (Clerkin & Creaven, 2013). This highlights that the literacy-related CPD available to teachers had not been engaged with consistently across schools.

Chapter summary and research questions

This chapter has outlined major policy developments that took place in the years prior to PIRLS 2016 (most notably, the *National Strategy to Improve Literacy and Numeracy*, and early consultation about what would become the Primary Language Curriculum). It has also outlined developments that have taken place since the study was conducted, including the Interim Review of the Strategy, the full rollout of the Primary Language Curriculum, and the embedding of the Digital Strategy for Schools and related policy documents such as the Digital Learning Framework. Several ongoing policy concerns as regards literacy learning in Ireland were discussed, including inequities related to socioeconomic status; the challenge of embedding literacy within home environments; persistent gender gaps in reading achievement, attitudes, and habits; and the need to embed digital and critical literacies within the teaching and learning of reading.

Existing data on learners' attitudes to reading, confidence as readers, and reading habits were examined, noting that these are important variables both for their relationship to reading achievement, and for their role in pupils' lives and wellbeing more broadly. Primary school pupils in Ireland tend to be relatively positive about reading and about their own abilities, and tend to read outside school quite regularly. However, there is a striking discrepancy between patterns at primary and post-primary levels, with second-level students increasingly reporting more negative attitudes about reading and less frequent reading activity. Reading confidence appears more consistent across levels of the education system, with primary and post-primary students reporting relatively high self-belief in relation to reading ability.

Attitudes to reading and reading habits have consistently been shown to differ by gender, with girls

enjoying reading more than boys and reading more frequently. While these gaps are evident in studies at primary level, they are particularly wide in the post-primary context, and it appears that the extent to which adolescent boys enjoy reading, in particular, has declined over time in Ireland. Reading confidence, on the other hand, is typically either similar across genders or slightly higher for (older) boys, despite the fact that achievement differences favour girls. Socioeconomic status also affects motivational factors related to reading. There is some evidence that the frequency with which primary level children with lower SES read has declined over time, while the attitudinal gap linked to SES appears wider at post-primary level. Reading confidence also seems to vary somewhat by socioeconomic status, with the gap in favour of those with higher SES appearing wider at post-primary level.

Aspects of reading in the home environment were explored next. It was noted that, while factors related to the home environment are acknowledged to be very important for reading development, there is mixed evidence as to which aspects of the home environment have the strongest impact in this regard. Variables such as the frequency of early literacy activities, the quantity of material resources such as books in the home, parental attitudes to reading and (parents' own) reading behaviours, and parental education have all been shown to be associated with pupils' reading achievement. Parents' active involvement in pupils' homework, on the other hand, is sometimes negatively associated with achievement, perhaps due to the fact that such involvement is most needed by pupils who are struggling with schoolwork.

In relation to literacy experiences in early childhood, it was noted that some of the PIRLS 2016 cohort, unlike the PIRLS 2011 cohort, would have experienced the effect of the Síolta and Aistear frameworks before starting school. Early literacy activities in the home have been shown to differ depending on the child's gender, with parents tending to engage more often in literacy activities with girls, and to rate girls' early literacy skills more highly than those of boys. The impact of socioeconomic status on various aspects of literacy in the home was discussed, including the reduced experience of early literacy activities afforded to children from lower-SES backgrounds. However, evidence that the effect of SES could be mitigated through informal parental involvement in children's education was also noted, along with broadly positive outcomes of the HSCL scheme in urban DEIS schools.

Turning to reading within the classroom context, primary school pupils in Ireland typically report high engagement in their reading lessons, with girls more engaged than boys. Before the introduction of the National Strategy to Improve Literacy and Numeracy, evidence suggested that teachers were by-and-large meeting the curricular requirement as regards instructional time for language; however, the Strategy has required an additional hour per week to be dedicated to literacy skills. In Ireland, whole-class teaching is the most commonly-reported organisational approach, although there is some evidence that recently qualified teachers make more extensive use of other approaches.

Research points to some areas of concern in relation to the teaching of reading in Ireland. Some teachers have indicated that they never explicitly teach reading comprehension strategies, while there are indications of heavy reliance on reading schemes, workbooks, and worksheets, with informational texts including real-world documents used relatively rarely. The integration of digital technologies into the teaching of reading is a priority area, and one that has been hampered by a lack of suitable infrastructure and of a structured approach to the provision of technical support and maintenance; the evaluation of the Digital Learning Framework is ongoing and its outcomes will be relevant in this regard. As for assessment practices, the introduction of mandatory standardised testing has been met with concern by some teachers, although the redevelopment of some of the tests available may address issues of curriculum alignment and norm relevance. Finally, uptake of reading-relating CPD among teachers in Ireland has been comparatively low and unevenly distributed.

Following this introductory review, the present report draws on data from the PIRLS 2016 questionnaires to address three interlinked sets of questions:

1) *How did pupils in Ireland behave as readers outside of school?* How did they feel about reading, and how confident were they in their ability as readers? How often did they read, and for what purpose(s)?
2) *How did reading feature in the home lives of pupils in Ireland?* What attitudes did their parents or guardians hold towards reading, and how often did their parents and guardians typically read? To what extent did pupils engage in early literacy activities before the start of their formal education? What language(s) did pupils speak prior to starting school? What resources were available at home to support their ongoing literacy learning, and to what extent did parents provide support for homework?
3) *What did pupils typically experience during their reading lessons in school?* To what extent did the pupils find their reading lessons engaging? How did their teachers typically organise reading instruction, and what teaching and learning strategies, text types, comprehension tasks, and digital resources were used? How were homework and assessment used in the context of reading development? To what extent did teachers engage in reading-related CPD?

For many of the variables examined, further detail will be explored: for instance, to what extent variables were associated with reading achievement; to what extent changes were apparent between PIRLS 2011 and 2016; and to what extent differences were apparent by pupil gender and school DEIS status.

Chapter 3:
Pupils' perspectives on reading

This chapter describes pupils' attitudes to reading, confidence as readers, and typical reading activities outside school, drawing on their responses to the PIRLS 2016 Student Questionnaire.

Each topic is approached from a number of angles. First, the data for Ireland are presented in international context, with reference to the average across all PIRLS countries and to the data for selected comparison countries. Associations between the variables of interest and reading achievement are also described, where relevant. Next, Ireland's data from 2016 and from the previous PIRLS assessment in 2011 are compared, to identify whether changes took place between the two time points. The 2016 data for Ireland are then analysed by gender, and subsequently by school DEIS status.[17]

Following separate discussions of reading attitudes, confidence, and activities, some patterns of association between these are considered.

An e-Appendix to accompany this chapter can be downloaded from www.erc.ie/pirls/reports.

Attitudes to reading

The extent to which pupils liked reading was reported on the PIRLS *Students Like Reading* scale, based on their responses to eight attitudinal questions and two behavioural questions.

The attitudinal questions asked how much pupils agreed or disagreed (*a lot* or *a little*) with each of the following statements: *I like talking about what I read with other people; I would be happy if someone gave me a book as a present; I think reading is boring* (reverse coded); *I would like to have more time for reading; I enjoy reading; I learn a lot from reading; I like to read things that make me think; I like it when a book helps me imagine other worlds.* The behavioural questions asked how often pupils read *for fun* outside school, and how often they read *to find out things they wanted to learn* outside school.

Pupils with scores of 8.3 or lower on the *Students Like Reading* scale were classified as *not liking* reading. Pupils with scores above 8.3 and below 10.3 were classified as *somewhat liking* reading, while those with scores of 10.3 or higher were classified as *very much liking* reading (see Mullis et al., 2017, for further detail on the indices of the scale).

In this section, attitudes to reading are discussed based on the *Students Like Reading* scale, but pupils' responses to the individual attitudinal statements that contribute to the scale are also considered, where of interest. Responses to the individual behavioural questions are explored in more detail later in this chapter, when the focus turns to reading activities.

Attitudes to reading in Ireland and internationally

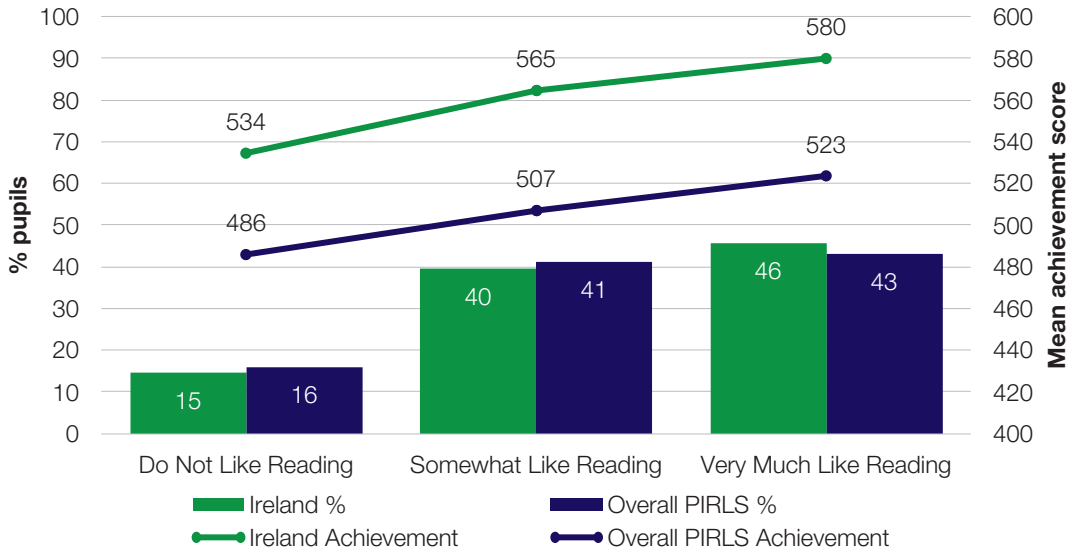
Pupils in Ireland reported that they liked reading roughly as much as pupils on average across the PIRLS countries. In Ireland, 46% of pupils (compared to 43% internationally) *very much* liked reading, while 15% (compared to 16% internationally) *did not* like reading.

Liking reading was positively associated with reading achievement, although the correlation was weak-to-moderate both in Ireland (r=.18) and internationally (r=.15) (see also Appendix Table A3.1a). The mean score

17 As explained in Chapter 1, the variable of school DEIS status is explored by comparing data for pupils in urban DEIS schools (Band 1 and Band 2) with data for pupils in other schools (non-DEIS and DEIS Rural).

of pupils in Ireland who *very much* liked reading (580) was significantly higher than the mean scores of those who *somewhat* liked reading (565) and those who *did not* like reading (534). Figure 3.1 shows the percentages and mean scores of pupils, in Ireland and internationally, by the extent to which they liked reading. (See also Appendix Tables A3.2a and A3.2b.)

Figure 3.1: Percentages and mean achievement of pupils in Ireland and internationally, by the extent to which they liked reading (PIRLS *Students Like Reading* scale)



Source: Appendix Table A3.2

Relative to their peers in the comparison countries, pupils in Ireland were among the more positive in their attitudes to reading, while pupils in Norway were least enthusiastic (22% *very much* liked reading, while 27% *did not* like it). Table 3.1 shows the percentages of pupils in Ireland, the comparison countries, and on average across all PIRLS countries, by the extent to which they liked reading (see also Appendix Table A3.2a).

Table 3.1: Percentages of pupils in Ireland, comparison countries, and on average across all PIRLS countries, by the extent to which they liked reading (PIRLS *Students Like Reading* scale)

	Do not like reading	Somewhat like reading	Very much like reading
Australia	16.4	40.9	42.7
England	19.9	44.7	35.4
Finland	22.9	48.8	28.4
Hong Kong, SAR	20.7	43.7	35.7
Ireland	14.6	39.7	45.7
New Zealand	13.5	42.1	44.4
Northern Ireland	19.2	42.2	38.6
Norway	27.2	50.8	22.1
Poland	22.7	44.8	32.5
Singapore	18.5	50.1	31.4
United States	21.9	42.2	35.9
Overall PIRLS	15.9	41.1	43.0

Source: Appendix Table A3.2a.

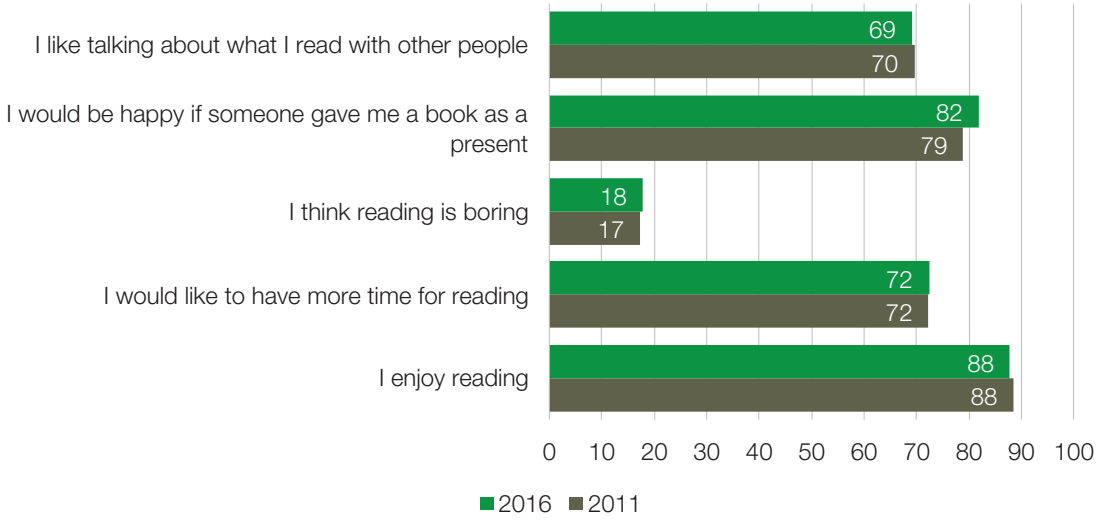
Responses to the individual attitudinal statements showed that more than four out of five pupils in Ireland agreed (*a lot* or *a little*) that they would be happy to receive a book as a present (82%); that they enjoyed reading (88%); that they learned a lot from reading (88%); that they liked to read things that made them think (85%); and that they liked it when a book helped them to imagine other worlds (89%). Pupils in Ireland were somewhat more circumspect when asked if they liked talking about what they read with other people (69% agreed, with 29% agreeing *a lot*), and if they would like to have more time for reading (72% agreed, with 39% agreeing *a lot*). Eighteen percent of pupils in Ireland indicated that they thought reading was boring, with 6% agreeing *a lot*. There were broadly similar response patterns across most of the comparison countries (see Appendix Table A3.3). Notably, pupils in *all* the comparison countries were less inclined than pupils on average across all PIRLS countries to enjoy talking about what they read with other people.

Trends in attitudes to reading

In PIRLS 2011, the *Students Like Reading* scale was based on a less extensive set of items than in PIRLS 2016.[18] To compare trends on attitudes to reading between the two cycles, we focus on responses to the five attitudinal statements that contributed to this measure on both occasions: *I like talking about what I read with other people*; *I would be happy if someone gave me a book as a present*; *I think reading is boring*; *I would like to have more time for reading*; and *I enjoy reading*.

The responses of pupils in Ireland to these statements were highly consistent between 2011 and 2016. There were some minor differences in the *strength* of pupils' agreement or disagreement with specific statements; for example, in 2011, 35% agreed *a lot* that they liked talking about what they read with other people, whereas this dropped to 29% in 2016. However, when response options were collapsed into agreement and disagreement, no changes were evident between the two time points – with the exception of a very slight but statistically significant increase (3%) in the percentage of pupils agreeing that they would like to receive a book as a present in 2016 (Figure 3.2). See also Appendix Tables A3.4a and A3.4b.

Figure 3.2: Percentages of pupils in Ireland, in 2016 and 2011, that agreed (*a lot* or *a little*) with each of five statements about liking reading



Source: Appendix Table A3.4a.

18 Specifically, in PIRLS 2011 the scale was based on the same two behavioural questions as in 2016, but on only six attitudinal questions, of which five were among the eight that contributed to the scale in 2016. See Martin et al. (2012) for details of the 2011 scale. See Clerkin and Creaven (2013) for an analysis of Ireland's outcomes on the 2011 scale.

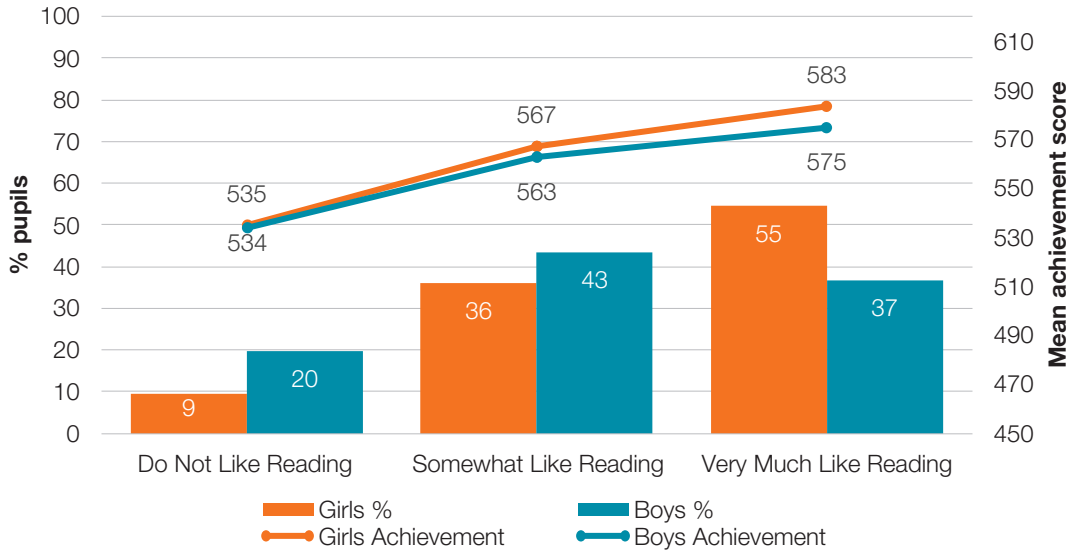
Gender and attitudes to reading

Girls were substantially and significantly more positive than boys about reading, in Ireland and internationally, in PIRLS 2016. In Ireland, more than half (55%) of girls *very much* liked reading in 2016, compared to 37% of boys. One in five boys in Ireland (20%) *did not* like reading, while just under one in ten girls (9%) *did not* like it.

Boys in Ireland liked reading about as much as boys internationally (36% of boys across all PIRLS countries *very much* liked reading, while 20% *did not* like it). However, girls in Ireland liked reading somewhat more than girls internationally (50% of girls across participating countries liked reading *very much*, while 12% *did not* like it).

A weak-to-moderate positive association between attitude to reading and reading achievement held for both boys and girls in Ireland: for boys, r=.19; for girls, r=.15 (see Appendix Table A3.1b). The mean scores of both boys and girls who *very much* liked reading (575 and 583, respectively) were significantly higher than the mean scores of their same-gender peers who *somewhat* liked reading (boys: 563; girls: 567) and who *did not* like reading (boys: 534; girls: 535). Figure 3.3 shows the percentage and mean achievement scores of girls and boys in Ireland, by the extent to which they liked reading (see also Appendix Tables A3.5a and A3.5b).

Figure 3.3: Percentages and mean achievement of girls and boys in Ireland, by the extent to which they liked reading (PIRLS *Students Like Reading* scale)



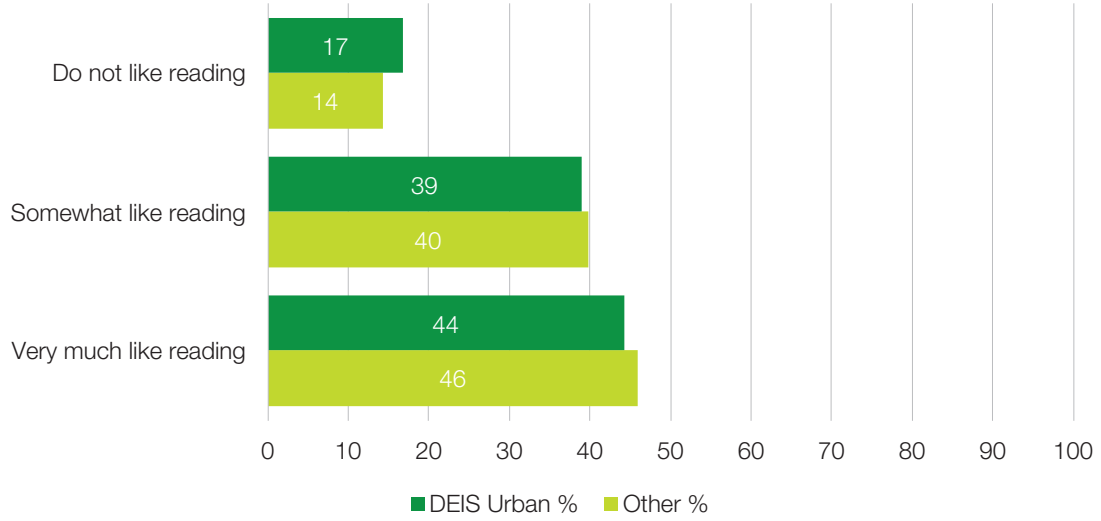
Source: Appendix Table A3.5a.

A higher proportion of girls than boys in Ireland agreed (*a lot* or *a little*) with each of the individual statements contributing to the *Students Like Reading* scale. The smallest gender gaps observed (4 – 5%) were in response to: 'I like to read things that make me think' (87% of girls and 83% of boys agreed); 'I learn a lot from reading' (91% of girls and 86% of boys agreed); and 'I like it when a book helps me imagine other worlds' (91% of girls and 86% of boys agreed). In contrast, the largest gender gaps (10 – 12%) were observed in responses to: 'I like talking about what I read with other people' (74% of girls and 64% of boys agreed, with only 34% of girls and 24% of boys agreeing *a lot*); the reverse-coded 'I think reading is boring' (13% of girls and 23% of boys agreed); and 'I would like to have more time for reading' (79% of girls and 66% of boys agreed). (See also Appendix Table A3.5c.)

School DEIS status and attitudes to reading

There was no significant difference observed between the extent to which pupils in urban DEIS schools and pupils in other (non-DEIS or DEIS Rural) schools liked reading. Forty-four percent of pupils in urban DEIS schools (and 46% in other schools) *very much* liked reading, while 17% in urban DEIS schools (and 14% in other schools) *did not* like reading. Figure 3.4 shows the percentages of pupils in urban DEIS and other schools in Ireland, by the extent to which they liked reading (see also Appendix Table A3.6). One-quarter of boys in urban DEIS schools (25%) reported that they *did not* like reading, although the increasing size of standard errors when gender subgroups are considered within the urban DEIS subgroup means that this should be interpreted with caution.

Figure 3.4: Percentages of pupils in Ireland in urban DEIS and other schools, by the extent to which they liked reading (PIRLS *Students Like Reading* scale)



Source: Appendix Table A3.6.

Reading confidence

Pupils' confidence as readers was reported on the PIRLS *Students Confident in Reading* scale, based on the extent to which pupils agreed or disagreed (*a little* or *a lot*) with each of six statements: *I usually do well in reading*; *Reading is easy for me*; *I have trouble reading stories with difficult words* (reverse coded); *Reading is harder for me than for many of my classmates* (reverse coded); *Reading is harder for me than any other subject* (reverse coded); *I am just not good at reading* (reverse coded).

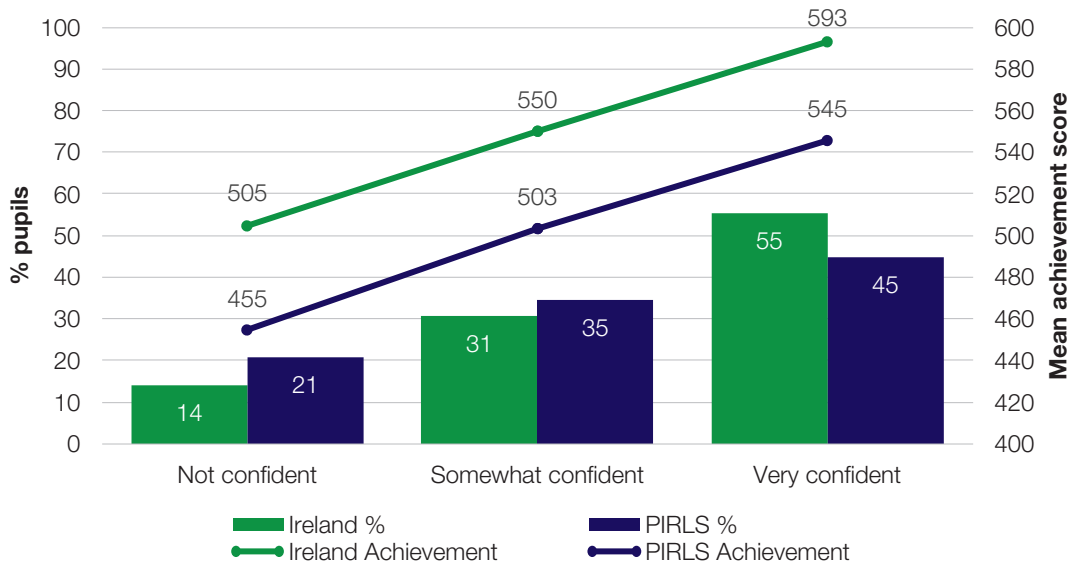
Pupils were combined into three groups based on their combined scores on the items – *not confident*, *somewhat confident*, and *very confident* (Mullis et al., 2017).

Reading confidence in Ireland and internationally

A slight majority of pupils in Ireland (55%) were *very confident* about reading, while 31% were *somewhat confident* and 14% were *not confident*. This represents a relatively high degree of confidence compared with the average across all PIRLS countries (45% internationally were *very confident*, while 21% were *not confident*).

There was a moderate-to-strong positive correlation between reading confidence and reading achievement, both in Ireland (r=.44) and internationally (r=.42) (see also Appendix Table A3.1a). The mean achievement of pupils in Ireland who were *very confident* in reading (593) was significantly higher than that of pupils who were *somewhat confident* (550), and significantly higher, by almost nine-tenths of a standard deviation, than that of pupils who were *not confident* (505). Figure 3.5 shows the percentages and mean achievement of pupils in Ireland and on average across all PIRLS countries, by their level of reading confidence (see also Appendix Tables A3.7 and A3.8).

Figure 3:5: Percentages and mean achievement of pupils in Ireland and internationally, by level of reading confidence (PIRLS *Students Confident in Reading* scale)



Source: Appendix Table A3.7.

Among the comparison countries, only Finland and Poland reported higher rates of reading confidence than Ireland. Finland's figures, with only one in 10 pupils (10%) *not confident*, were particularly striking. Table 3.2 shows the percentages of pupils in Ireland, comparison countries, and on average across all PIRLS countries, by their level of reading confidence (see also Appendix Table A3.7).

Table 3.2: Percentages of pupils in Ireland, comparison countries, and on average across all PIRLS countries, by confidence about reading (PIRLS *Students Confident in Reading* scale)

	Not confident	Somewhat confident	Very confident
Australia	16.3	34.3	49.4
England	15.9	30.9	53.2
Finland	9.9	30.6	59.5
Hong Kong	26.0	38.0	36.1
Ireland	14.1	30.6	55.3
New Zealand	23.9	41.1	35.0
Northern Ireland	16.6	33.0	50.4
Norway	14.4	32.8	52.8
Poland	12.1	28.7	59.2
Singapore	16.1	36.1	47.8
United States	18.8	31.7	49.5
Overall PIRLS	20.7	34.6	44.7

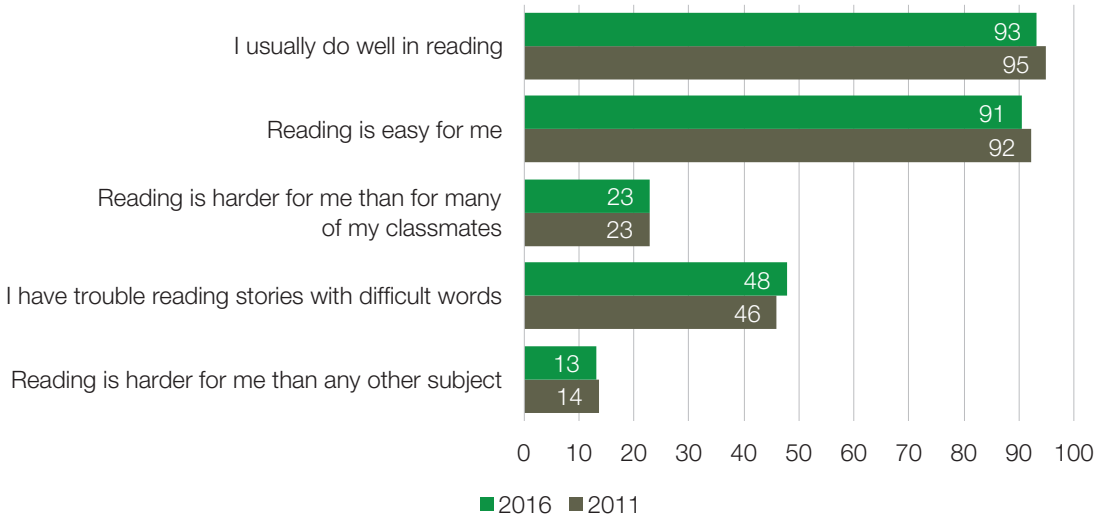
Source: Appendix Table 3.7.

Trends in reading confidence

While PIRLS 2011 also included a *Students Confident in Reading* scale, this was arrived at slightly differently.[19] Responses to five statements contributed to the scale on both occasions. These statements were: *I usually do well in reading*; *Reading is easy for me*; *Reading is harder for me than for many of my classmates* (reverse coded); *I have trouble reading stories with difficult words* (reverse coded); and *Reading is harder for me than any other subject* (reverse coded).

The responses of pupils in Ireland to these statements in 2011 and 2016 suggest that there has been no notable change in patterns of reading confidence between the cycles. Although slightly fewer pupils in 2016 agreed *a lot* that reading was easy for them (60% in 2016 vs 66% in 2011), or that they usually did well in reading (60% in 2016 vs 64% in 2011), the percentages that agreed and disagreed overall with the five shared statements were very consistent across the cycles (Figure 3.6; see also Appendix Table A3.9).

Figure 3.6: Percentages of pupils, in 2016 and 2011, that agreed (*a lot* or *a little*) with each of five statements about reading confidence



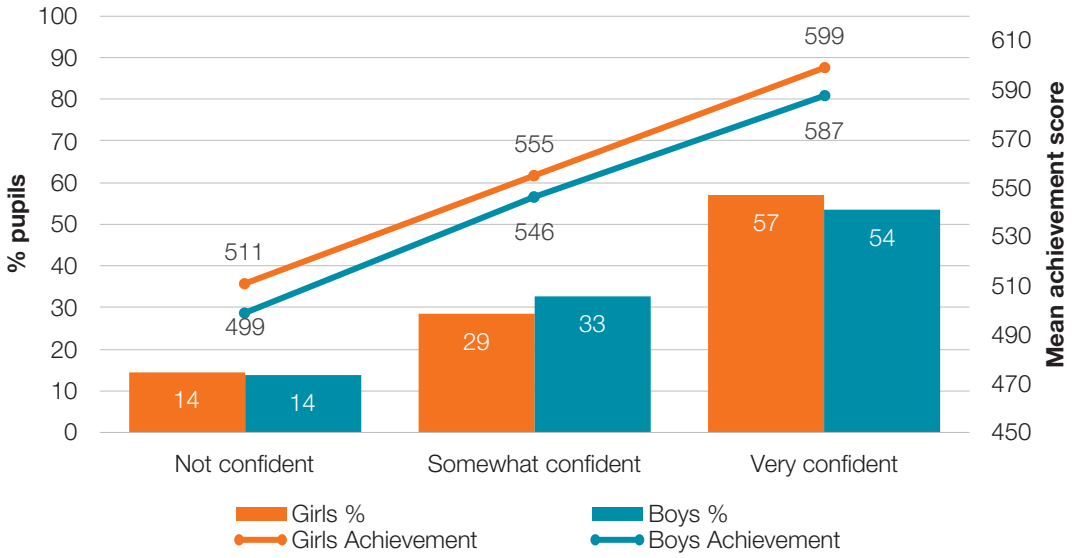
Source: Appendix Table A3.9.

Gender and reading confidence

The reading confidence of boys and girls in Ireland was very similar in PIRLS 2016: 57% of girls and 54% of boys were *very confident*, while 14% of each gender group were *not confident*. The only statistically significant difference across categories was that slightly more boys (33%) than girls (29%) were *somewhat confident*. The positive association between reading confidence and reading achievement was moderate-to-strong for both boys (r=.41) and girls (r=.46) (see also Appendix Table A3.1b). For each gender group, there was a substantial and significant gap of just over 88 scale score points between the mean achievement of those who were *not confident* and those who were *very confident*. Figure 3.7 shows the percentages and mean reading achievement of boys and girls in Ireland, by their level of reading confidence (see also Appendix Table A3.10).

19 In PIRLS 2011, the *Students Confident in Reading* scale was based on responses to five of the six component statements used in 2016, and to two other statements ('If a book is interesting, I don't care how hard it is to read' and 'My teacher tells me I am a good reader'). The reverse-coded 'I am just not good at reading' from 2016 was not administered in 2011. See Martin et al., 2012, for further details.

Figure 3.7: Percentages and mean achievement of girls and boys in Ireland, by reading confidence (PIRLS *Students Confident in Reading* scale)

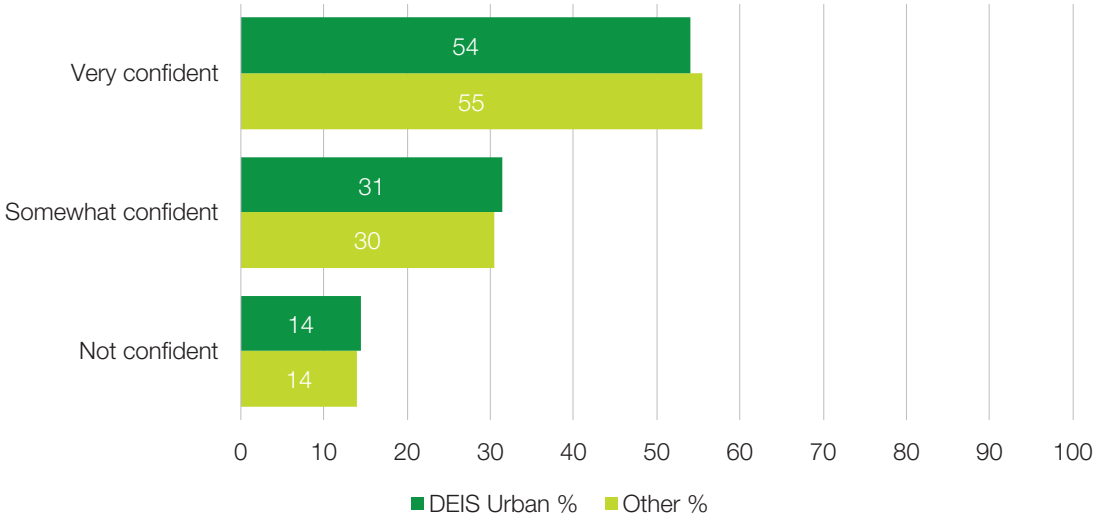


Source: Appendix Table A3.10a.

School DEIS status and reading confidence

There was no difference observed between the levels of reading confidence in urban DEIS schools and other schools. Fifty-four percent of pupils in urban DEIS schools (and 55% in other schools) were *very confident* in reading, while 14% of pupils in both urban DEIS and other schools were *not confident* (Figure 3.8; see also Appendix Table A3.11).

Figure 3.8: Percentages of pupils in Ireland in urban DEIS schools and other schools, by level of confidence in reading (PIRLS *Students Confident in Reading* scale)



Source: Appendix Table A3.11.

Reading activity

Pupils were asked a number of questions about their typical reading behaviours outside of school. First, they were asked how much time they usually spent reading outside of school on a school day, with options ranging from *less than 30 minutes* to *2 hours or more*. (The question did not specify the purpose of this reading, so pupils may have included reading they did for pleasure, for homework, and/or for other reasons.) Next, pupils were asked to give a broad indication of how often, outside of school, they read for fun, and how often they read to find out about things they wanted to learn, with options in each case ranging from *never or almost never* to *every day or almost every day*.[20] Finally, pupils were asked how often they borrowed books from a library (which could be a school, class, or public library).[21]

The next subsections describe the out-of-school reading behaviours of pupils in Ireland in 2016. Pupils' experiences of reading in the classroom are discussed in Chapter 5.

Reading activity in Ireland and internationally

Pupils in Ireland tended to spend somewhat more time reading outside school than their peers across all PIRLS countries. In Ireland, a majority (60%) reported that they spent at least half an hour reading outside school on a typical school day, compared to 53% internationally. About one in 10 pupils in Ireland (10%) reported that they usually read for two hours or more, compared to a similar 9% internationally. Among the comparison countries, too, pupils in Ireland spent relatively high amounts of time reading outside school. The pattern in Northern Ireland was very similar to that in Ireland, while Poland and Singapore also reported roughly similar percentages. However, in Finland and Norway, pupils spent comparatively little time reading, with half or more of pupils (50% and 58%, respectively) spending less than half an hour reading outside school on a typical day, and very few (4% and 2%, respectively) reading for two hours or more (Table 3.3; see also Appendix Table A3.12).

Table 3.3: Percentages of pupils that spent different amounts of time reading outside school on a typical school day, in Ireland, comparison countries, and on average across all PIRLS countries

	< 30 mins	30 mins to 1 hr	1 hr to 2 hrs	2 hrs or more
Australia	46.3	35.1	9.2	9.5
England	47.4	33.6	10.0	9.1
Finland	50.1	37.7	8.1	4.1
Hong Kong, SAR	49.7	32.3	10.3	7.7
Ireland	39.9	37.4	13.0	9.7
New Zealand	50.3	30.9	9.4	9.4
Northern Ireland	39.0	35.7	14.5	10.8
Norway	57.6	33.6	6.4	2.4
Poland	37.7	43.4	12.1	6.7
Singapore	43.0	36.4	11.1	9.4
United States	49.2	36.7	7.5	6.6
Overall PIRLS	46.5	34.0	10.7	8.7

Source: Appendix Table A3.12.

20 As described earlier, the questions about time spent reading for fun and time spent reading to find things out also contributed to the PIRLS *Students Like Reading* scale.

21 While the question about library usage specified that books borrowed could include e-books as well as print books, the questions about extent and frequency of reading outside school did not specify whether both print and digital forms of reading should be included. Given that pupils responded to this questionnaire immediately after completing the paper-based PIRLS test, it seems likely that many interpreted the questions as referring to paper-based reading.

When asked how regularly they read *for fun* outside school, pupils in Ireland were broadly in line with the international PIRLS average: 43% of pupils in Ireland read for fun *every day or almost every day*, compared to an average of 40% internationally, while 13% *never or almost never* did so, compared to an average of 15% internationally. Relative to their peers in comparison countries, pupils in Ireland read for fun quite frequently. In contrast, about one-quarter of pupils in Singapore (25%) and more than one-fifth in Norway (23%) and the US (21%) reported that they *never or almost never* read for fun (Table 3.4; see also Appendix Table A3.13).

Table 3.4: Percentages of pupils by frequency of reading for fun in Ireland, comparison countries, and on average across all PIRLS countries

	Never or almost never	Once or twice a month	Once or twice a week	Every day or almost every day
Australia	12.2	10.7	30.9	46.1
England	13.1	13.3	32.5	41.2
Finland	10.4	18.1	36.5	35.0
Hong Kong	14.1	21.2	35.4	29.3
Ireland	12.8	12.8	31.3	43.1
New Zealand	11.3	12.3	30.3	46.1
Northern Ireland	16.4	14.2	32.0	37.5
Norway	22.7	18.1	31.7	27.4
Poland	14.3	20.8	35.4	29.4
Singapore	25.5	18.2	26.3	30.0
United States	21.1	14.2	27.9	36.7
Overall PIRLS	14.9	14.2	31.2	39.7

Source: Appendix Table A3.13.

Reading outside school *to find out things that pupils wanted to learn* was less common than reading for fun among pupils in Ireland – although, internationally, both activities were reported with roughly similar frequency. In Ireland, just under one-third of pupils (31%) read to find things out on a daily or near-daily basis, compared to an international average of 39%. Most other pupils in Ireland reported that they read to find things out on a roughly weekly (36%) or monthly (20%) basis, while 13% – similar to the international average of 12% – reported that they *never or almost never* did so. In most comparison countries, too, pupils read to find things out less often than on average across all PIRLS countries. The pattern in Ireland was very similar to that in Poland and Australia, and roughly similar to that in England, New Zealand, and Singapore. Pupils in Norway and Finland were least likely to report that they often read to find things out (16% and 20%, respectively, did this on a roughly daily basis) (Table 3.5; see also Appendix Table A3.14).

Table 3.5: Percentages of pupils by frequency of reading to find out things they wanted to learn, in Ireland, comparison countries, and on average across all PIRLS countries

	Never or almost never	Once or twice a month	Once or twice a week	Every day or almost every day
Australia	12.7	20.8	36.5	29.9
England	15.6	24.3	33.5	26.7
Finland	11.9	28.2	40.2	19.7
Hong Kong	18.0	27.0	33.4	21.6
Ireland	13.0	20.1	35.7	31.2
New Zealand	11.7	19.9	34.7	33.8
Northern Ireland	14.6	24.0	35.6	25.7
Norway	20.4	29.2	34.0	16.3
Poland	12.1	20.2	35.5	32.2
Singapore	11.9	20.3	33.7	34.0
United States	18.3	17.9	29.8	34.0
Overall PIRLS	11.6	17.5	31.5	39.4

Source: Appendix Table 3.14.

About two in five pupils in Ireland (41%) used a library on at least a weekly basis, while a further 28% did so once or twice a month. Roughly one in six pupils (17%) borrowed books a few times a year, while 14% *never or almost never* did so. Although this level of library usage was slightly above the international average, it was low relative to that in a number of the comparison countries. For instance, majorities of pupils in Australia (69%), the US (67%) and New Zealand (60%) borrowed books on at least a weekly basis. A different pattern was apparent in Finland, where weekly library usage was less common than in Ireland (28%), but very few pupils (5%) *never or almost never* borrowed books (Table 3.6; see also Appendix Table A3.15).

Table 3.6: Percentages of pupils by frequency of borrowing books from a library, in Ireland, comparison countries, and on average across all PIRLS countries

	Never or almost never	A few times a year	Once or twice a month	At least once a week
Australia	7.5	9.3	14.1	69.0
England	16.2	17.5	29.3	37.0
Finland	4.7	18.6	49.0	27.8
Hong Kong, SAR	9.2	13.7	33.4	43.8
Ireland	14.0	16.9	27.8	41.2
New Zealand	8.9	11.4	19.8	59.8
Northern Ireland	11.1	15.9	33.4	39.6
Norway	8.1	12.7	40.6	38.6
Poland	8.8	26.8	37.7	26.7
Singapore	14.1	25.1	30.0	30.7
United States	8.8	10.2	13.8	67.1
Overall PIRLS	21.5	16.0	25.1	37.4

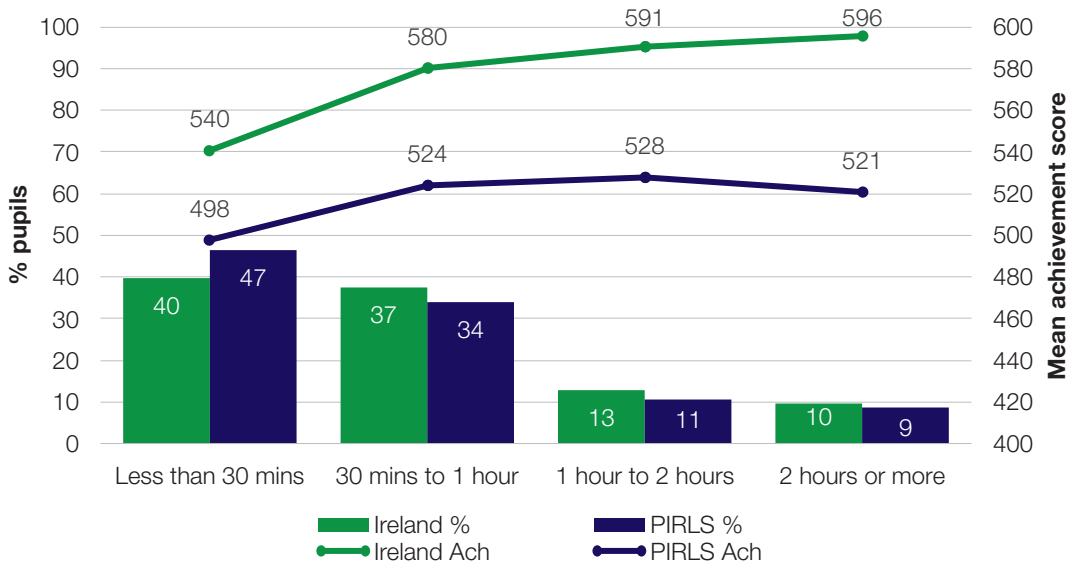
Source: Appendix Table A3.15.

In Ireland, reading achievement was positively associated with time spent reading on a typical day (Figure 3.9) and with frequency of reading for fun (Figure 3.10). The mean PIRLS achievement score for the 40% of pupils in Ireland that spent *less* than half an hour per day reading outside school was 540, well below the mean score of 596 for the pupils who read for longest (more than two hours) each day. This latter group also significantly, if more slightly, outperformed pupils who read for between 30 minutes and an hour per day (580), but did not significantly outperform those who read for between one and two hours (591) (see also Appendix Table A3.16). Pupils in Ireland who *never or almost never* read for fun achieved a mean score of 516, compared to 553 for those who read for fun once or twice a month, 565 for those who did so once or twice a week, and 589 – significantly higher than the mean scores of all the other groups – for those who did so on a more or less daily basis (see also Appendix Table A3.17).

The relationship to achievement was less clear-cut for frequency of reading to find things out, and frequency of borrowing books from a library. The mean score of pupils who read to find things out on a roughly daily basis (552) was significantly *lower* than the mean scores of those who did so on a roughly weekly or roughly monthly basis (579 and 577, respectively), and was not significantly different from the mean score of pupils who never or almost never read to find things out (559) (Figure 3.11; see also Appendix Table A3.18). Similarly, the mean score of pupils who borrowed books from a library at least once a week was significantly *lower* (563) than that of pupils who used a library on a roughly monthly basis (584), although it was also significantly higher than the mean score of pupils who *never* borrowed from a library (548) (Figure 3.12; see also Appendix Table A3.19).

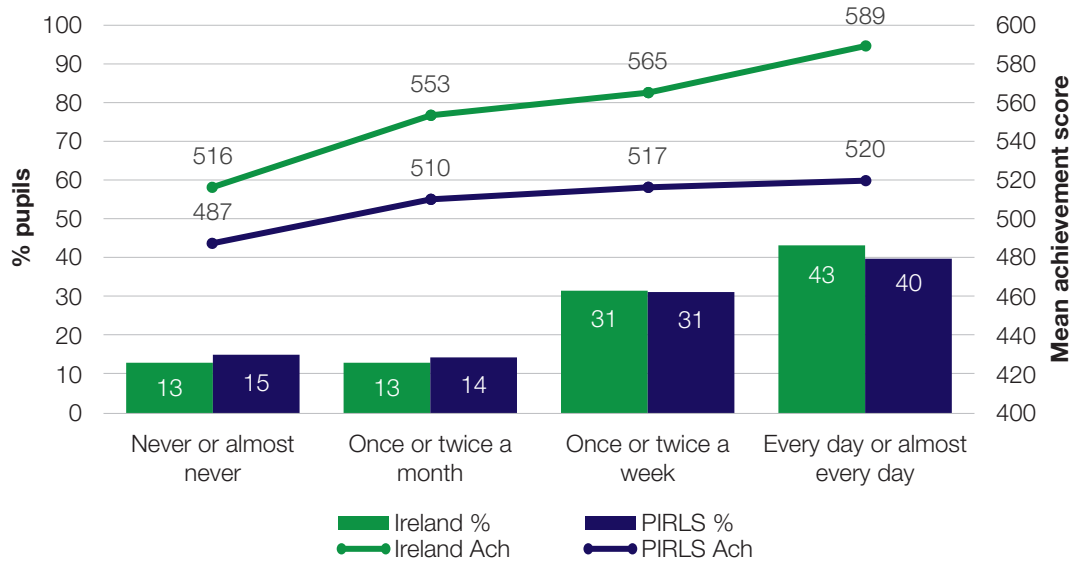
Figures 3.9 – 3.12 show the percentages and mean scores of pupils in Ireland and internationally, by time spent reading outside school on a typical school day (Figure 3.9), frequency of reading for fun outside school (Figure 3.10), frequency of reading to find things out outside school (Figure 3.11), and frequency of borrowing books from a library (Figure 3.12).

Figure 3.9: Percentages and mean achievement of pupils in Ireland and internationally, by time spent reading outside school on a typical day



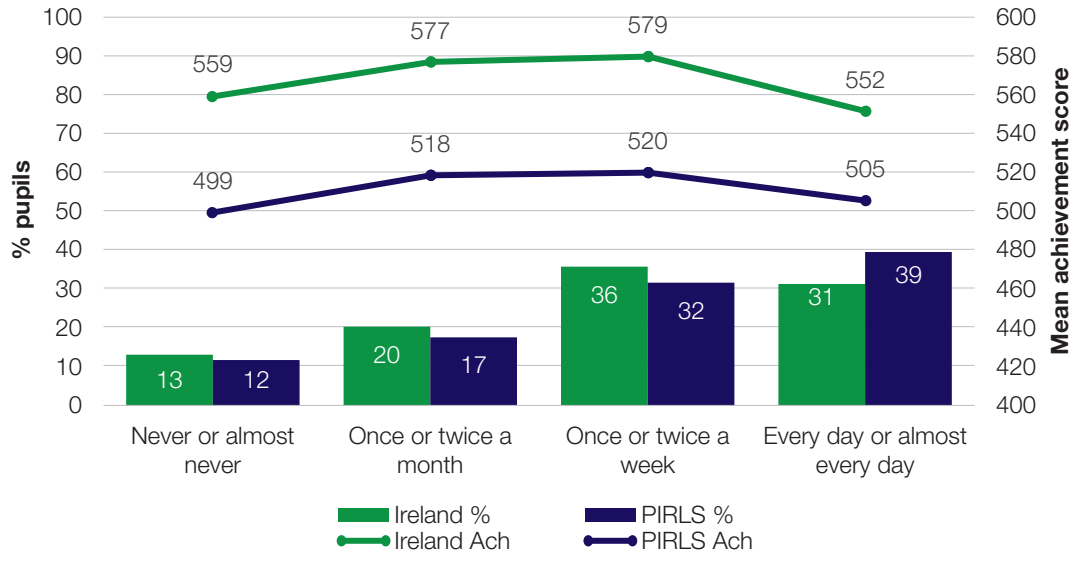
Source: Appendix Table A3.12.

Figure 3.10: Percentages and mean achievement of pupils in Ireland and internationally, by frequency of reading for fun outside school



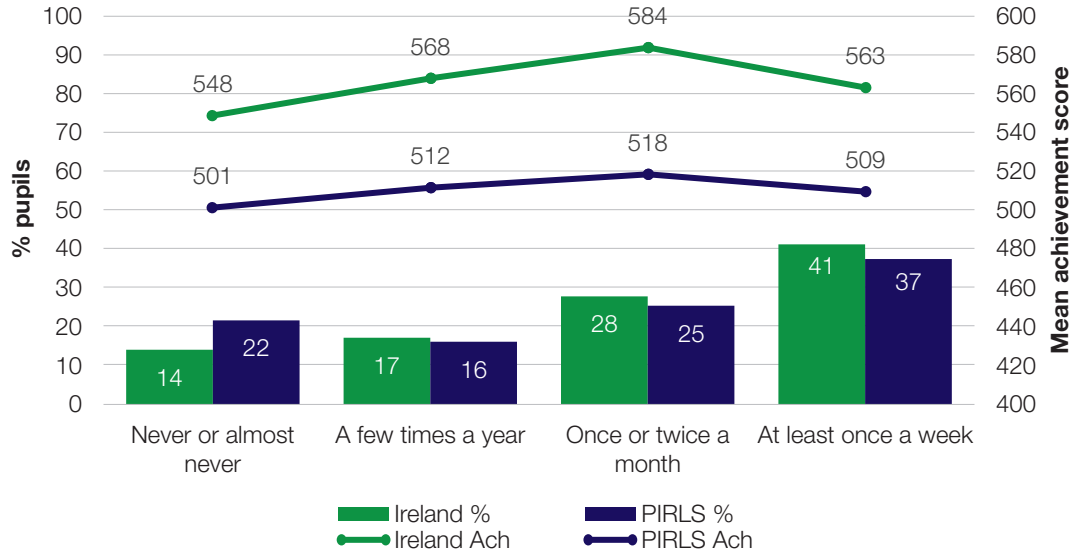
Source: Appendix Table A3.13.

Figure 3.11: Percentages and mean achievement of pupils in Ireland and internationally, by frequency of reading to find things out outside school



Source: Appendix Table A3.14.

Figure 3.12: Percentages and mean achievement of pupils in Ireland and internationally, by frequency of borrowing books from a library



Source: Appendix Table A3.15.

Trends in reading activity

The time spent reading outside school by pupils in Ireland in 2016 was generally similar to that observed in 2011, when 38% of pupils spent less than half an hour per day reading outside school. A marginally higher proportion of pupils spent more than two hours reading outside school in 2011 (12%) than in 2016 (10%), and this difference, although very small, was statistically significant.

The frequency of reading for fun was also similar across cycles. In 2011, 45% of pupils in Ireland (compared to 43% in 2016) reported that they read for fun on a daily or near-daily basis, while 11% (compared to 13% in 2016) *never or almost never* read for fun.

Reading to find out things that pupils wanted to learn became somewhat less common in Ireland between 2011 and 2016. In 2011, 39% (declining significantly to 31% in 2016) read to find things out on a roughly daily basis, while 10% (increasing slightly but significantly to 13% in 2016) *never or almost never* did so.

There was also a small drop in the proportion of pupils reporting very frequent library usage between 2011 and 2016. In 2011, 47% of pupils in Ireland said that they borrowed books *at least once a week*, significantly more than in 2016 (41%). However, there was no significant change in the percentage of pupils that *never or almost never* borrowed library books (12% in 2011, compared to 14% in 2016).

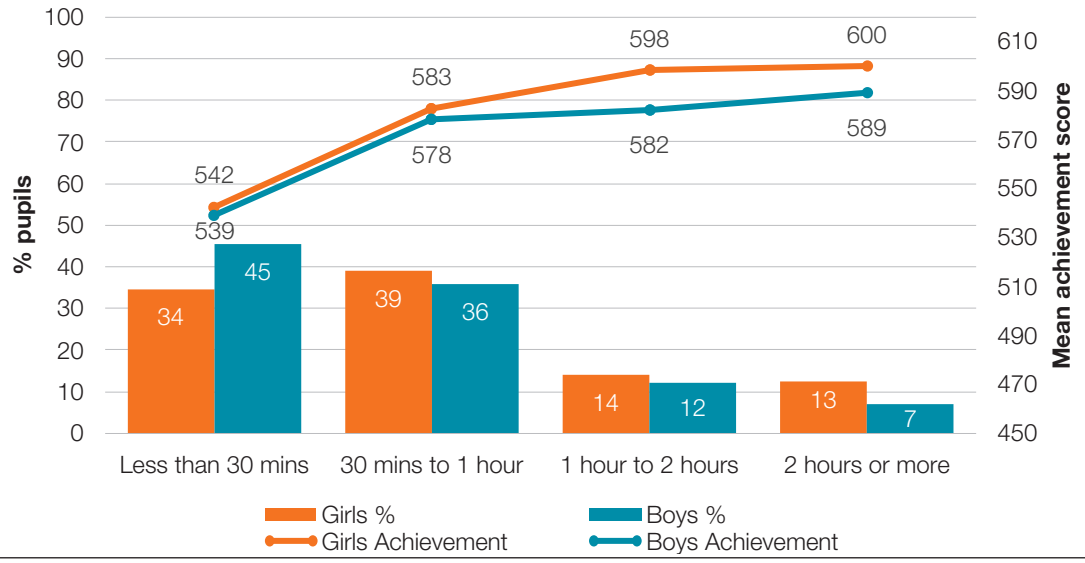
(For further details of all the above, see Appendix Table A3.20.)

Reading activity by gender

In Ireland and internationally, girls reported spending more time reading outside school than boys. Significantly more boys (45%) in Ireland spent less than half an hour per day reading, compared to just over one-third (34%) of girls. At the other extreme, nearly twice as many girls (13%) as boys (7%) in Ireland spent more than two hours per day reading. The mean achievement scores of both girls and boys in this category (600 and 589, respectively) were significantly higher than those of their same-gender peers who spent less than half an hour per day reading (542 and 539, respectively). Girls who read for more than two hours also outperformed girls who read for between 30 minutes and one hour. However, there was not a significant

difference between the corresponding groups of boys. (Figure 3.13; see also Appendix Tables A3.21a and A3.21b).

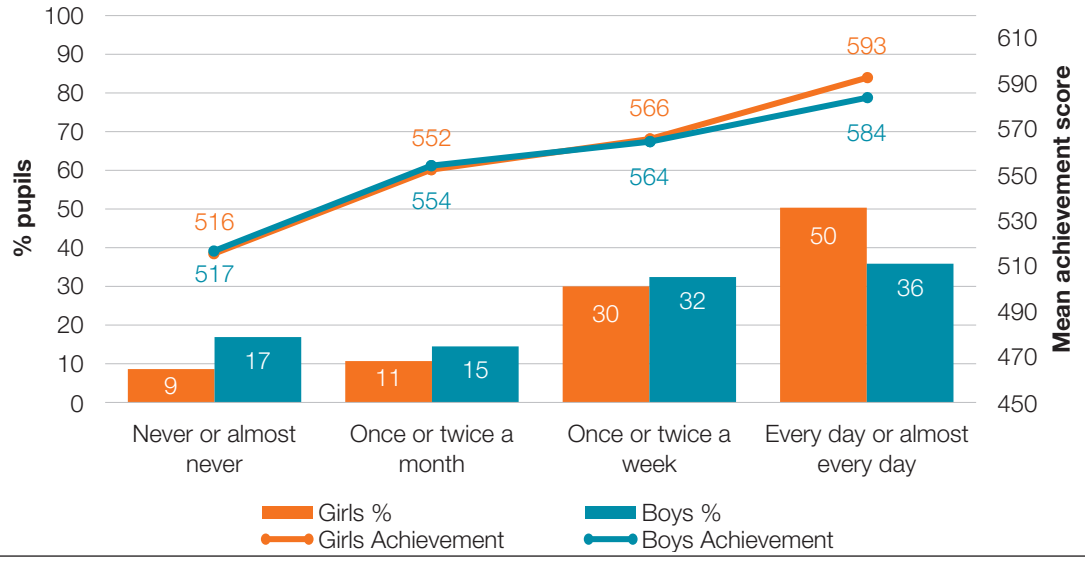
Figure 3.13: Percentages and mean achievement of girls and boys in Ireland, by time spent reading outside school on a typical day.



Source: Appendix Table A3.21a.

Girls also read for fun more often than boys did, in Ireland and internationally. Girls in Ireland were more likely than girls internationally (50% vs 44%) to read for fun on a daily or almost daily basis. However, boys in Ireland were about as likely as boys internationally to do this (36% in both cases). Nearly twice as many boys (17%) as girls (9%) in Ireland *never or almost never* read for fun, compared to 18% of boys and 11% of girls internationally. The relationship to reading achievement was similar for both gender groups: daily or near-daily reading for fun was associated with significantly higher mean scores than any of the less frequent options, for boys as well as girls (Figure 3.14; see also Appendix Tables A3.22a and A3.22b).

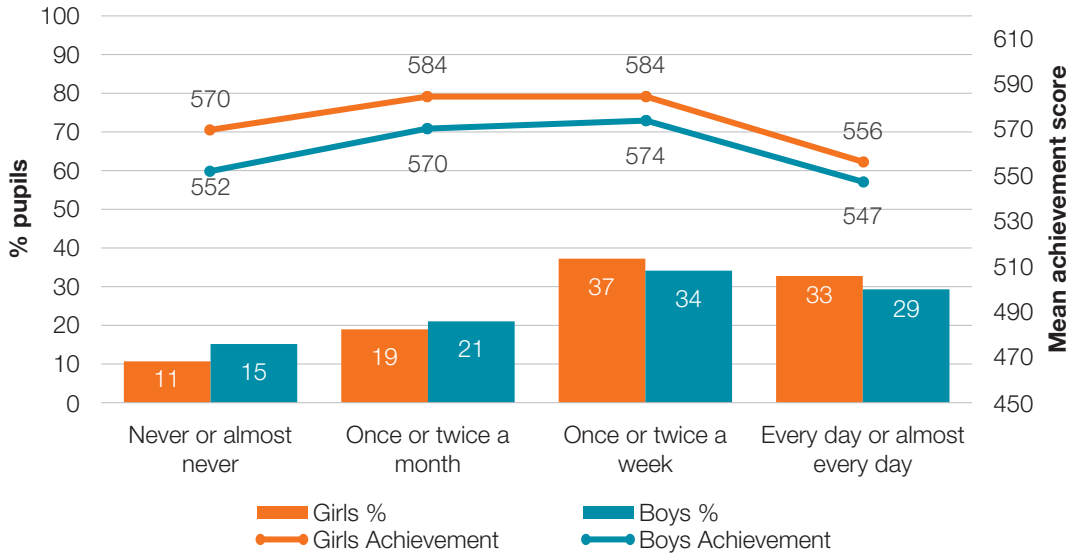
Figure 3.14: Percentages and mean achievement of girls and boys in Ireland, by frequency of reading for fun



Source: Appendix Table A3.22a.

Reading to find things out was marginally more common among girls than boys in Ireland. Although more girls than boys reported doing this on a roughly daily basis (33% vs 29%) and on a roughly weekly basis (37% vs 34%), these differences are not significant. However, 15% of boys *never or almost never* read to find things out, in comparison to 11% of girls and this difference is statistically significant. Overall, however, the gender gap on this variable was small compared to the gender gap seen in relation to frequency of reading for fun. The association with achievement was similar across the gender groups: both boys and girls who read to find things out on a roughly daily basis achieved significantly *lower* scores than their same-gender peers who read for this purpose on a roughly weekly or monthly basis (Figure 3.15; see also Appendix Tables A3.23a and A23b).

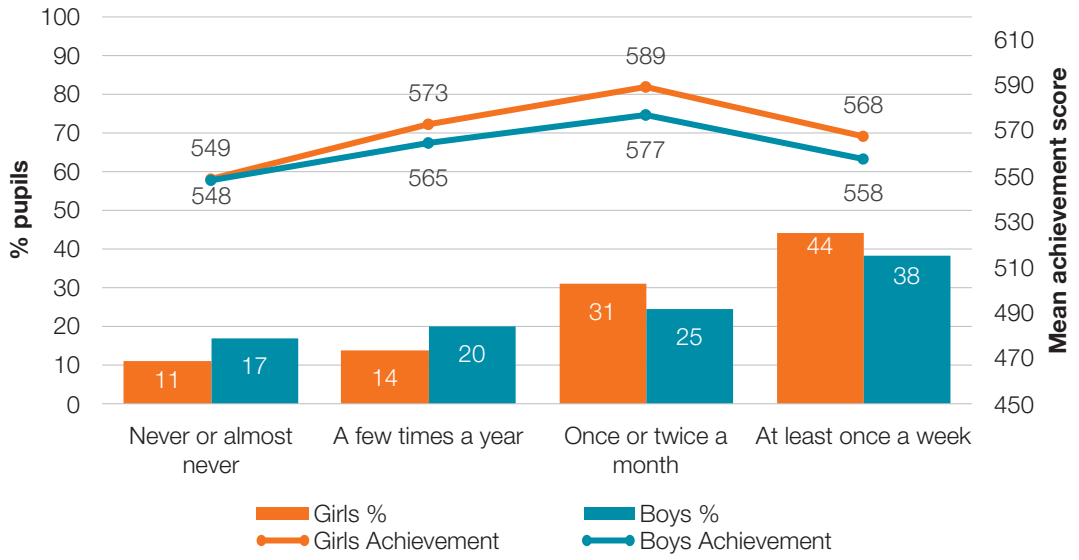
Figure 3.15: Percentages and mean achievement of girls and boys in Ireland, by frequency of reading to find out things they wanted to learn



Source: Appendix Table A3.23a.

Boys in Ireland, and internationally, reported using libraries less often than girls did. In Ireland, significantly more boys (17%) than girls (11%) *never or almost never* borrowed books from a library. Conversely, while three-quarters of girls in Ireland (75%) borrowed books on a monthly or more frequent basis, this was true for a lower proportion (63%) of boys. For both girls and boys in Ireland, moderately regular (roughly monthly) library use was associated with significantly higher reading achievement (589 for girls; 577 for boys) than more frequent, weekly library use (568 for girls; 558 for boys) (Figure 3.16; see also Appendix Tables A3.24a and A3.24b).

Figure 3.16: Percentages and mean achievement of girls and boys in Ireland, by frequency of borrowing books from a school or local library

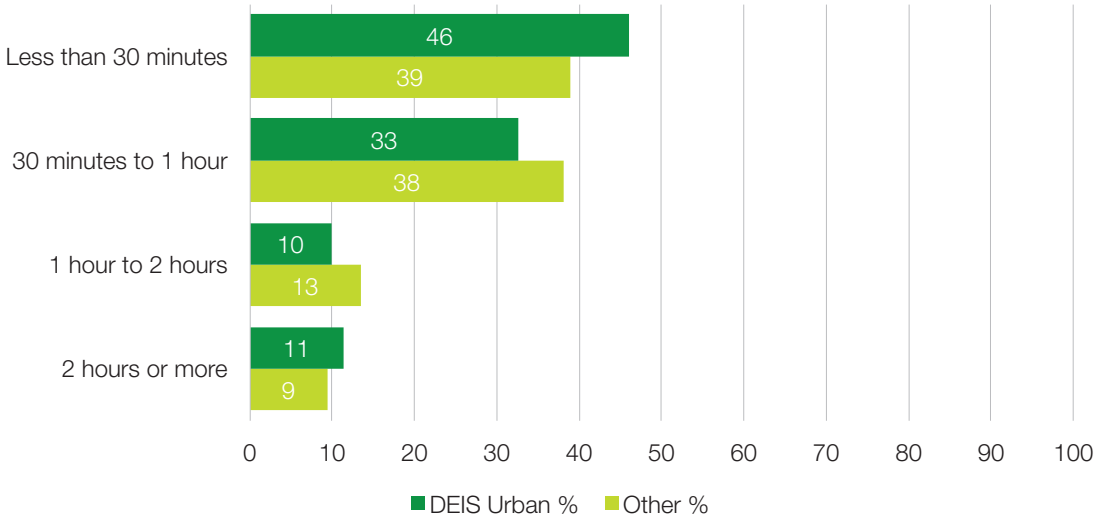


Source: Appendix Table A3.24a.

Reading activity by school DEIS status

Overall, pupils in urban DEIS schools reported spending somewhat less time reading outside school than their peers in other (non-DEIS and DEIS Rural) schools. On a typical school day, 46% of pupils in urban DEIS schools spent less than half an hour reading outside school, significantly more than in other schools (39%). However, the percentages of pupils that spent the most time (two hours or more per day) reading outside school were similar in urban DEIS schools (11%) and other schools (9%). (Figure 3.17; see also Appendix Table A3.25a.)

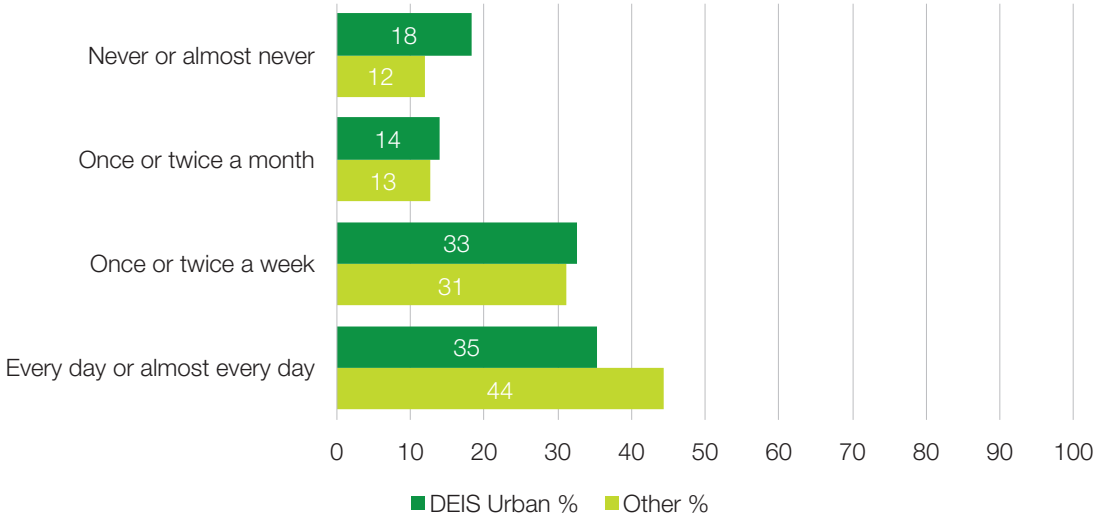
Figure 3.17: Percentages of pupils in Ireland in urban DEIS schools and other schools, by time spent reading outside school on a typical school day



Source: Appendix Table A3.25a.

Reading for fun outside school was less common among pupils in urban DEIS schools than among those in other schools. Just over one-third (35%) of pupils in urban DEIS schools read for fun on a daily or near-daily basis, which is significantly fewer than in other schools (44%). (Figure 3.18; see also Appendix Table A3.25b). In particular, 27% of boys in urban DEIS schools reported that they *never or almost never* read for fun, although, due to the larger standard errors associated with subgroups within subgroups, this should be interpreted with caution (see Appendix Table A3.26.)

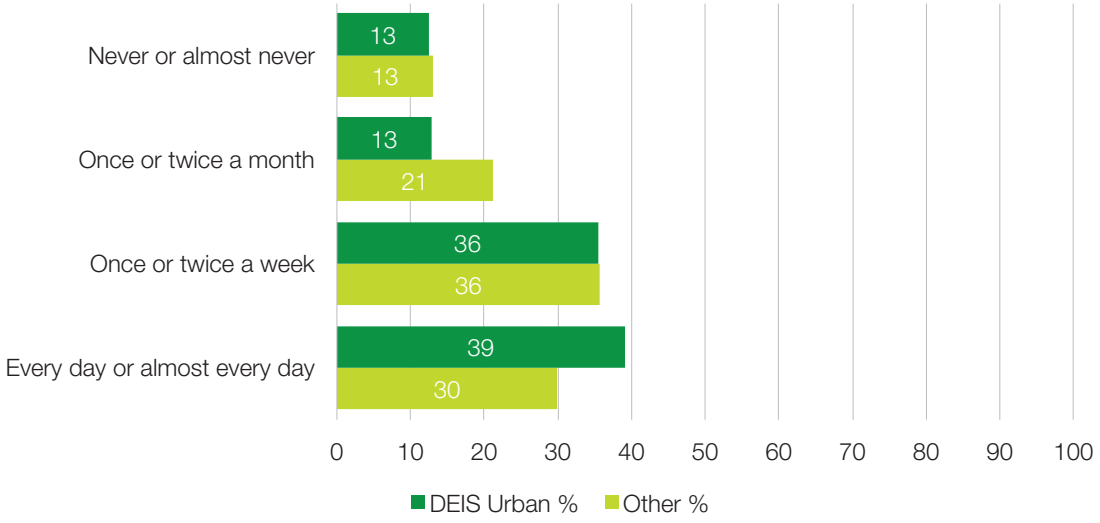
Figure 3.18: Percentages of pupils in Ireland in urban DEIS schools and other schools, by frequency of reading for fun outside school



Source: Appendix Table 3.25b.

In contrast, reading outside school to find out things that pupils wanted to learn was a little more common among pupils in urban DEIS schools than those in other schools. In urban DEIS schools, 39% of pupils read to find things out on a roughly daily basis, significantly more than in other schools (30%). (See Appendix Table A3.25c.)

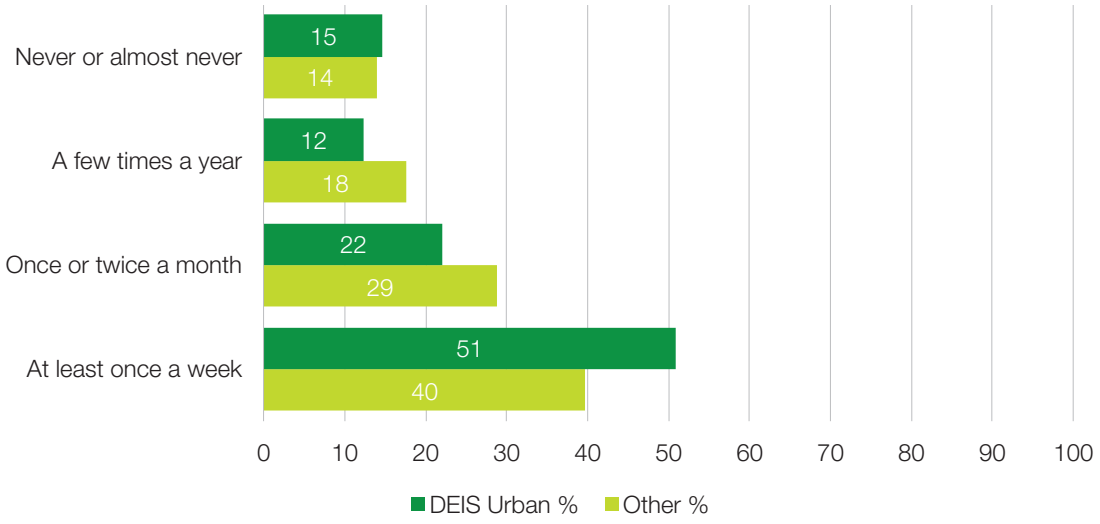
Figure 3.19: Percentages of pupils in Ireland in urban DEIS schools and other schools, by frequency of reading to find things out outside school



Source: Appendix Table A3.25c.

Although very frequent (at least weekly) use of libraries appeared to be slightly more common among pupils in urban DEIS schools (51%) than in other schools (40%), this difference was not statistically significant. Almost identical proportions of pupils in both urban DEIS schools (15%) and other schools (14%) *never or almost never* borrowed books from a library. (See Appendix Table A3.25d.)

Figure 3.20: Percentages of pupils in Ireland in urban DEIS schools and other schools, by frequency of borrowing books from a library



Source: Appendix Table A3.25d.

Reading attitudes, confidence, and activities: Patterns of association

As described above, reading achievement among pupils in Ireland in PIRLS 2016 was positively associated with liking reading, being confident as a reader, spending more time reading outside school, and reading for fun on a regular basis. However, it was also found that while confidence in reading and liking reading each had a linear (steadily increasing) relationship with reading achievement, moderately frequent engagement in some reading activities (as opposed to very low or high frequency) was associated with the highest reading scores. Clearly, the inter-relationships between attitudes, confidence, and reading activities are complex. This section explores some associations between reading attitudes, reading confidence, and the reading activities that had clear positive associations with achievement, in order to provide some further insights into these inter-relationships.

Reading attitudes and reading confidence

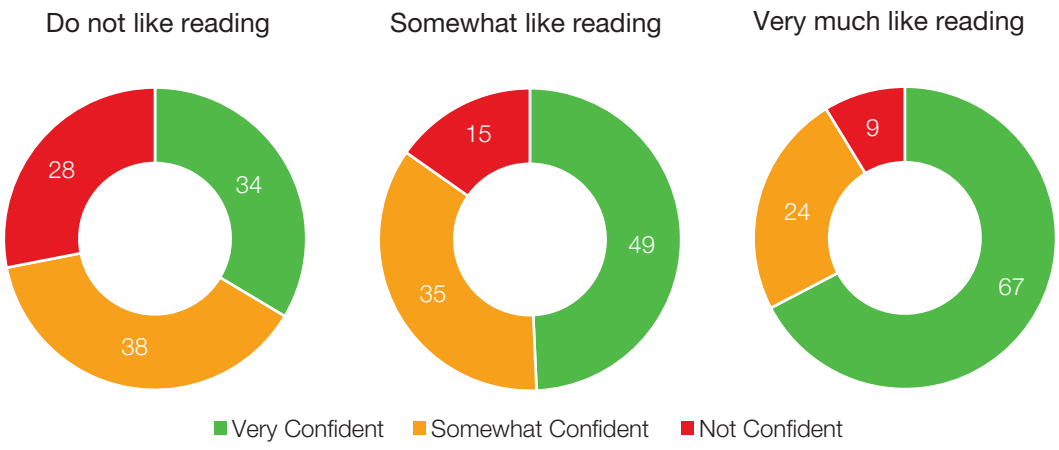
For pupils in Ireland, there was a moderate positive correlation (r=.30) between liking reading (*Students Like Reading* scale) and being confident in reading (*Students Confident in Reading* scale). A similar correlation was observed on average across all PIRLS countries (r=.29), and in most comparison countries.[22] (See Appendix Table A3.1a for correlations in Ireland and on average internationally; see Appendix Table A3.27a for correlations in all comparison countries.)

22 Somewhat stronger correlations were observed in Hong Kong (r=.46) and Singapore (r=.38).

In Ireland, the correlation between liking reading and level of reading confidence was very similar for boys (r=.29) and girls (r=.30). The same was true in most of the comparison countries, while on average across all PIRLS countries the correlation was marginally stronger for girls (r=.30) than for boys (r=.27). (See Appendix Table A3.1b for details of correlations by gender in Ireland and on average internationally; see Appendix Table A3.27b for correlations by gender in all comparison countries.)

Joint analyses of the indices of the *Students Like Reading* and *Students Confident in Reading* scales show that, in Ireland, around two-thirds (67%) of the pupils who *very much* liked reading were also *very confident* readers, compared to one-third (34%) of the pupils who *did not* like reading. While roughly one in ten pupils who *very much* liked reading (9%) were *not* confident as readers, this increased to nearly three in ten (28%) among pupils who *did not* like reading (Figure 3.21; see also Appendix Table A3.28).

Figure 3.21: Percentages of pupils in Ireland within each 'liking reading' category (PIRLS *Students Like Reading* scale), by their level of reading confidence (PIRLS *Students Confident in Reading* scale)



Source: Appendix Table A3.28.

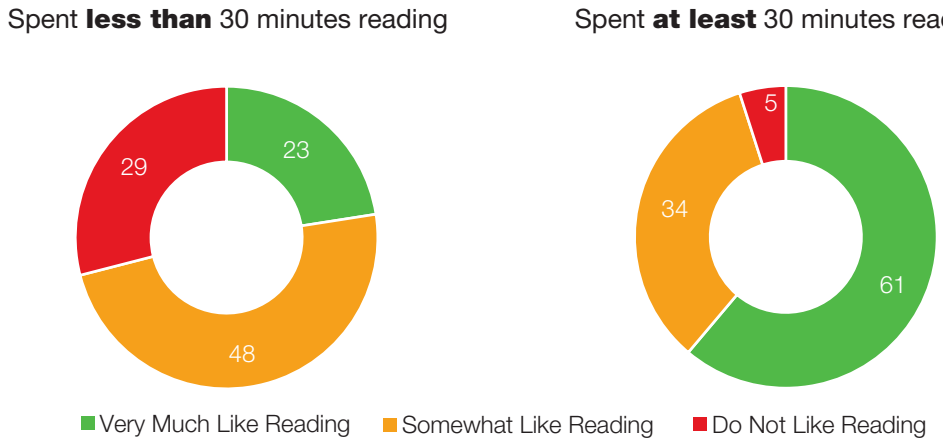
Reading attitudes and reading activities

Among pupils in Ireland who spent at least half an hour per day reading outside school, very few (5%) *did not* like reading. In contrast, pupils who read outside school for less than half an hour per day[23] were almost six times as likely (29%) to dislike reading. Figure 3.22 shows the percentages of pupils within these two categories of daily time spent on reading, by the extent to which they liked reading.[24] (See also Appendix Table A3.29.)

23 As pupils were not presented with the specific response option of spending no time reading outside school on a typical day, it is not possible to separate pupils who did not read outside school at all from those who read for brief periods (< 30 minutes).

24 Because frequency of reading for fun contributed to the *Students Like Reading* scale, these variables are not analysed together.

Figure 3.22: Percentages of pupils in Ireland within each of two categories of typical daily time spent reading outside school, by the extent to which they liked reading (PIRLS *Students Like Reading* scale)

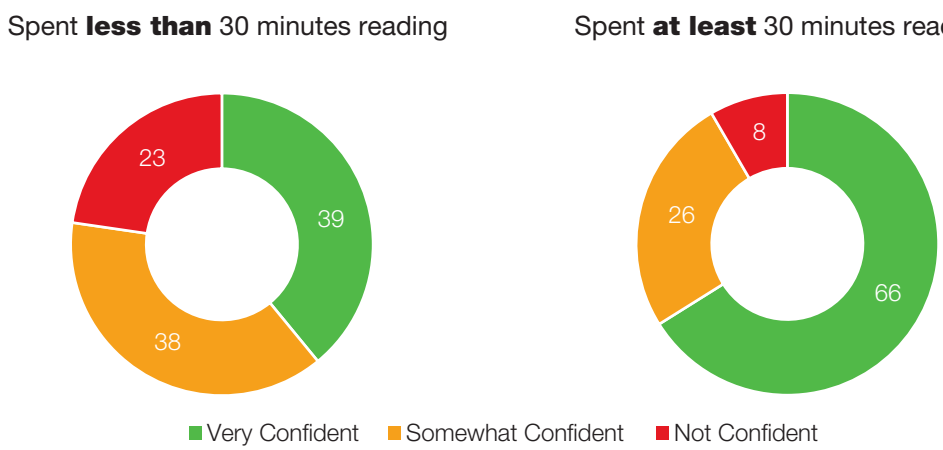


Source: Appendix Table A3.29.

Reading confidence and reading activities

Two-thirds (66%) of pupils in Ireland who spent at least half an hour per day reading outside school were *very confident* in reading, while 8% were *not confident*. In contrast, just 39% of pupils who typically spent less than half an hour reading outside school were *very confident* readers, while nearly one-quarter (23%) were *not confident*. Figure 3.23 shows the percentages of pupils in these two categories of daily time spent on reading, by their level of confidence as readers. (See also Appendix Table A3.30.)

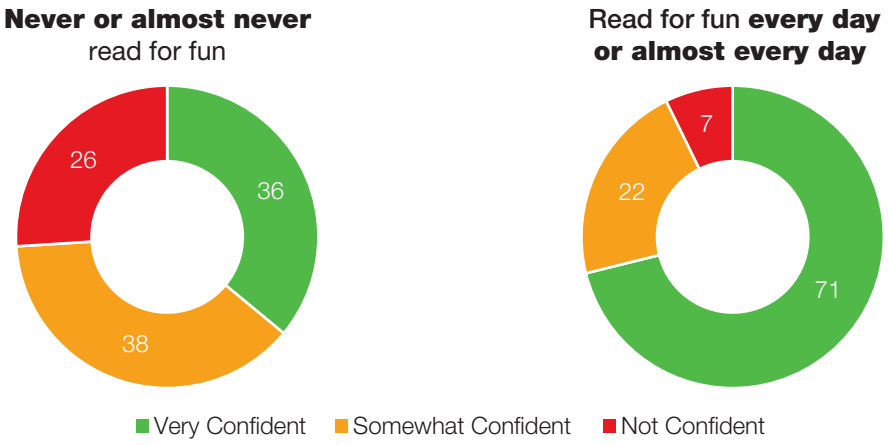
Figure 3.23: Percentages of pupils in Ireland within each of two categories of typical daily time spent reading outside school, by their level of reading confidence (PIRLS *Students Confident in Reading* scale)



Source: Appendix Table A3.30.

The frequency with which pupils read for fun was similarly positively associated with reading confidence. Among pupils who *never or almost never* read for fun, more than a quarter (26%) were *not confident* readers. Conversely, among pupils who read for fun every day or almost every day, only 7% were not confident, while 71% were *very confident* readers (Figure 3.24). (See also Appendix Table A3.31.)

Figure 3.24: Percentages of pupils within categories that read for fun least frequently and most frequently, by their level of reading confidence (PIRLS *Students Confident in Reading* scale)



Source: Appendix Table A3.31.

Chapter summary

Most Fourth class pupils in Ireland were broadly positive about reading, with just 15% indicating that they *did not* like reading. This was in line with the international average, and somewhat more positive than pupils' attitudes in many comparison countries.

Pupils in Ireland also tended to be confident as readers, with 14% indicating that they were *not confident*. Relative to pupils in most comparison countries, and on average internationally, this represented a high degree of reading confidence.

Outside school, pupils in Ireland spent more time per day reading, and read for fun more often, than pupils internationally and in many comparison countries. However, they were similar to peers in several comparison countries, and below the international average, in the frequency with which they read to find out things they wanted to learn. Pupils in Ireland borrowed books from libraries a little more often than pupils on average internationally; however, the comparison countries varied widely in their patterns of library use, with several reporting much more frequent use than was seen in Ireland.

Between 2011 and 2016, no major changes were observed in the reading attitudes or reading confidence of pupils in Ireland. Daily time spent reading outside school, and frequency of reading for fun, also remained stable. The frequency with which pupils in Ireland read to find things out, and borrowed books from libraries, declined a little between the two study cycles.

In PIRLS 2016, boys in Ireland liked reading less than girls did, and spent less time on reading activities outside school (mirroring the average international pattern, but with slightly wider gender gaps). However, the reading confidence of boys and girls in Ireland was very similar.

Pupils in urban DEIS schools liked reading to a similar extent as pupils in other schools in Ireland, and were similarly confident as readers. Some small differences emerged in terms of reading activities. Compared to their peers in other schools, pupils in urban DEIS schools spent less time per day reading outside school, and read for fun less often; however, they were slightly more likely to read to find things out.

In Ireland and internationally, bivariate analyses indicated that reading achievement in PIRLS was positively associated with liking reading, being confident as a reader, spending more time reading outside school, and reading for fun more often. However, optimal reading achievement was associated with *moderately* (not highly) frequent instances of reading to find things out and borrowing books from libraries. These associations held more or less consistently across gender subgroups in Ireland.

Liking reading was positively associated with being confident as a reader, in Ireland and internationally, and for boys as well as girls. Pupils who spent more time reading outside school tended to be more positive about reading and more confident as readers than those who spent less time doing so. Similarly, pupils who read for fun more often tended to have higher reading confidence than those who did not.

Chapter 4:
Reading and the home environment

This chapter describes parents' and guardians' attitudes to reading, their reading habits, the learning environment of pupils in their early childhood, and the ongoing resources and support for literacy learning available to pupils at home. Throughout the remainder of the chapter (and this report), the term 'parents' is used to refer to both parents and guardians of pupils.

In Ireland, a very high proportion of parents completed the Home Questionnaire in PIRLS 2016. While 96% of eligible pupils completed the PIRLS test, the parents of 93% of these pupils (i.e., 89% of all eligible pupils) also completed a Home Questionnaire. Mean PIRLS achievement of the pupils whose parents did not complete a Home Questionnaire was substantially lower than that of their peers. It should be borne in mind that parents with literacy difficulties and/or less familiarity with English may have been less likely than others to complete the questionnaire, and as such may be underrepresented in the data.

Overall, those who completed the PIRLS Home Questionnaire in Ireland were predominantly female caregivers (87%), while male caregivers were involved in completing 20% of questionnaires.[25] Internationally, parents in England and the United States did not take part in these questionnaires and are not included in the analysis or any comparisons. Australia, New Zealand, and Northern Ireland did take part; however, parents of less than 50% of sampled pupils completed the questionnaire in these countries, and therefore comparisons should be made with caution.

Each topic is examined from several perspectives. Initially, each topic is examined in an international context with reference to selected comparison countries and to the average across all PIRLS countries. Associations between home variables and overall reading achievement in PIRLS are presented where appropriate. Ireland's data for 2016 are compared to those of the previous PIRLS cycle (2011), to see, where possible, what trends can be established. Finally, where relevant, data for Ireland are analysed by pupil gender and examined by school DEIS status.

An e-Appendix to accompany this chapter can be downloaded from www.erc.ie/pirls/reports.

Parental attitudes to reading

To establish parents' attitudes to reading, parents of pupils who took part in PIRLS 2016 were asked eight attitudinal questions and one behavioural question. Parents were asked how much they agreed or disagreed (*a little* or *a lot*) with the following eight statements: *I only read if I have to* (reverse coded); *I like talking about what I read with other people; I like to spend my spare time reading; I read only if I need information* (reverse coded); *Reading is an important activity in my home; I would like to have more time for reading; I enjoy reading; Reading is one of my favourite hobbies.* Parents were also asked how often they read for enjoyment when they were at home (from *never or almost never* to *every day or almost every day*). The combination of both sets of questions was used to create the *Parents Like Reading* scale (Mullis et al., 2017).

25 These percentages sum to more than 100% as, in some households, two adults of different genders jointly completed the questionnaire.

Parental attitudes to reading in Ireland and internationally

Parents in Ireland were more positive in their attitudes towards reading than on average internationally. Many parents in Ireland (47%) reported that they liked reading *very much*, 40% indicated that they *somewhat* liked reading, while 13% *did not like* reading. Relative to selected comparison countries, parents in Ireland were among the most likely to report liking reading *very much* (Table 4.1; see also Appendix Table A4.1).

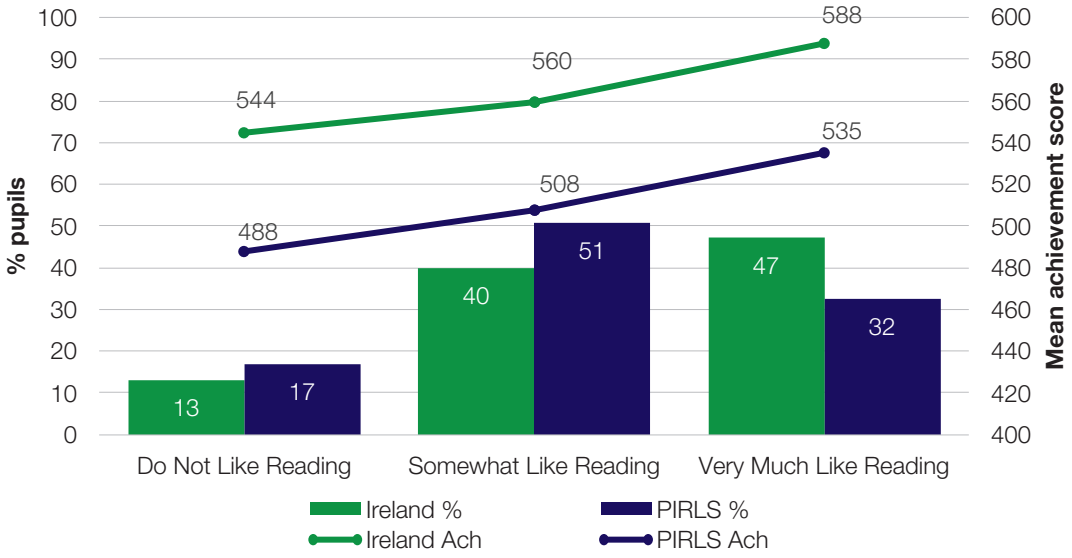
Table 4.1: Percentages and mean achievement of pupils in Ireland, comparison countries, and on average across PIRLS countries, by the extent to which parents liked reading (PIRLS *Parents Like Reading* scale)

	Do Not Like Reading		Somewhat Like Reading		Very Much Like Reading	
	%	Ach	%	Ach	%	Ach
Finland	15.9	542	42.9	563	41.2	585
Hong Kong	22.5	562	60.7	569	16.9	580
Ireland	13.0	544	39.8	560	47.2	588
Norway	14.6	532	43.8	556	41.6	574
Poland	14.4	541	50.1	561	35.5	581
Singapore	18.2	561	57.2	572	24.6	603
Australia+	12.4	535	39.8	551	47.8	582
New Zealand+	13.4	511	39.8	524	46.8	567
Northern Ireland+	14.8	568	36.0	577	49.2	602
Overall PIRLS	16.9	488	50.7	508	32.4	535

Source: Appendix Table A4.1.
+ Data available for less than 50% of pupils.
The United States and England did not administer this item.

As parents' scores on the *Parents Like Reading* scale increased, so did the reading performance of pupils, with a moderate positive relationship (r=0.26) between the two variables in Ireland. The mean reading achievement of pupils whose parents reported liking reading *very much* was, at 588, significantly higher than that of pupils whose parents *somewhat* liked reading (560) or *did not* like reading (544) (Figure 4.1). Many comparison countries, including Finland, Norway, and Poland, reported a similar pattern. (See Appendix Tables A4.2 and A4.3.)

Figure 4.1: Percentages and mean achievement of pupils, in Ireland and on average across PIRLS countries, by the extent to which their parents liked reading (PIRLS *Parents Like Reading* scale)



Source: Appendix Table A4.1.

Trends in parental attitudes to reading

Across the 2011 and 2016 administrations of PIRLS, parents were presented with most of the same attitudinal statements to create the *Parents Like Reading* scale, with one additional statement added in 2016 (*Reading is one of my favourite hobbies*).

Parents in Ireland remained positive in their attitudes towards reading across cycles (Table 4.2; see also Appendix Table 4.4). Large majorities agreed (*a lot* or *a little*) they they enjoyed reading (95% in 2011 and 94% in 2016) and that reading was an important activity in their homes (90% in both years). Over three-quarters of parents agreed that they liked to spend their free time reading (77% in 2011 and 75% in 2016). A higher proportion of parents agreed that they would like to have more time for reading, with the proportion increasing marginally between 2011 (89%) and 2016 (91%). In both PIRLS cycles, four in five parents (80%) agreed that they liked talking about what they read with other people.

Two negative statements about reading were presented to parents. In both cycles, slightly more than one-fifth of parents in Ireland agreed that they only read if they had to (22% in 2011 and 23% in 2016). In 2011, 24% of parents agreed that they only read if they needed information, which increased slightly (but statistically significantly) to 28% in 2016.

Table 4.2: Percentages of pupils in Ireland, in 2016 and 2011, whose parents agreed with statements about liking reading

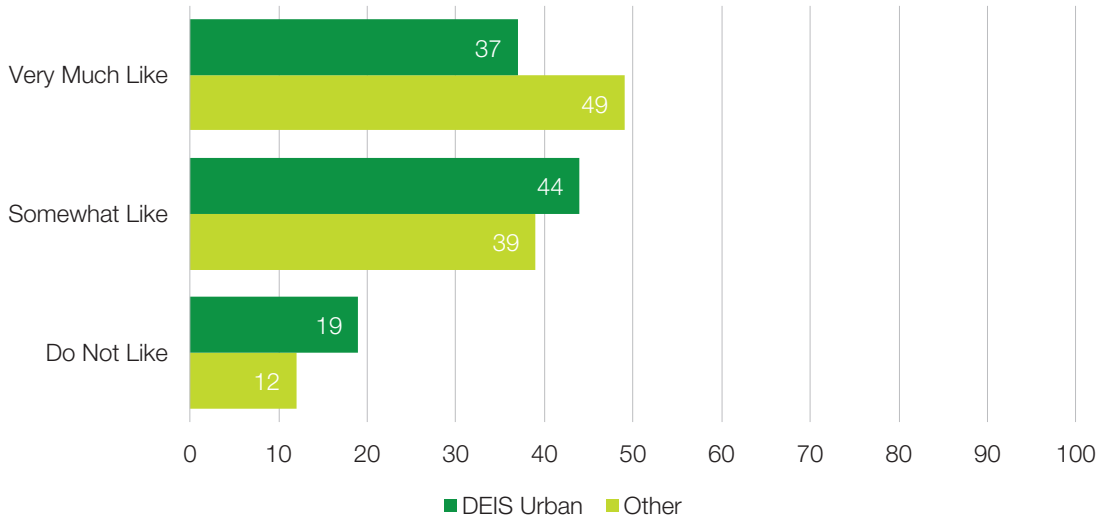
		% Agree
I only read if I have to	2011	22.0
	2016	22.7
I like talking about what I read with other people	2011	80.3
	2016	80.1
I like to spend my spare time reading	2011	77.2
	2016	75.2
I read only if I need information	2011	24.2
	2016	27.9
Reading is an important activity in my home	2011	89.8
	2016	90.2
I would like to have more time for reading	2011	88.8
	2016	90.8
I enjoy reading	2011	95.2
	2016	93.8

Source: Appendix Table A4.4.

Parental attitudes to reading and school DEIS status

The *Parents Like Reading* scale was also examined by the school DEIS status of pupils. The parents of pupils who attended urban DEIS schools were significantly less likely to like reading *very much* (37%) than those whose children attended other schools (49%). The percentages of parents that *somewhat* liked reading did not differ significantly between urban DEIS schools (44%) and other schools (39%). However, 19% of parents of pupils in urban DEIS schools indicated that they *did not* like reading, which is significantly higher than the corresponding percentage for other schools (12%) (Figure 4.2; see also Appendix Table A4.5).

Figure 4.2: Percentages of pupils in Ireland in urban DEIS schools and other schools, by the extent to which their parents liked reading in 2016 (PIRLS *Parents Like Reading scale*)



Source: Appendix Table A4.5.

Parents' and pupils' attitudes to reading

The relationship between the *Parents Like Reading* and *Students Like Reading* scales was examined. A weak to moderate positive relationship was found in Ireland between how parents reported their attitudes towards reading and how pupils reported their attitudes towards reading (r=0.18). On average internationally, there was a similarly positive, yet weak, association between parents' and pupils' attitudes to reading (r=0.13). Among PIRLS comparison countries, Singapore (r=0.21) reported the strongest association between these variables, although, like Ireland, this was still only a weak to moderate relationship. (See Appendix Table A4.6).

Parental reading habits

Parents were asked two questions about their reading habits. First, parents were asked to indicate how much time they spent reading for themselves at home (*Less than one hour a week* to *More than 10 hours a week*), which could be for leisure or work, and either in print or digital form. Second, they were asked how frequently they read at home for enjoyment (*Every day or almost every day* to *Never or almost never*) (which, as mentioned above, also contributed to the *Parents Like Reading* scale).

Time spent by parents reading for themselves at home

Almost half of parents in Ireland (48%) spent six or more hours per week reading for work and/or leisure, with a further 42% spending one to five hours per week reading. Eleven percent of parents in Ireland spent less than one hour per week reading. Among the comparison countries, the Scandinavian countries had lower proportions of parents in this bracket (5% in Finland, 7% in Norway), while the East Asian countries had higher proportions (18% in Hong Kong, 16% in Singapore) (Table 4.3; see also Appendix Table A4.7).

Table 4.3: Percentages and mean achievement of pupils, in Ireland, comparison countries, and on average across PIRLS countries, by the time their parents spent reading at home in a typical week

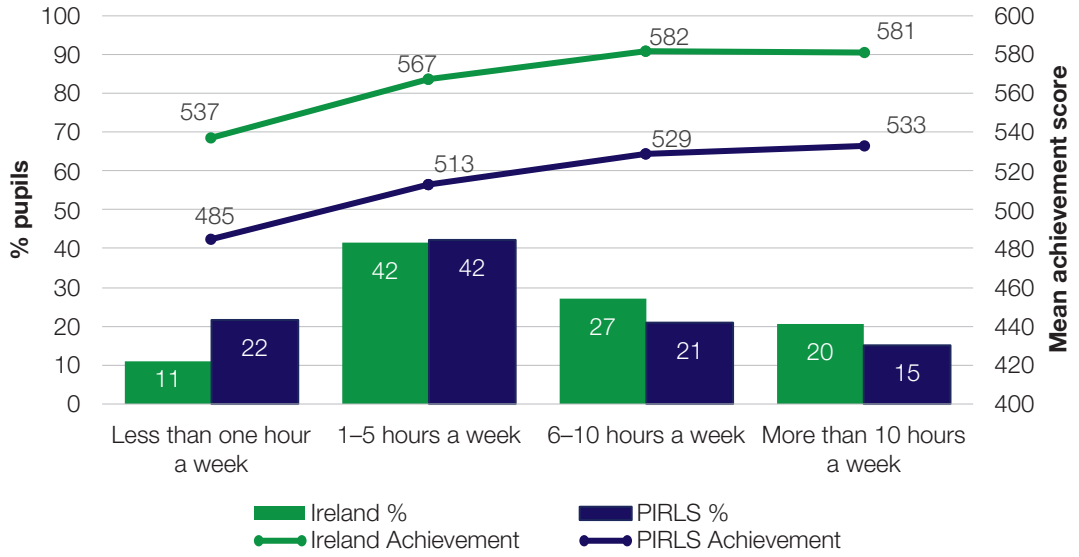
	Less than one hour a week		*1–5 hours a week*		*6–10 hours a week*		*More than 10 hours a week*	
	%	Ach	%	Ach	%	Ach	%	Ach
Finland	4.9	529	41.2	561	33.8	575	20.1	584
Hong Kong	17.7	561	46.2	568	19.7	578	16.4	571
Ireland	10.8	537	41.7	567	27.1	582	20.4	581
Norway	6.7	546	43.9	550	39.3	568	10.1	571
Poland	12.0	537	44.2	560	25.3	576	18.4	579
Singapore	16.1	538	44.6	576	21.3	590	18.0	602
Australia+	9.5	521	40.9	556	27.8	578	21.7	579
New Zealand+	10.1	506	39.8	537	27.2	551	22.9	560
Northern Ireland+	11.8	560	42.6	587	24.5	597	21.1	595
Overall PIRLS	21.7	485	42.3	513	21.0	529	15.1	533

Source: Appendix Table A4.7.
+ Data available for less than 50% of pupils.
The United States and England did not administer this item.

In Ireland, pupils' mean reading achievement remained similar when parents read for at least six hours during the week, regardless of whether they read for 6 – 10 hours or for more than 10 hours. However,

significantly lower mean reading scores were found among pupils whose parents read for less than six hours per week. Children of parents who stated that they read for less than an hour a week scored almost 45 points lower, on average, than children of those who read for six hours or more per week (Figure 4.3). A similar difference in reading achievement was observed on average internationally, and in some comparison countries, with Singapore reporting a 64-point difference and Finland reporting a 56-point difference in the reading achievement of pupils whose parents read for more than 10 hours a week and those whose parents who read for less than one hour a week (Appendix Tables A4.7 and A4.8).

Figure 4.3: Percentages and mean achievement of pupils, in Ireland and internationally, by the time their parents spent reading in a typical week



Source: Appendix Table A4.7.

Frequency of reading for enjoyment

Parents were asked how often they read specifically *for enjoyment*, which could again include paper and/or digital texts. A large majority of parents in Ireland reported that they read for enjoyment at least once a week (*once or twice a week* or *every day/almost every day* totalling 80%), with almost half of parents reporting that they read for enjoyment daily or almost daily (48%).

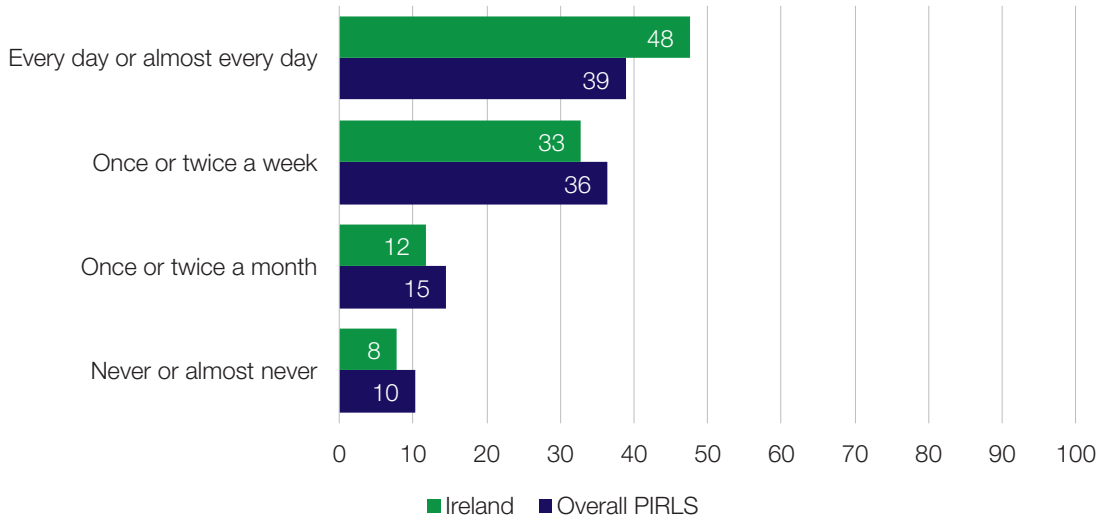
The frequency of parents' reading for enjoyment across comparison countries showed a similar pattern to that in Ireland, with reading for enjoyment *every day or almost every day* proving the most popular response option among parents in most of these countries. Finland (60%) and Norway (54%) are of note as over half of all parents in these countries reported reading for enjoyment *every day or almost every day*. On the other hand, less than one-third of parents in Hong Kong (29%) read for pleasure on a daily or near-daily basis (Table 4.4 and Figure 4.4; see also Appendix Table A4.9).

Table 4.4: Percentages of pupils, in Ireland, comparison countries, and on average across PIRLS countries, by the frequency with which their parents read for enjoyment

	Never or almost never	*Once or twice a month*	*Once or twice a week*	*Every day or almost every day*
Finland	5.2	11.6	23.0	60.2
Hong Kong	14.2	17.9	39.0	28.9
Ireland	7.8	11.8	32.8	47.6
Norway	6.2	9.7	29.7	54.4
Poland	6.3	17.1	39.2	37.4
Singapore	6.6	13.1	37.3	43.0
Australia+	9.4	11.7	32.2	46.7
New Zealand+	7.7	12.5	28.5	51.3
Northern Ireland+	9.5	13.5	31.1	45.9
Overall PIRLS	10.2	14.5	36.4	38.9

Source: Appendix Table A4.9.
+ Data available for less than 50% of pupils.
The United States and England did not administer this item.

Figure 4.4: Percentages of pupils, in Ireland and internationally, by the frequency with which their parents read for enjoyment



Source: Appendix Table A4.9.

Early literacy and preparation for school

To capture information about pupils' early literacy environments, parents were asked to report how often they had taken part in specific activities with their children prior to the start of the first grade of primary education. They were also asked how well their children had been able to complete specific literacy tasks before the start of first grade. In Ireland, these questions asked about activities prior to the start of First class in primary school.

In this section, early literacy activities and early literacy tasks are discussed in turn. There are **some caveats** associated with international comparisons on both indices. Briefly, there was some variation between countries in how the question was adapted in 2016. Parents in Ireland were asked about what their child could do before *starting First class* (deemed equivalent to the first grade of primary education). However, in some other countries, including some with similarly-structured education systems, parents were asked about what their child could do before *starting school*. This should be borne in mind when Ireland is compared with other selected countries. In additional, trend analysis is not included for either early literacy activities or early literacy tasks. This is because the questions were adapted differently in Ireland in 2011 and 2016, rendering trend comparisons problematic. (These caveats are discussed further in Chapter 6.)

Early literacy activities

The frequency with which parents had completed nine activities with their children was used to create the *Early Literacy Activities* scale. Parents were asked how frequently (*often, sometimes,* or *never or almost never*) they, or someone in their household, had carried out the following activities with pupils in early childhood: *Read books; Tell stories; Sing songs; Play with alphabet toys (e.g. blocks with letters of the alphabet); Talk about what they had done; Talk about what they had read; Play word games; Read aloud signs or labels; Write letters or words*.

The following subsections examine the *Early Literacy Activities* scale in 2016 in an international comparative context; by gender; and by school DEIS status.

Early literacy activities in Ireland and internationally

In Ireland, parents frequently engaged in literacy activities with pupils in their early lives. Parents in Ireland were more likely to have completed literacy activities *often* (55%) than on average internationally (39%), and less likely to report completing these activities *sometimes* (45%) or *never* (a very low 1%) than on average internationally (58% and 3%, respectively). In comparison to selected countries, the percentage of parents in Ireland who reported that they engaged *often* in early literacy activities fell into the middle range, with Northern Ireland indicating the highest engagement (65%) (although less than 50% of parents in Northern Ireland responded to the question). Table 4.5 shows the percentages of pupils in Ireland, and on average across all PIRLS countries, by their parents' responses on the *Early Literacy Activities* scale, as well as the mean achievement of pupils (see also Appendix Table A4.10). (As noted above, international comparisons on this index should be interpreted cautiously.)

Parents in Ireland reported engaging in some of the selected activities more than others. The most popular activities for parents in Ireland to engage in *often* were talking about things that they had done (76%) and reading books (70%). However, only 40% of parents in Ireland would *often* talk about what they had read (see Appendix Table A4.11).

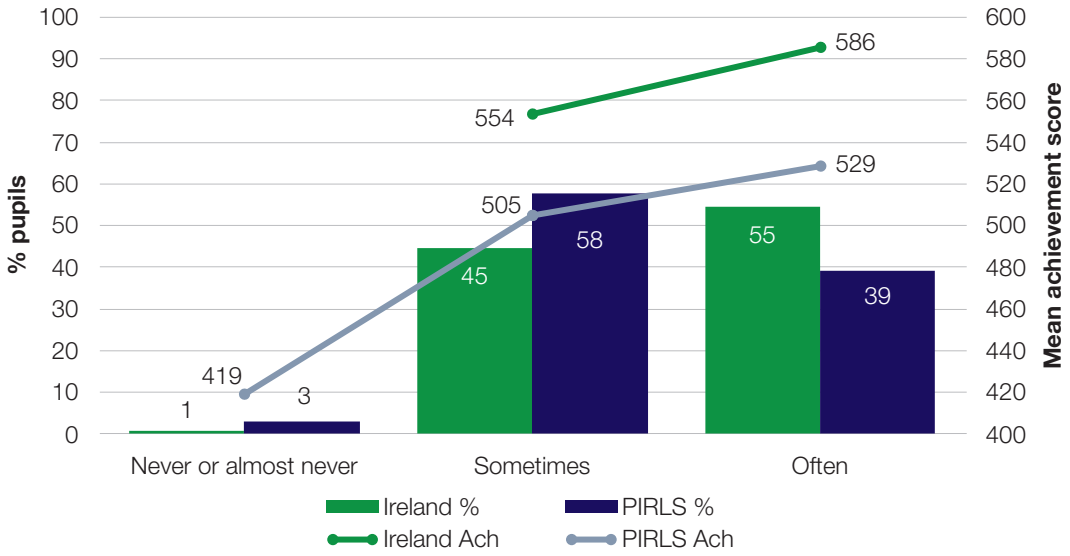
Table 4.5: Percentages and mean achievement of pupils, in Ireland, comparison countries, and on average across all PIRLS countries, by the frequency with which their parents engaged in early literacy activities with them (PIRLS *Early Literacy Activities* scale)

	Never or almost never		*Sometimes*		*Often*	
	%	**Ach**	**%**	**Ach**	**%**	**Ach**
Finland	0.9	~	67.0	562	32.1	583
Hong Kong	5.7	568	81.4	568	12.9	580
Ireland	0.9	~	44.6	554	54.6	586
Norway	0.9	~	61.2	552	37.9	573
Poland	0.4	~	48.7	558	50.9	572
Singapore	3.9	542	66.4	569	29.7	601
Australia+	0.8	~	42.5	553	56.7	572
New Zealand+	0.7	~	42.2	521	57.0	560
Northern Ireland+	0.5	~	34.4	571	65.1	597
Overall PIRLS	3.0	419	57.9	505	39.1	529

Source: Appendix Table A4.10.
+ Data available for less than 50% of pupils.
~ indicates that mean achievement is not reported as there is insufficient data.
The United States and England did not administer these items.

A moderate positive relationship between the *Early Literacy Activities* scale and pupil achievement was observed in Ireland (r=0.27), which was stronger than that on average internationally (r=0.19). In Ireland, the mean reading achievement score of pupils whose parents reported *often* engaging in early literacy activities with them was significantly higher, by 32 points, than that of pupils whose parents had *sometimes* engaged in these activities. Findings from some comparison counties resemble those of Ireland, with Singapore indicating similar and significant differences in achievement between these groups (by 32 points) (Figure 4.5; see also Appendix Tables A4.12-A4.13).

Figure 4.5: Percentages and mean achievement of pupils, in Ireland and internationally, by the frequency with which their parents engaged in early literacy activities with them (PIRLS *Early Literacy Activities* scale)



Source: Appendix Table A4.10.
Note. Mean achievement for *Never or almost never* in Ireland is not reported due to insufficient data.

Early literacy activities and gender

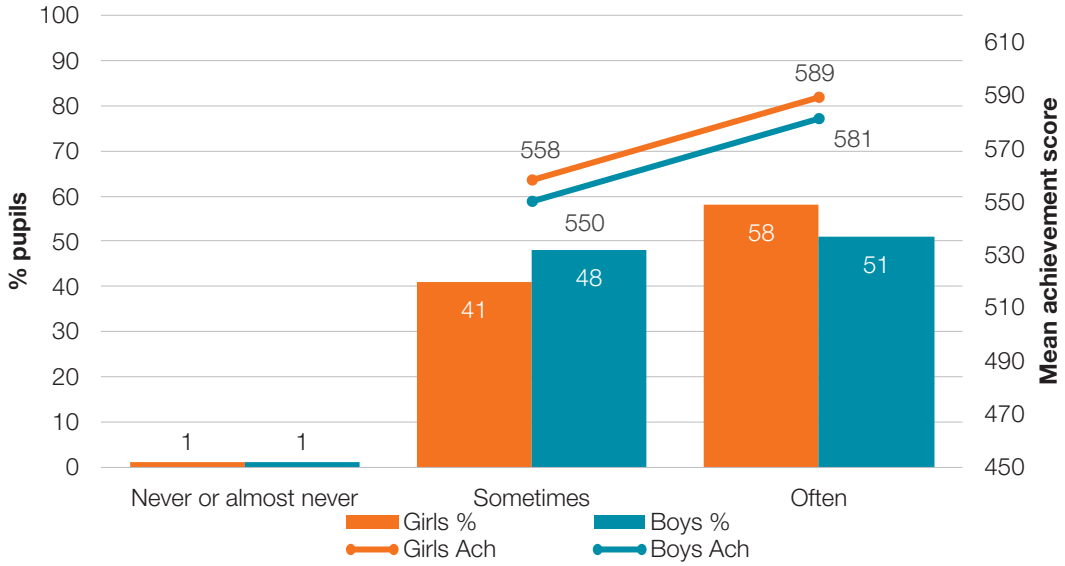
Overall in Ireland, as we have seen, just over half of parents reported that they had engaged in literacy activities with children *often*. When examined by pupil gender, a significant difference was found, with 58% of girls' parents engaging in early literacy activities with them *often,* compared to 51% of boys' parents doing so. Conversely, more parents of boys (48%) than of girls (41%) reported that they *sometimes* engaged in early literacy activities. For parents who *never or almost never* engaged in literacy activities, there was no significant difference with respect to pupil gender (1% of parents of children in each gender group). In comparison countries, too, and on average internationally, parents reported a higher frequency of early literacy activities with girls than boys. However, Ireland's eight-point gender difference for the proportion of parents engaging in early literacy activities with pupils *often* was among the largest of the comparison countries, with only Norway indicating a larger gender difference of 10% (Table 4.6 and Figure 4.6; see also Appendix Tables A4.14 and A4.15).

Table 4.6: Percentages of girls and boys, in Ireland, comparison countries, and on average across all PIRLS countries, by the frequency with which their parents engaged in early literacy activities with them (PIRLS *Early Literacy Activities* scale)

	Never or almost never		*Sometimes*		*Often*	
	Girl	**Boy**	**Girl**	**Boy**	**Girl**	**Boy**
Finland	0.5	1.3	64.3	69.9	35.3	28.8
Hong Kong	5.3	6.0	81.7	81.2	13.0	12.8
Ireland	0.7	1.1	40.9	48.4	58.5	50.5
Norway	0.5	1.3	56.8	65.8	42.7	32.9
Poland	0.6	0.2	44.7	52.6	54.7	47.2
Singapore	3.9	4.0	63.1	69.6	33.0	26.4
Australia+	0.8	0.8	40.5	44.8	58.8	54.4
New Zealand+	0.3	1.2	41.0	43.4	58.6	55.4
Northern Ireland+	0.5	0.4	31.8	37.2	67.7	62.4
Overall PIRLS	2.7	3.3	55.6	60.2	41.7	36.5

Source: Appendix Table A4.14.
+ Data available for less than 50% of pupils.
The United States and England did not administer these items.

Figure 4.6: Percentages and mean achievement of girls and boys in Ireland, by the frequency with which their parents engaged in early literacy activities with them (PIRLS *Early Literacy Activities* scale)



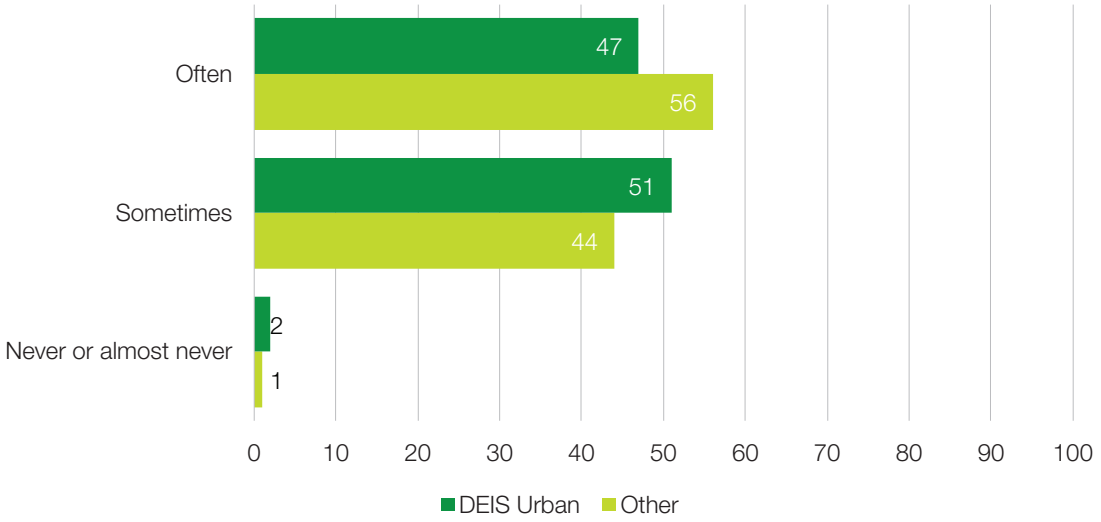
Source: Appendix Table A4.14.
Note. Mean achievement for *Never or almost never* is not reported as there is insufficient data.

Each of the nine activities used to create the *Early Literacy Activities* scale was examined individually by gender. Parents in Ireland reported spending more time on every activity with girls than with boys, although some gaps were wider than others. In particular, parents were significantly more likely to sing songs *often* with girls (65%) than with boys (54%). There were also significant gender gaps associated with writing letters of the alphabet (the parents of 57% of girls and 50% of boys did this *often*), and with talking together about things they had read (the parents of 44% of girls and 37% of boys reported doing this *often*) (see Appendix Table A4.16 and A4.17).

Early literacy activities and school DEIS status

The *Early Literacy Activities* index was examined by school DEIS status. Significantly fewer parents of pupils in urban DEIS schools (47%) reported *often* carrying out early literacy activities with their children than parents of pupils in other schools (56%) (Figure 4.7). Parents of pupils who attended urban DEIS schools were more likely to engage in early literacy activities *sometimes*, with half (51%) of parents reporting this, in comparison to 44% of parents of pupils attending other schools. The proportion of parents that reported *never* engaging in early literacy activities did not differ significantly between urban DEIS schools (2%) and other schools (1%). Differences by DEIS status were also observed for some component activities of this index, with the largest differences between the proportions that *often* carried out activities such as *reading books*, *telling stories* and *talking about things they had done*. On the other hand, two activities that were completed less often overall in Ireland had minimal differences by DEIS status: *talking about things they had read* (42% in urban DEIS schools and 40% in other schools had done this *often*) and *playing word games* (39% in urban DEIS schools and 38% in other schools had done this *often*). When examining all the component activities, differences by DEIS status in the percentage of pupils that had *never or almost never* carried out each activity with parents were generally very small. (See Appendix Tables A4.18 and A4.19).

Figure 4.7: Percentages of pupils in Ireland in urban DEIS schools and other schools, by the extent to which parents engaged in early literacy activities with them (PIRLS *Early Literacy Activities* scale)



Source: Appendix Table A4.18.

Early literacy tasks

Parents were asked to outline how well pupils could complete specific literacy tasks before starting first grade (in Ireland, First class), to gauge how prepared pupils were with some basic skills for reading when embarking on formal primary education. The *Early Literacy Tasks* scale was created from parental reports of how well pupils completed six tasks at that stage of their lives: *Recognise most of the letters of the alphabet, Read some words, Read some sentences, Read a story, Write letters of the alphabet,* and *Write some words.*

The following subsections examine the *Early Literacy Tasks* scale in 2016 in an international comparative context; by gender; and by school DEIS status.

Early literacy tasks in Ireland and internationally

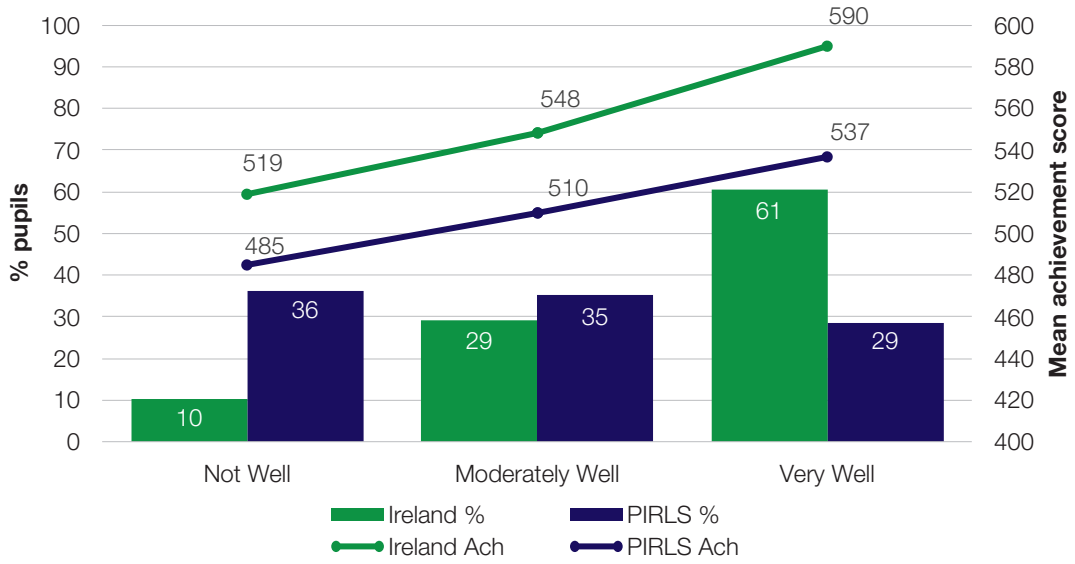
As noted earlier, there are some caveats associated with international comparisons on this index, and results described in this subsection should be interpreted very cautiously. Specifically, the fact that parents in Ireland were asked about pupils' literacy skills *at the start of First class* (after two years of early schooling) while pupils in many other countries were asked about skills *at the start of school* renders comparisons problematic.

Parents in Ireland were significantly and substantially more likely (61%) than parents on average internationally (29%) to estimate that their child had been able to carry out the named literacy tasks *very well*. Just under one-third of parents in Ireland (29%) reported that their child could complete the tasks *moderately well* (compared to 35% internationally), with 10% indicating their child could not carry out these tasks well (compared to 36% internationally) (Figure 4.8; see also Appendix Table A4.20). Of the tasks that parents evaluated (i.e. the component tasks of this index), the majority of parents in Ireland reported that pupils were *very well* able to carry out tasks such as recognising most of the letters in the alphabet (79%), and writing letters of the alphabet (65%). Parents in Ireland were least confident of pupils' abilities to read sentences or a story before starting First class, with 16% and 23% respectively reporting that pupils could only complete these tasks *not very well* or *not at all* (see Appendix Table A4.21).

The mean reading achievement of pupils in Ireland whose parents viewed them as having been able to complete early literacy tasks *very well* (590) was significantly higher than the mean achievement of pupils

whose parents viewed them as having completed tasks *moderately well* (548) or *not well* (519). In Ireland, there was a positive correlation, in the moderate range, between the *Early Literacy Tasks* scale and pupil achievement (r=0.39), which was a stronger association than on average internationally (r=0.26). Although Ireland reported a higher level of early pupil competency than other countries, some comparison countries were found to have a similar or stronger relationship between this variable and achievement as Ireland – for example, Finland (r=.40) and Singapore (r=.46) (see Appendix Table A4.22).

Figure 4.8: Percentages and mean achievement of pupils, in Ireland and on average across PIRLS countries, by the extent to which their parents considered that the pupils could complete early literacy tasks (PIRLS *Early Literacy Tasks* scale)



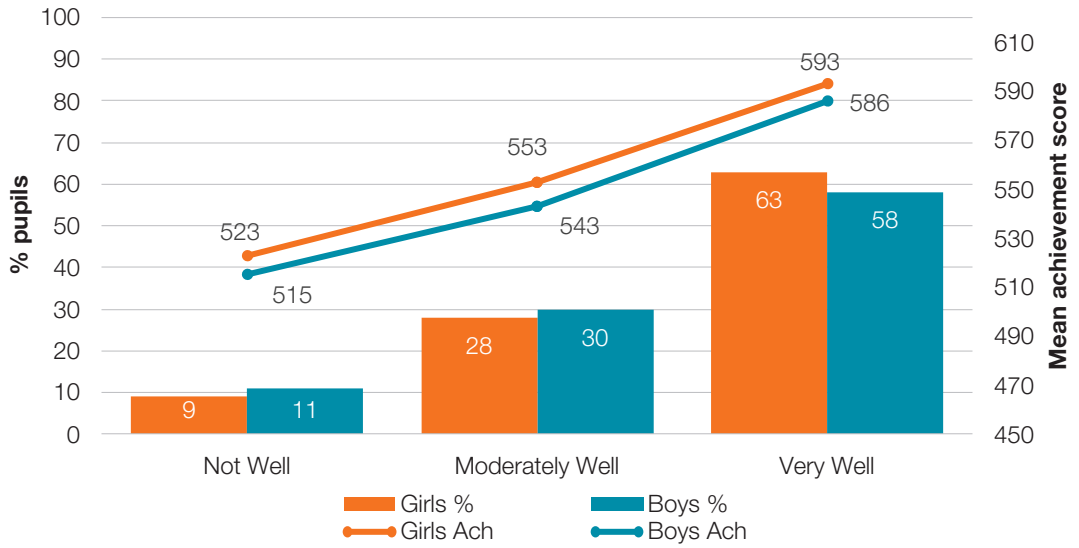
Source: Appendix Table A4.20.
Note. As described in the text, caveats apply to international comparisons on this index.

Gender and early literacy tasks

The *Early Literacy Tasks* index was further examined by gender. Parents in Ireland were more likely to report that girls completed tasks *very well* (63%) than that boys did (58%) (Figure 4.9; see also Appendix Table A4.23). However, this difference is small (5%) and is similar to the international average gap of 6%.

Each of the six tasks contributing to the *Early Literacy Tasks* scale was examined individually by gender. Overall, there was only a small difference in how parents rated pupils' competencies by gender, with parents rating tasks such as recognising letters in the alphabet (boys=77%, girls=80%) and reading words (boys=61%, girls=63%) as tasks that both boys and girls in Ireland could do *very well*. However, differences by pupil gender were marginally larger for the more complex task of reading a story, and larger again for tasks involving the production of written language (e.g., writing letters of the alphabet; writing words) (see Appendix Table A4.24).

Figure 4.9. Percentages and mean achievement of girls and boys in Ireland, by the extent to which their parents considered that the pupils could complete early literacy tasks (PIRLS *Early Literacy Tasks* scale)

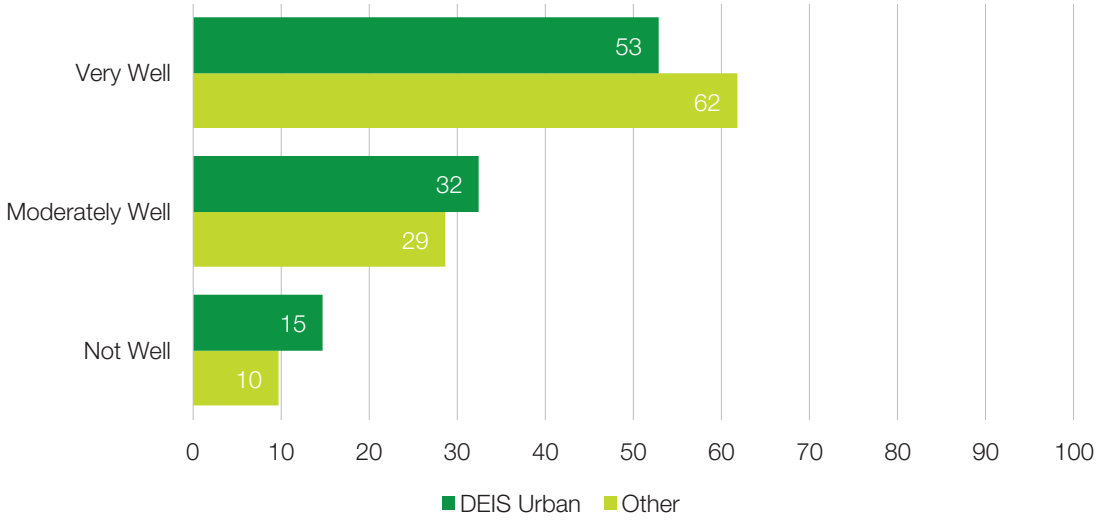


Source: Appendix Table A4.23.

Early literacy tasks and school DEIS status

The *Early Literacy Tasks* index was examined by the school DEIS status of pupils. Over half of parents whose children attended urban DEIS schools estimated that their children could perform the early literacy tasks *very well* (53%), which was significantly lower than the corresponding 62% of parents of pupils in other schools. Parents of pupils in urban DEIS schools were more likely to estimate that their children could complete the tasks *moderately well* or *not well* than parents whose children attended other schools (Figure 4.10; see also Appendix Table A4.25). Differences by school DEIS status were also evident in responses to the individual tasks of this index. The largest differences between the groups were found for recognising most letters of the alphabet, reading some words, and writing letters of the alphabet, with fewer pupils in urban DEIS than other schools considered able to do each of these *very well*. In general, the proportions of pupils whose parents reported that they could not complete the tasks *at all* were very small in both urban DEIS and other schools, with the largest relating to pupils who could not read a story *at all* (6% in urban DEIS schools, 5% in other schools). (See Appendix Table A4.26.)

Figure 4.10: Percentages of pupils in Ireland, in urban DEIS schools and other schools, by the extent to which parents considered that pupils could complete early literacy tasks (PIRLS *Early Literacy Tasks* scale)



Source: Appendix Table A4.25.

Languages spoken in the home

Parents in Ireland were asked to identify which language(s) their child had spoken prior to starting primary school. Parents were given a choice of languages that were selected from the most frequently spoken languages in Ireland among the PIRLS pupil age group (Fourth class), based on a combination of data from the most recent census and from NAMER 2014, along with an option of 'other'. The languages listed for parents differed across each country that administered PIRLS, with the first language(s) listed on each country's questionnaire being the language(s) of the PIRLS assessment in that country.

A large majority of pupils in Ireland (93%) spoke English before they started primary school, with some pupils speaking Irish (4%), Polish (3%), Romanian (1%), French (1%), and 8% speaking another language[26] (see Appendix Table A4.27a). Eighty-five percent of pupils in Ireland spoke *only* English prior to starting school. The remaining English-speaking pupils spoke a combination of English and Irish (and possibly another language(s)) (3%), or English and another language(s) without Irish (5%). Six percent of pupils in Ireland spoke a language or languages that did not include English or Irish in their early life before school. Less than half a percent of pupils spoke Irish, but not English, prior to starting school. (See Appendix Table 4.27b.)

Table 4.7 groups parents' reports of language(s) spoken by pupils in their early lives into three broad categories, with reference to English as this is the language of the PIRLS test in Ireland.[27] Pupils who spoke English, plus at least one other language, before starting school achieved a higher mean reading achievement score than those who spoke only English, but this difference was not significant. Pupils who did not speak English before starting school had significantly lower mean reading achievement than those who spoke English only.

26 For these original language options, parents could choose more than one language. Therefore, these percentages add up to more than 100%.

27 That is, in Ireland, PIRLS has to date been an assessment of English reading literacy only.

Table 4.7. Percentages and mean achievement of pupils in Ireland, by language(s) spoken at home in early childhood

	Language spoken before starting school in Ireland	
	Percent	**Mean achievement**
English only	84.7	573
English plus at least 1 other language	8.9	577
Not English	6.5	541

Source: Appendix Table A4.27c.

Parents were also asked about the frequency with which their children used English at home at the time of the PIRLS assessment (i.e., when they were in Fourth class). Of the pupils whose parents reported that they spoke English plus at least one other language before starting school, 84% *always* or *almost always* spoke English at home by the time they were in Fourth class. Of the pupils who did not speak English at home before starting school, 51% spoke English at home *sometimes* by Fourth class, with 44% speaking English *almost always* or *always*. (See Appendix Table 4.27d.)

Home environment and ongoing support for learning

The *Home Resources for Learning* scale was created from data provided by both pupils (during the questionnaire section of their PIRLS assessments) and parents (who completed the Learning to Read Survey). Pupils and parents were asked questions to assess what kinds of resources for learning they had in their homes.

The *Home Resources for Learning* scale was created from a combination of responses. Pupils reported of the number of books in the home (from *0 - 10* to *More than 200*) and other study supports (e.g. whether they had *Internet connection* and/or *their own room*). Parents reported the number of *children's* books in the home (from *0 - 10* to *More than 100*), as well as their own educational level[28] and occupation.[29] Having *Many* resources for learning typically meant having more than 100 books and more than 25 children's books in the home, as well as both Internet connection and pupils' own room, with at least one parent having a degree and/or a professional occupation (Mullis et al., 2017). Having *Few* resources for learning typically meant having fewer than 25 books, and 10 or fewer children's books, in the home, with neither Internet connection or pupils' own room, and parents reporting not going beyond secondary education and not having an occupation in the professional/small business owner/clerical categories. Other combinations were typically characterised as representing *Some* resources for learning.

Home resources for learning, in Ireland and internationally

In Ireland, just under one-third of parents and pupils reported *many* resources for learning (33%), in comparison to 20% on average internationally, while two-thirds of pupils' households reported having *some* resources (66%), in comparison to 73% internationally. Only a small number (1%) reported having *few* resources in Ireland, in comparison to 7% internationally (Table 4.8 and Figure 4.11; see also Appendix Table A4.28).

28 Educational level ranged from *did not go to school* to *finished university or higher*.

29 Occupational categories included: *Professional (corporate manager or senior official, professional, technician or associate professional); small business owner; clerical (clerk or service or sales worker); semi-professional (skilled agricultural or fishery worker, craft or trade worker, plant or machine operator); general labourer; never worked outside of the home for pay*.

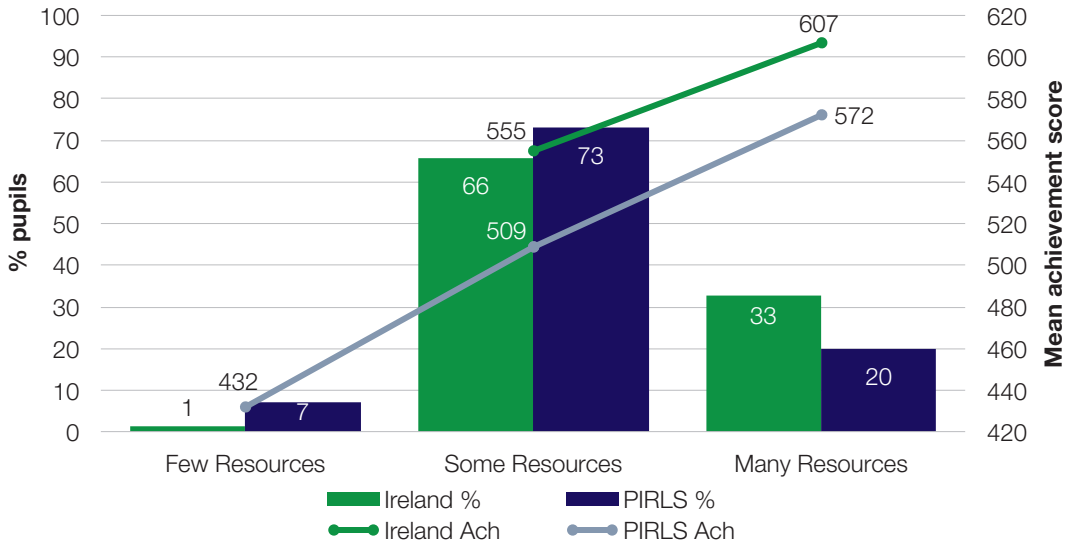
Overall, a significant positive relationship was found in Ireland and internationally between home resources for learning and pupils' reading achievement in PIRLS. In Ireland, a moderate to strong correlation was observed between the *Home Resources for Learning* scale and pupil achievement (r=0.44), which was a stronger association than on average internationally (r=0.38). Ireland was among the comparison countries that had the strongest relationship between this scale and reading achievement, with only Singapore reporting a higher coefficient (r=0.51), also within the moderate to strong range (Appendix Table A4.29).

Table 4.8: Percentages and mean achievement of pupils, in Ireland, comparison countries, and on average across PIRLS countries, by the level of home resources reported by pupils and parents (PIRLS *Home Resources for Learning* scale)

	Few Resources		*Some Resources*		*Many Resources*	
	%	**Ach**	**%**	**Ach**	**%**	**Ach**
Finland	0.3	~	63.0	555	36.8	594
Hong Kong	5.0	553	74.0	568	21.1	579
Ireland	1.4	~	65.7	555	32.9	607
Norway	0.6	~	54.2	544	45.1	581
Poland	3.1	509	75.7	556	21.3	605
Singapore	1.6	~	69.2	562	29.2	624
Australia+	0.5	~	53.5	541	46.0	592
New Zealand+	1.7	~	59.8	522	38.5	581
Northern Ireland+	0.6	~	57.2	569	42.2	615
Overall PIRLS	7.2	432	73.0	509	19.9	572

Source: Appendix Table A4.28.
~ indicates that mean achievement is not reported as there is insufficient data.
+ Data available for less than 50% of pupils.
The United States & England did not administer these items.

Figure 4.11: Percentages and mean achievement of pupils, in Ireland, and on average internationally, by the level of home resources reported by pupils and parents (PIRLS *Home Resources for Learning* scale)



Source: Appendix Table A4.28.
Note. Mean achievement for *Few Resources* in Ireland is not reported as there is insufficient data.

Trends in home resources for learning

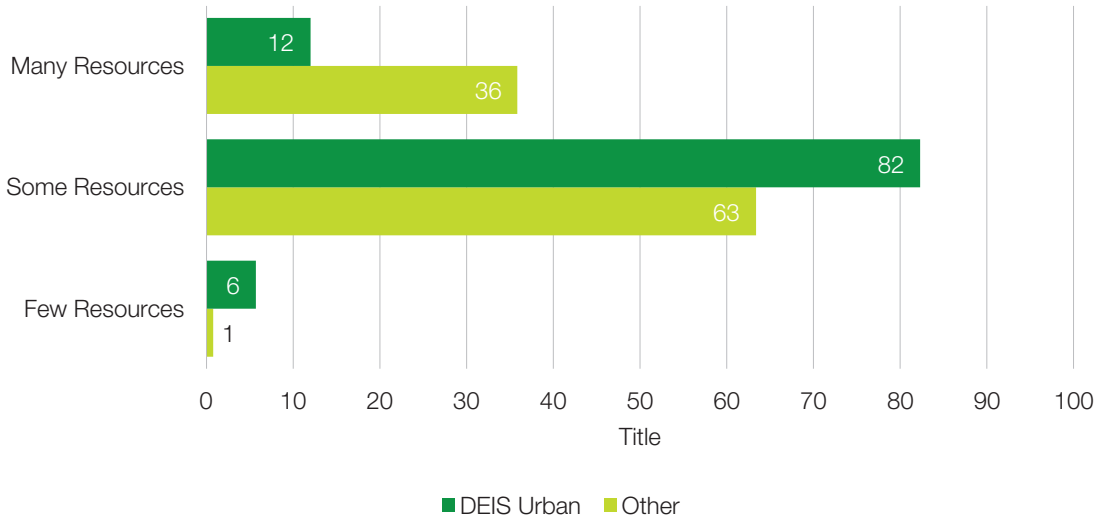
Parents and pupils in 2011 and 2016 were asked the same questions about home resources for learning. As the cut points for the index categories were determined differently across cycles, comparisons are drawn on the basis of component items rather than the overall scale.

The number of books and children's books in households in Ireland increased marginally, but not significantly.[30] In 2016, 70% of pupils reported that there were 26 or more books in their home, compared to 67% in 2011. Four in five parents (80%) in 2016 reported having 26 or more *children's* books in their homes, a 2% increase on 2011. The frequency of having an Internet connection increased from 90% in 2011 to 95% in 2016. The proportion of pupils that had their own bedroom remained stable, with 78% of pupils in both cycles reporting this. The highest education level of parents increased across cycles. There was a 4% increase (from 87% to 91%) in those who had completed post-primary education (Leaving Certificate or equivalent) or higher, and a 10% increase (from 33% to 43%) in those who had completed a university degree or higher (see Appendix Table A4.30).

Home resources for learning and school DEIS status

The *Home Resources for Learning* scale was examined by the school DEIS status of pupils. Significantly more pupils who attended other schools had *many* resources (36%) than pupils who attended urban DEIS schools (12%). The majority of pupils at both urban DEIS schools and other schools had *some* resources for learning, although significantly more pupils at DEIS schools (82%) reported this than pupils at other schools (63%). Significantly more households with pupils who attended an urban DEIS school (6%) reported having *few* resources than households of pupils who attended other schools (1%) (Figure 4.12; see also Appendix Table A4.31).

Figure 4.12: Percentages of pupils in Ireland in urban DEIS schools and other schools, by the level of home resources reported by pupils and parents (PIRLS *Home Resources for Learning* scale)



Source: Appendix Table 4.31.

30 It is worth noting that there is a disparity between pupil and parent accounts of the amount of books in the home. In 2016, 70% of children reported having 26 or more books (of any kind) in the home, while 80% of parents reported having 26 or more *children's* books in the home. This may be due to report bias, in that some children may not recall all books present, or may be unaware of the true amount of books in the home. It is also possible that some parents are overstating the amount of children's books in the home.

Components of the *Home Resources for Learning* scale were also examined by school DEIS status. The majority reported having an Internet connection at home, with 96% of pupils who attended other schools and 94% of pupils who attended an urban DEIS school reporting this. Although not a component of the scale, pupils were also asked about having a computer or tablet, and the vast majority of pupils at both urban DEIS schools (96%) and other schools (97%) reported having a device in the home, although this was not necessarily for their primary use. Fewer pupils who attended urban DEIS schools reported having a considerable number of books (26 or more) in the home (46%) than pupils who attended other schools (73%). Parental reports of children's books in the home mirrored this trend, with 57% of parents of urban DEIS pupils reporting that they had 26 or more of children's books in the home, in comparison to 83% of parents of other pupils. (See Appendix Table 4.32.)

Parental support for homework

Parents in Ireland were asked to indicate how often their child did homework per week. Almost all pupils in Ireland completed homework regularly, with 55% completing homework three to four times a week, and just under half completing homework every day (44%). This is higher than on average across PIRLS countries (Table 4.9; see also Appendix Table A4.33). It is also higher than in most comparison countries.[31]

Table 4.9: Percentages and mean achievement of pupils, in Ireland and internationally, by the frequency with which parents reported that pupils did homework

How often does your child do homework?

	My child does not have homework to do		*Twice or less a week*		*3 or more times a week*	
	%	**Ach**	**%**	**Ach**	**%**	**Ach**
Ireland	0.2	~	0.7	~	99.1	572
Overall PIRLS	2.5	~	16.6	496	81.0	516

~ indicates that mean achievement is not reported as there is insufficient data.

In Ireland, parents whose children had homework frequently asked if their child had completed their homework, with the majority of parents asking if homework was completed *every day* (82%), and almost all asking this at least 3 times a week (98%). Mean reading achievement was highest for pupils whose parents asked *three or four times a week* (584) and was somewhat lower for pupils whose parents who asked *every day* (570). This trend is not in line with the average across all PIRLS countries, where pupils' mean reading achievement remains constant for pupils whose parents asked if their homework had been completed three or more times a week (Table 4.10; see also Appendix Table A4.34).

Table 4.10: Percentages and mean achievement of pupils, in Ireland and internationally, by the frequency with which parents asked about homework completion

How often do you ask if your child has done their homework?

	Twice or less a week		*3 or 4 times a week*		*Every day*	
	%	**Ach**	**%**	**Ach**	**%**	**Ach**
Ireland	1.7	~	16.7	584	81.6	570
Overall PIRLS	8.3	507	10.7	513	81.0	514

Source: Appendix Table A4.34b.
~ indicates that mean achievement is not reported as there is insufficient data.
Note. In this table, data relate to percentages of those pupils who at least sometimes had homework to do (in Ireland, 99.8% of all pupils).

31 Northern Ireland reported a higher frequency, but, as stated previously, this comparison should be made with caution due to Northern Ireland's low response rate on the Home Questionnaire

Although parents in Ireland often asked about whether homework was completed, they less frequently engaged in more practical forms of support. Over half of parents in Ireland whose children had homework reported that they helped their children with their homework[32] (54%) or reviewed their homework to make sure it was correct (57%) *every day*. Although this is considerably lower than the frequency with which they monitored completion, parents in Ireland did help and review more often than on average internationally, where 40% helped with homework and 49% reviewed homework *every day* (Table 4.11).

The mean reading achievement of pupils, both in Ireland and internationally, was somewhat higher for pupils whose parents provided homework support *less* frequently. On average, pupils in Ireland achieved 25 score points higher when parents helped them *twice or less a week* (589) in comparison to *every day* (564). This increase was similar for PIRLS countries on average, where a mean 29-point score difference was found between pupils whose parents helped *twice or less a week* (528) and those who helped *every day* (499). A similar pattern was found in relation to the frequency with which parents reviewed pupils' homework for correctness, with pupils in Ireland achieving 20 points more, on average, when parents reviewed their homework *twice or less a week* (586) in comparison to *every day* (566). Again, a comparable trend was found on average across all PIRLS countries, with pupils whose parents reviewed their homework *twice or less a week* (525) achieving a mean 21 score points more than pupils whose parents reviewed their work *every day* (504). This difference in achievement may be due to a pattern of pupils who are finding homework difficult needing more frequent support at home.

Table 4.11: Percentages and mean achievement of pupils, in Ireland and internationally, by the frequency with which parents helped with, or reviewed, pupils' homework

	Twice or less a week		*3 or 4 times a week*		*Every day*	
	%	**Ach**	**%**	**Ach**	**%**	**Ach**
How often do you help your child with their homework?						
Ireland	21.6	589	24.9	574	53.5	564
Overall PIRLS	38.7	528	20.7	510	40.5	499
How often do you review your child's homework to make sure it is correct?						
Ireland	16.3	586	27.1	573	56.6	566
Overall PIRLS	31.9	525	19.1	512	49.0	504

Source: Appendix Table A4.34b.
Note. In this table, data relate to percentages of those pupils who at least sometimes had homework to do (in Ireland, 99.8% of all pupils).

Parental support for homework and pupil gender

When examined by pupil gender, parents in Ireland did not report a difference in homework support. Parents in Ireland asked if homework was completed, and helped with homework, as often with girls as they did with boys. Parents in Ireland also tended to review boys' homework similarly to that of girls, with 85% of boys having parents who reviewed their homework three or more times a week, in comparison to 83% of girls (see Appendix Table A4.35b).

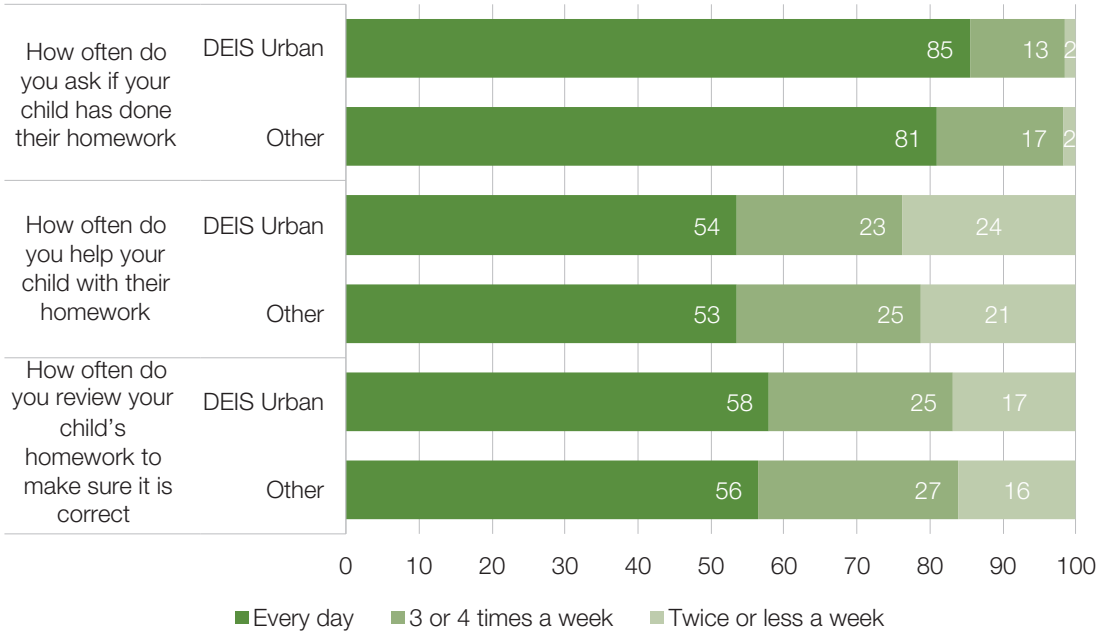
Parental support for homework and school DEIS status

The frequency of support that parents provided for pupils when they received homework was also examined by school DEIS status (Figure 4.13; see also Appendix Table A4.36). The majority of parents in both groups reported that they asked if pupils had completed their homework *every day*, with 85% of parents of pupils in urban DEIS schools and 81% parents from other schools reporting this. A very small minority of parents in both types of schools (less than 2%) indicated that they did this twice or less a week.

32 The Home Questionnaire, however, did not specify what *helping* entailed.

For more intensive forms of homework support, there was also no noteworthy difference by school type in the extent to which parents supported their children with homework. A similar proportion of parents of pupils in urban DEIS schools (54%) and parents of those who attended other schools (53%) reported helping their children with their homework *every day*. Over half of parents (58%) from urban DEIS schools reviewed their child's homework *every day*, in comparison to an almost identical proportion of parents from other schools (56%).

Figure 4.13: Percentages of pupils in Ireland in urban DEIS schools and other schools, by the frequency with which parents asked about, helped with, and reviewed pupils' homework



Source: Appendix Table A4.36a-c.
Note. In this table, data relate to percentages of those pupils who at least sometimes had homework to do (in Ireland, 99.8% of all pupils).

Chapter Summary

The data from PIRLS 2016 paint a broadly positive picture of the reading environments that Fourth class pupils in Ireland experienced at home. Parents in Ireland were largely positive in their own attitudes towards reading, with only 13% indicating that they *did not* like reading. Almost half (48%) reported that they read at home for six hours or more per week, with a high proportion (80%) reading at least once a week for enjoyment.

Parents and Fourth class pupils in Ireland were very likely to have engaged in literacy activities in the home in pupils' early childhoods, with 55% of parents indicating that pupils had completed such activities with them *often*. The most frequent activities that parents in Ireland engaged in *often* were talking about things that they had done, and reading books. Even though many parents talked to their children about what they had done, only 40% of parents in Ireland recalled *often* talking about what they had read. Parents in Ireland also viewed pupils' early competency in literacy tasks very positively, with 61% reporting that pupils could complete these tasks *very well* at the time they were starting First class. In particular, the majority of parents in Ireland reported that pupils could carry out tasks such as recognising most of the letters in the alphabet, and being able to write letters of the alphabet *very well*, although parents were somewhat less confident about pupils' abilities to read sentences or a story before starting First class. A large majority of pupils in Ireland spoke English at home before they started school, with 85% of pupils speaking *only* English prior to starting

school. Of the pupils who did not speak English at home before starting school, by the time they got to Fourth class, 51% spoke English at home *sometimes*, with 44% speaking English *almost always* or *always.*

The resources at home for pupils in Ireland for learning were generally favourable, with almost one-third of pupils (33%) having *many* resources for learning and almost two-thirds (66%) having *some* resources. Almost all parents in Ireland (99%) reported that their children were assigned homework three or more times a week. Parents in Ireland offered a moderate level of homework support to pupils. Almost all parents whose children received homework checked whether homework was completed three or more times a week (98%). Over half reported that they helped their children with their homework (54%) or reviewed their homework to make sure it was correct (57%) *every day*. Although this is less frequently than they asked about homework completion, parents in Ireland did help and review homework more often than on average internationally.

Between 2011 and 2016, parental enjoyment of reading remained fairly stable, although there was a slight increase between cycles in the extent to which parents reported reading only when they needed information and wishing they had more time for reading. In terms of the resources at home for learning, the proportion of households that had Internet increased across cycles, as did parental education level.

In 2016, parents reported having engaged in early literacy activities more frequently with girls than with boys. Parents were significantly more likely to have *often* talked about what they had read, sung songs, and written letters of the alphabet with girls than with boys. Although the difference in how parents rated pupils' competency on early literacy tasks across genders was small, parents consistently rated girls' competencies as a little higher than those of boys.

Parents of pupils who attended urban DEIS schools were more likely to moderately like reading themselves than to like it *very much*, with parents of children who attended other schools tending to like reading more. Parents in urban DEIS schools were also slightly less likely to engage in early literacy activities as frequently. Over half of parents in Ireland, in both urban DEIS and other schools, rated pupils' competency in early literacy tasks very highly. For the specified literacy tasks, the largest differences between these groups was found in the proportions of pupils' parents who thought pupils could recognise most letters of the alphabet, read some words, and write letters of the alphabet *very well*, with parents of pupils in urban DEIS schools less confident than others.

Significantly fewer parents whose children attended urban DEIS schools reported that they had *many* resources at home for learning, in comparison to parents whose children attended other schools. The majority of parents in both urban DEIS schools and other schools had *some* home resources for learning, with 19% more parents in urban DEIS schools reporting this than parents in other schools; however, 6% of parents of pupils who attended DEIS schools reported having *few* resources, in comparison to just 1% of parents of pupils at other schools. The vast majority of pupils across both urban DEIS schools and other schools had at least some access to a computer or tablet at home, as well as an Internet connection. Pupils who attended urban DEIS schools had fewer books, including children's books, in their homes than peers who attended other schools.

In Ireland and internationally, pupils' reading achievement in PIRLS was moderately positively associated with parents' attitudes to reading. Reading achievement was also moderately positively associated with parents' engagement in early literacy activities with their children, and with how they rated their children's competency in early literacy tasks. Pupils who spoke English, plus at least one other language, before starting school achieved similar mean reading achievement to those who spoke only English, while the mean reading achievement of pupils who did not speak English before starting school was significantly lower. The level of home resources had a moderate to strong relationship with reading achievement, and this association was stronger for Ireland than on average internationally. The mean reading achievement of pupils, both in Ireland and internationally, was somewhat higher for pupils whose parents provided homework support less frequently.

Chapter 5:
Reading in the classroom

This chapter describes reading in the classroom, drawing on pupil and teacher responses to the PIRLS 2016 Student and Teacher Questionnaires. It examines: pupils' engagement in reading lessons; time spent on reading activities; organisation of reading activities; text types; use of digital devices during reading lessons; strategies and approaches used during reading lessons; post-reading activities; resources for pupils who struggle with reading; reading homework; assessing reading; and teacher professional development in reading.

Each topic is examined from several perspectives. Initially, each topic is examined in an international context with comparisons made with selected countries and with the average across all PIRLS countries. Associations with overall reading achievement in PIRLS are presented where appropriate. Ireland's data for 2016 are compared to those of the previous PIRLS cycle in 2011, to see, where possible, what trends can be established. Finally, data for Ireland are analysed by pupil gender[33] (where relevant) and examined by school DEIS status.[34]

An e-Appendix to accompany this chapter can be downloaded from www.erc.ie/pirls/reports.

Pupil engagement in reading lessons

To establish the extent to which pupils in Ireland were engaged with reading during their lessons, the *Students Engaged in Reading Lessons* scale was created (Mullis et al., 2017). The scale was based on the extent to which pupils agreed or disagreed (*a lot or a little*) with nine attitudinal statements. Based on their scale scores, pupils were classified as *not engaged*, *somewhat engaged* or *very engaged*.

The scale was created from responses to the following nine statements: *I like what I read about in school; my teacher gives me interesting things to read; I know what my teacher expects me to do; my teacher is easy to understand; I am interested in what my teacher has to say; my teacher encourages me to say what I think about what I have read; my teacher lets me show what I have learned; my teacher does a variety of things to help us learn; my teacher tells me how to do better when I make a mistake*.[35]

33 Variables derived from pupil data are examined by gender. However, teacher data, which are reported at the pupil level (i.e., X% of pupils had teachers who answered in a particular way), were not examined by (pupil) gender, due to the random and variable nature of the gender mix in many primary school classrooms.

34 As explained in Chapter 1, the variable of school DEIS status is explored by comparing data for pupils in urban DEIS schools (Band 1 and Band 2) with data for pupils in other schools (non-DEIS and DEIS Rural).

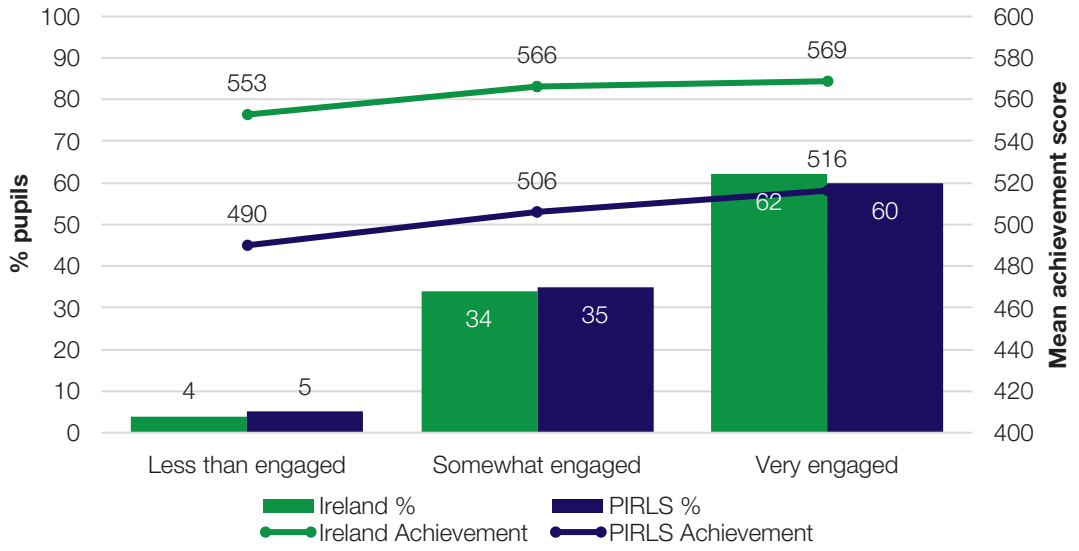
35 It is worth noting that most of these statements relate to what pupils think about their teachers' behaviours. The extent to which this may affect measurement of engagement is discussed in Chapter 6.

Pupil engagement in reading lessons in Ireland and internationally

Over three-fifths (62%) of pupils in Ireland were *very engaged* in reading lessons, which was in line with the average internationally (60%). Ireland remained internationally typical across each of the categories, with 34% of pupils in Ireland being *somewhat engaged* (35% internationally) and 4% of pupils in Ireland being *less than engaged* (5% internationally) (Appendix Table A5.1).

Figure 5.1 shows the percentages and mean scores of pupils in Ireland and internationally, by the extent to which they were engaged in reading lessons. Pupils who were *very engaged* had a mean achievement score of 569, but this was not significantly higher than the mean scores of pupils who were *somewhat engaged* (566) or *less than engaged* (553) (Appendix Table A5.2). Internationally, the *very engaged* group scored higher (516) than both the *somewhat engaged* (506) and *less than engaged* (490) groups (Mullis et al., 2017, Exhibit 10.1). Pupils' engagement in reading lessons in Ireland was marginally positively associated with their overall reading achievement, but this correlation was not significant (r=.03; Appendix Table A5.2). Internationally, the correlation of pupils' engagement in reading lessons with their reading achievement was statistically significant, but weak (r=.07, Appendix Table A5.2).

Figure 5.1: Percentages and mean achievement of pupils in Ireland and internationally, by engagement in reading lessons (PIRLS *Students Engaged in Reading Lessons* scale)



Source: Appendix Table A5.1.

Table 5.1 shows the percentages of pupils in Ireland, the comparison countries, and on average across all PIRLS countries, by the extent to which they engaged in reading lessons. In comparison to other pupils within the selected comparison countries, pupils in Ireland were among the most engaged pupils. Overall, pupils in the United States (62% *very engaged* with 6% *less than engaged*), followed closely by Ireland and Northern Ireland, were most likely to report that they were engaged in reading lessons, with Hong Kong reporting the least engagement (34% *very engaged* and 14% *less than engaged*).

Table 5.1: Percentages of pupils in Ireland, comparison countries, and on average across all PIRLS countries, by the extent to which they were engaged in reading lessons (PIRLS *Students Engaged in Reading Lessons* scale)

	Less than Engaged	Somewhat Engaged	Very Engaged
Australia	4.9	38.6	56.5
England	4.5	38.4	57.1
Finland	7.2	53.6	39.2
Hong Kong, SAR	13.9	52.1	34.0
Ireland	4.2	34.2	61.6
New Zealand	4.3	38.1	57.6
Northern Ireland	4.1	34.5	61.5
Norway	4.2	42.5	53.3
Poland	6.4	45.0	48.6
Singapore	7.6	49.7	42.7
United States	5.7	32.2	62.0
Overall PIRLS	5.0	35.2	59.7

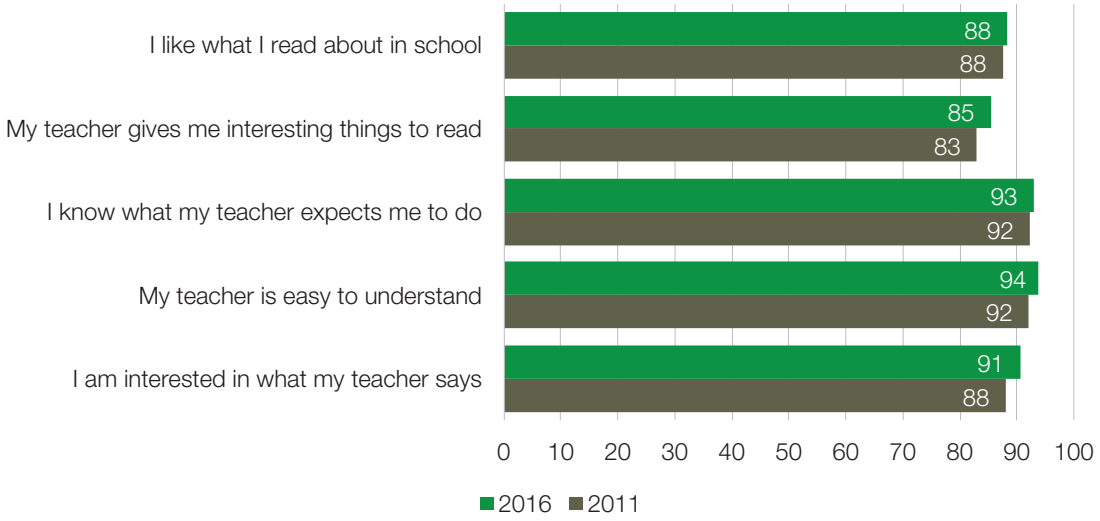
Source: Appendix Table A5.1.

Pupils' responses in Ireland showed a high level of agreement with each of the nine attitudinal statements used to make up the *Students Engaged in Reading Lessons* scale (Appendix Table A5.3). Nearly all pupils in Ireland agreed (*a lot* or *a little*) that their teacher did a variety of things to help them learn (96%), that their teacher told them how to do better when they made a mistake (95%), and that their teacher was easy to understand (94%). Over four-fifths agreed *a lot* or *a little* with all other statements, including that they liked what they read about in school (88%), that their teacher gave them interesting things to read (85%) and that their teacher let them show what they had learned (85%).

Trends in pupil engagement in reading lessons

While the *Students Engaged in Reading Lessons* scale in 2016 was based on pupils' level of agreement with nine statements, the equivalent scale in 2011 was based on responses to seven statements.[36] Five statements contributed to the scale in both 2011 and 2016: *I like what I read about in school*; *My teacher gives me interesting things to read*; *I know what my teacher expects me to do*; *My teacher is easy to understand*; *I am interested in what my teacher says*. Pupils in Ireland were at least as likely to agree with each of these in 2016 as they were in 2011 (Figure 5.2; Appendix Table A5.4). There were no significant differences in response patterns between the two cycles for the statements *I like what I read about in school; My teacher gives me interesting things to read;* and *I know what my teacher expects me to do.* More pupils agreed with the statements *My teacher is easy to understand* and *I am interested in what my teacher says* in 2016 than in 2011, and these increases were statistically significant but slight.

Figure 5.2: Percentages of pupils in Ireland, in 2016 and 2011, that agreed (*a lot* or *a little*) with each of five statements about engagement in reading lessons



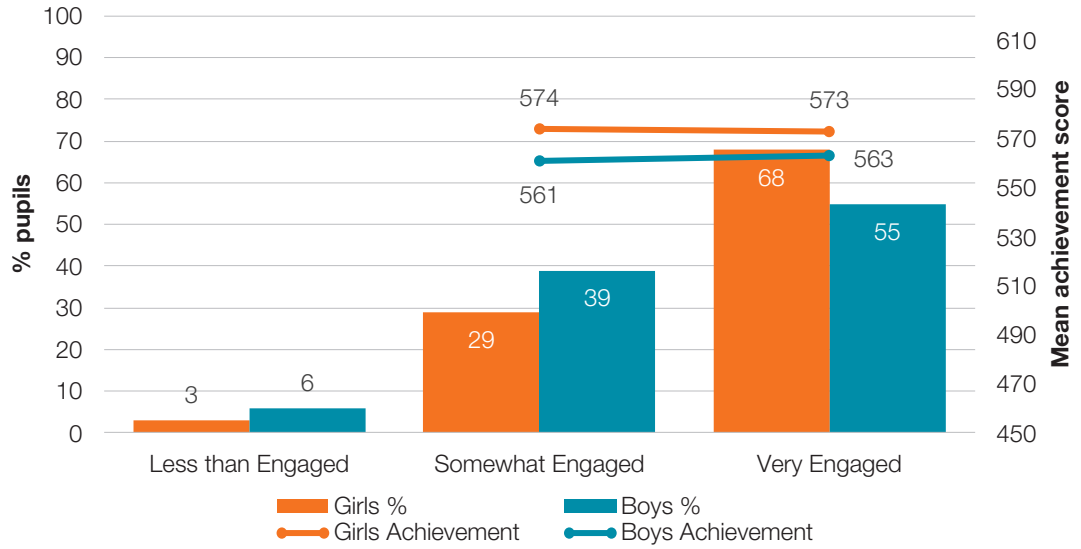
Source: Appendix Table A5.4

36 Specifically, the 2011 scale included responses to two statements dropped in 2016 (*I think of things not related to the lesson*; *My teacher gives me interesting things to do*), and did not include four statements added in 2016 (*My teacher encourages me to say what I think about what I have read*; *My teacher lets me show what I have learned*; *My teacher does a variety of things to help us learn*; *My teacher tells me how to do better when I make a mistake*). See Martin et al., 2012, for details of the 2011 scale.

Gender and pupil engagement in reading lessons

Girls in Ireland, and internationally, were more engaged in their reading lessons than boys. Figure 5.3 presents the percentages and mean achievement of girls and boys in Ireland, by the extent to which they engaged in reading lessons. Significantly more girls were classified as *very engaged* (68%) in comparison to boys (55%), while significantly more boys than girls were classified as *somewhat engaged* and *less than engaged* (Figure 5.3). Girls achieved significantly higher mean scores than boys in both the *very engaged* and *somewhat engaged* categories.[37] Twice as many boys (6%) as girls (3%) were classified as *less than engaged*, a pattern similar to that observed on average across all PIRLS countries (Appendix Table A5.5).

Figure 5.3: Percentages and mean achievement of girls and boys in Ireland, by the extent to which they engage in reading lessons (PIRLS *Students Engaged in Reading Lessons* scale)



Source: Appendix Table A5.5a.
Note. Mean achievement for *Less than Engaged* is not reported due to insufficient data.

While a majority of both boys and girls in Ireland were *very engaged* in reading lessons, the gender gap observed in Ireland (14%) was wider than on average internationally (9%). In Ireland, more girls were *very engaged* (68%) than on average internationally (64%) while the proportion of boys who were *very engaged* (55%) was in line with the average internationally (55%). Ireland reported the widest gender gap among the comparison countries, followed by New Zealand (12%) and Finland (12%). Singapore reported the narrowest gender gap (5%), followed by Hong Kong (6%) (Appendix Table A5.5a). On the nine individual items used to make up the *Students Engaged in Reading Lessons* scale, in all cases, girls in Ireland reported agreeing (*a lot or a little)* with each of the statements more than boys (Appendix Table A5.5b).

The correlation between engagement in reading lessons and reading achievement was negligible and non-significant in Ireland for both boys (r=.06) and girls (r=-.03) (Appendix Table A5.6).

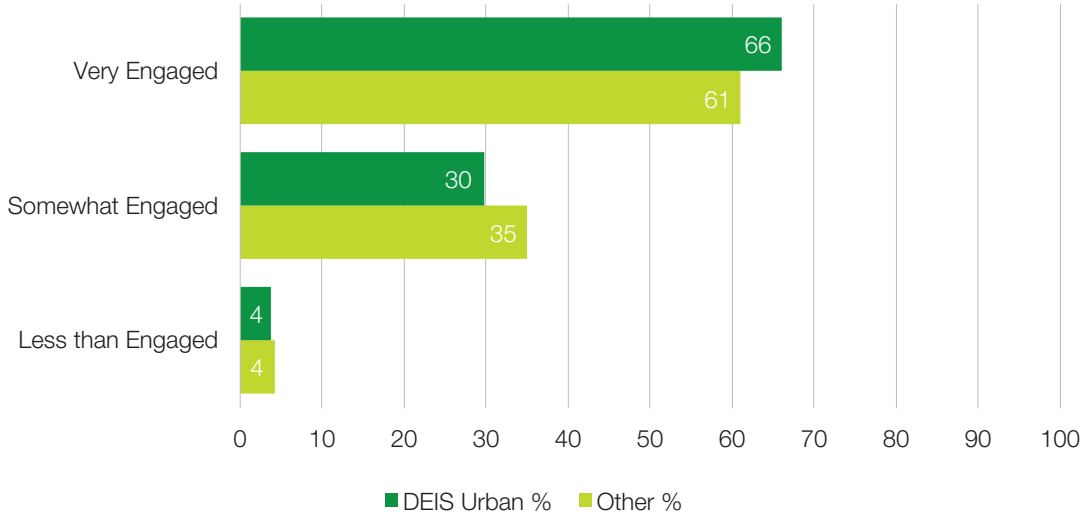
School DEIS status and pupil engagement in reading lessons

There were no significant differences observed in the extent to which pupils in urban DEIS schools and pupils in other schools indicated engagement in their reading lessons. In urban DEIS schools, 66% of pupils were *very engaged* (compared to 61% in other schools), 30% of pupils were *somewhat engaged* (compared to 35%

37 In the *less than engaged* category, girls also achieved a higher mean score than boys, but due to large standard errors (associated with the small proportions here) this was not statistically significant.

in other schools) and 4% of pupils in both urban DEIS and other schools were *less than engaged* (Figure 5.4; Appendix Table A5.7).

Figure 5.4: Percentages of pupils in Ireland in urban DEIS schools and other schools, by the extent to which they engage in reading lessons (PIRLS *Student Engaged in Reading Lessons* scale)



Source: Appendix Table A5.7.

Time spent on English language instruction and reading instruction

Teachers were asked two questions about instructional time. Firstly, they were asked to indicate how much time per week they spent on instruction and activities related to the language of the PIRLS test (i.e., in Ireland's case, teachers were asked how much time they spent on *English language* instruction). It was specified that this should include instruction and activities related to reading, writing, speaking, studying literature, and other language skills. Secondly, teachers were asked how much time per week they spent on instruction and activities related to *reading*. It was specified that this should include activities across curriculum areas as well as formally scheduled reading instruction time (if applicable).

This section and all subsequent sections in this chapter refer to responses from the Teacher Questionnaire. As pupils, rather than teachers, constitute representative samples in PIRLS, these data are described in terms of the percentage of pupils whose teachers answered a question in a particular way.

Instructional time in Ireland and internationally

On average, pupils in Ireland spent 23% of their total instructional time on English language instruction and activities, compared to 27% on average internationally (Mullis et al., 2017, Exhibit 9.1). However, there was considerable variation in the responses of teachers within Ireland as to how much time they spent on English language instruction in a typical week.

As might be expected, pupils in Irish-medium schools generally had teachers who spent less time on English language instruction than pupils in English-medium schools (Table 5.2; Appendix Table A5.8).

Nevertheless, even among pupils in English-medium schools, time spent on English language instruction ranged widely. While the Primary School English Curriculum (DES/NCCA, 1999c) originally required schools to spend four hours per week on instruction related to their first language and 3 hours 30 minutes on instruction related to their second language, the National Strategy to Improve Literacy and Numeracy (DES, 2011b) provided for an extra hour per week to be spent on 'the development of literacy skills, particularly in the first language of the school' (DES, 2011a, p. 4).

Teachers of a small percentage of pupils in English-medium schools (7%) spent less than four hours per week on English language instruction, which suggests that they were not meeting the original curriculum requirement. Over one-tenth of pupils in English-medium schools (14%) had teachers who spent between four and 4.5 hours per week on English language instruction. These teachers are meeting the curriculum requirement but are not meeting the Strategy requirement fully. A small proportion of pupils (3%) had teachers who reported spending between 4.5 and five hours, suggesting that they are likely to be meeting the Strategy requirement. The majority of pupils (57%) had teachers who spent between five and seven hours on English language instruction, which exceeds the requirement outlined in the Strategy, while close to a further one-fifth (19%) had teachers who reported spending seven hours or more on this, which greatly exceeds the requirement outlined in the Strategy.[38]

In Irish-medium schools, almost one-fifth of pupils (19%) had teachers who reported spending a proportion of time on English language instruction that was in line with the 1999 curriculum expectation (3.5 hours), while teachers of a small proportion (8%) reported spending less than 3.5 hours on this. One-third of pupils had teachers who reported spending at least four hours but less than five hours on English language instruction, which suggests that they are using at least part of the extra time mandated by the Strategy for English language instruction. Teachers of all other pupils (41%) reported spending five hours or more on English language instruction, which would suggest that a large proportion in Irish-medium schools are exceeding the expectation outlined in the Literacy and Numeracy Strategy (DES, 2011b), at least as it relates to English language instruction.

Table 5.2: Percentage of pupils in Ireland by school medium of instruction and time spent by teachers on English language

School medium of instruction	Weekly time spent by teachers on English language instruction	%
English medium schools	Less than 4 hours	7.1
	At least 4 hours but less than 4.5 hours	13.8
	At least 4.5 hours but less than 5 hours	2.7
	At least 5 hours but less than 7 hours	56.9
	At least 7 hours but less than 9 hours	10.3
	9 hours or more	9.1
Irish-medium schools	Less than 3.5 hours	8.4
	At least 3.5 hours but less than 4 hours	19.4
	At least 4 hours but less than 5 hours	31.2
	At least 5 hours but less than 7 hours	38.8
	At least 7 hours but less than 9 hours	2.2
	9 hours or more	0.0

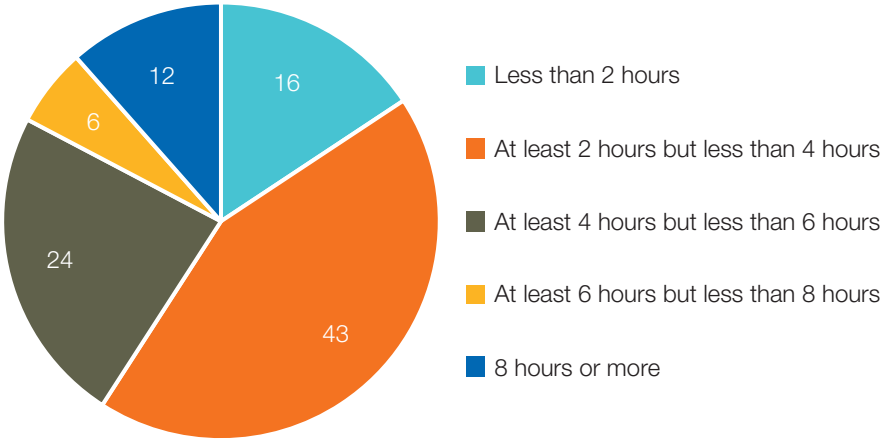
Source: Appendix Table A5.8.
Note. Percentages within Irish-medium schools should be interpreted having regard to larger standard errors.

Pupils in Ireland had teachers who spent an average 16% of instructional time on *reading* activities across the curriculum – approaching the international average of 18% (Mullis et al., 2017, Exhibit 9.1). Among comparison countries, Ireland had the median proportion of time spent on reading instruction, with proportions ranging from 4% of instructional time in Poland to 32% of instructional time in the United States.

38 Some caution must be used when interpreting these results as the responses varied greatly, which may suggest that there was some ambiguity in the interpretation of the question.

Within Ireland, there was also wide variation in teacher responses as to how much time they spent on reading instruction in a typical week, with answers ranging from one to 15 hours.[39] The majority of pupils had teachers who spent somewhere between two and six hours per week on reading instruction, with teachers of 43% of pupils indicating that they spent two to four hours on it and teachers of a further 24% indicating that they spent four to six hours on it. However, a significant minority of pupils (16%) had teachers that spent less than two hours per week on reading instruction. At the other extreme, 17% of pupils had teachers that spent six hours or more on reading instruction; within this group, two-thirds (12% of the overall sample) had teachers for whom reading instruction took up at least eight hours per week (Figure 5.5; Appendix Table A5.9).

Figure 5.5: Percentages of pupils in Ireland, by the weekly time their teachers spent on *reading* instruction across the curriculum



Source: Appendix Table A5.9.

Trends in time spent on English language instruction[40] and reading instruction

In 2011, the median[41] instructional time spent on English language instruction per week in Ireland was 4.5 hours, which increased to five hours in 2016.[42] However, the range of answers provided in both years may suggest some ongoing ambiguity in the interpretation of the questions and therefore it is important to interpret this finding with caution. In 2011, teachers of 16% of pupils indicated that they spent less than four hours on English language instruction, in comparison with 9% in 2016. Teachers of over one-fifth of pupils in 2011 reported spending between four and 5.5 hours (22%), with the proportion decreasing to nearer one-tenth of pupils in 2016 (13%) (Appendix Table A5.10). In both 2011 (43%) and 2016 (55%), a sizeable proportion of pupils had teachers who spent between five and seven hours a week on English language instruction, and this increase is significant between 2011 and 2016. The percentage of pupils whose teachers reported spending seven hours or more on English language instruction increased from 5% in 2011 to 18% in 2016 which is a substantial and significant increase over time (Appendix Table A5.10).

39 This question was intended to address reading instruction in any language. However, this was not made explicit in the phrasing, and some teachers may have included their school's Language 2 reading instruction while others may have excluded it. Additionally, some teachers may have considered reading activities across the curriculum where others may have taken a narrower approach. These factors may explain some of the upper outliers in the data.

40 This subsection, unlike the previous one, reports on all (English-medium and Irish-medium) schools combined to allow comparison across cycles. In both cycles, the sample was selected to be nationally representative as regards school language of instruction.

41 The measure of central tendency used in this and the subsequent section was the median, to account for the presence of outliers.

42 These questions were also administered in 2011 with a minor change to phrasing made in 2016 in the hope of improving clarity.

Since 2011, time spent on *reading* instruction across the curriculum has remained fairly consistent. The median time reported by teachers of pupils was over three hours in both 2011 (3 hours and 30 minutes) and 2016 (3 hours and 20 minutes), but may suggest a slight decrease in trend. In 2011, teachers of 27% of pupils reported spending six hours or more each week on reading activities, which decreased by 10% in 2016 (Appendix Table A5.11). As stated above, however, this should be interpreted with caution due to the variety and range of responses across both years.

School DEIS status and time spent on English language instruction and reading instruction

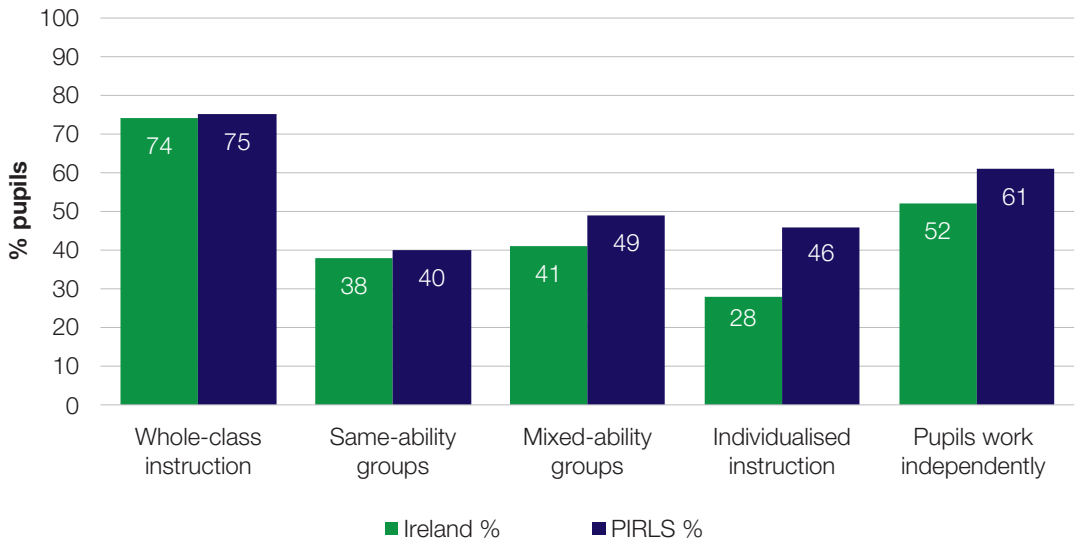
The median time spent on English language instruction across the curriculum weekly in 2016 does not differ substantially as reported by teachers of pupils in urban DEIS schools and pupils in other schools. The median time spent on English language instruction in both urban DEIS and other school types was five hours per week. Similarly, teachers of pupils in both school types reported spending a median 3 hours and 20 minutes per week on reading instruction, which suggests no notable difference across school type.

Organisation of reading activities

Organisational approaches in Ireland and internationally

Teachers were presented with a list of five organisational approaches that might be used in reading class, spanning a continuum from teaching reading as a whole-class activity, through creating same-ability or mixed-ability groups, to providing individualised instruction or assigning pupils to work independently on a plan or goal. For each organisational approach, teachers were asked to say whether they *always or almost always*, *often*, *sometimes*, or *never* used it when teaching reading to the PIRLS pupils. Figure 5.6 shows the proportion of pupils whose teachers reported that they *always or almost always* or *often* used each of the five organisational approaches, in Ireland and on average across the PIRLS countries.

Figure 5.6: Percentages of pupils whose teachers reported *always or almost always* or *often* using the following organisational approaches, in Ireland and on average across PIRLS countries



Source: Appendix Table A5.12

In Ireland, whole-class instruction was the most frequently used of these approaches. About three-quarters of pupils (74%) were taught by teachers who either *often* (49%) or *always or almost always* (25%) taught reading as a whole-class activity, and almost all remaining pupils (25%) were taught by teachers who *sometimes* did this (Appendix Table A5.13 provides a breakdown of percentages against each of the four response options). This was roughly similar to the average across all PIRLS countries, and was similar to patterns observed in comparison countries such as Finland, Norway, and the US. Pupils in New Zealand, England, and Northern Ireland were relatively less likely to experience frequent whole-class reading instruction, while pupils in Hong Kong were likely to experience it most frequently.

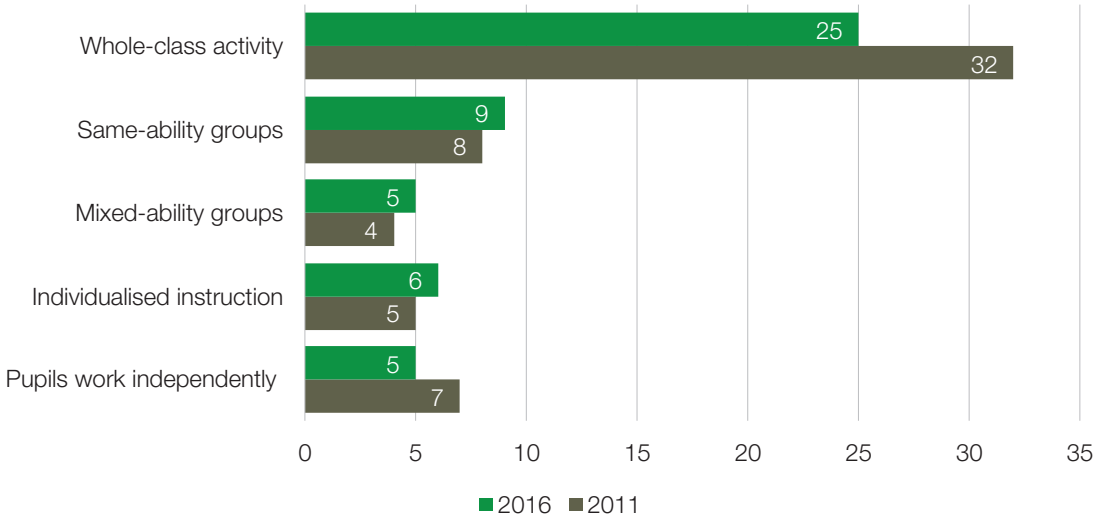
Group work was less commonly used in reading lessons in Ireland. Roughly two-fifths of pupils (38%) were taught by teachers who created same-ability groups either *often* (30%) or *always or almost always* (9%), while a similar proportion (41%) had teachers who created mixed-ability groups either *often* (36%) or *always or almost always* (5%). The frequency of use of same-ability groups in Ireland was very similar to that across all PIRLS countries (where 40% of pupils, on average, had teachers who indicated that they *often* or *always* created such groups). Mixed-ability groups were used slightly less often in Ireland than on average across all PIRLS countries (where 49% of pupils had teachers who *often* or *always* created these). Patterns varied widely across the comparison countries, with the percentages of pupils whose teachers *often* or *always or almost always* used same-ability groups strikingly high in other English-speaking countries, particularly Northern Ireland (92%).

Individualised instruction for reading was relatively rarer in Ireland, with 28% of pupils taught by teachers who *often* (23%) or *always or almost always* (6%) used this. A majority of pupils (60%) were taught by teachers who *sometimes* used individualised instruction, while 11% were taught by teachers who *never* did so. This represents somewhat infrequent use of individualised instruction for reading relative to both the PIRLS average (46% of pupils across all PIRLS countries had teachers who *often* or *always or almost always* used it) and most English-language comparison countries. However, independent work on an assigned plan or goal was used *often* or *always or almost always* by teachers of more than half of pupils in Ireland (52%). While somewhat below the comparable international average (61%), this was similar to the responses in a number of comparison countries, including England (53%).

Trends in organisational approaches

Figure 5.7 presents the percentages of pupils whose teachers *always or almost always* used various organisational approaches in 2011 and 2016. Between the cycles, there was a (non-significant) decrease in the percentage of pupils whose teachers *always or almost always* used whole-class instruction for reading, from just under one-third (32%) in 2011 to about one-quarter (25%) in 2016. For all other approaches, there was little variation in the proportion of pupils whose teachers reported using them *always or almost always* between the two cycles. (See Appendix Tables A5.14, A5.15.)

Figure 5.7: Percentages of pupils whose teachers *always or almost always* used the following organisational approaches in PIRLS 2016 and 2011

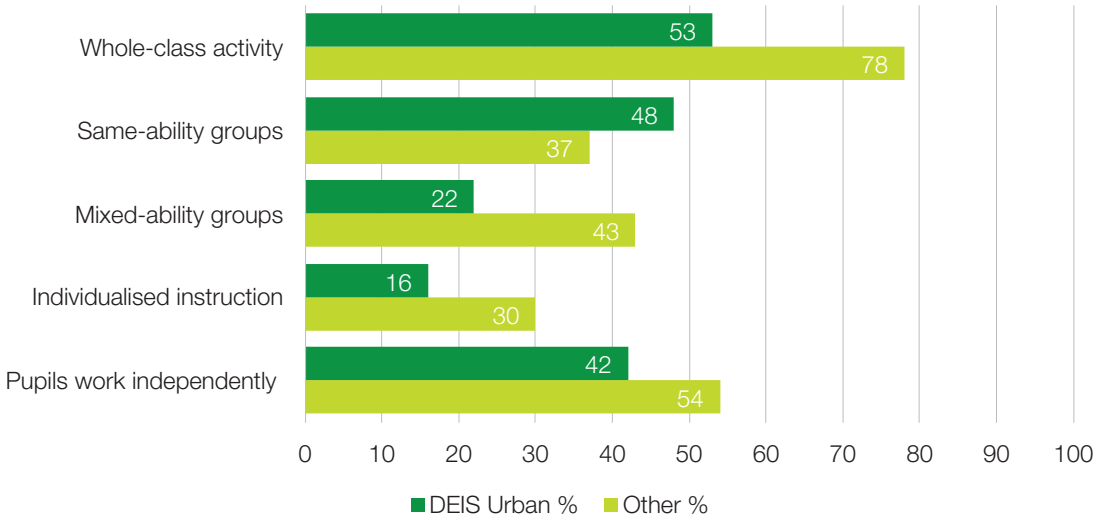


Source: Appendix Table A5.15a.

School DEIS status and organisational approaches to reading activities

There were differences in the proportions of pupils in urban DEIS schools and other schools whose teachers reported using various organisational approaches *always or almost always* or *often* (Figure 5.8). Teachers in other (non-DEIS and rural DEIS) schools reported that whole-class instruction was used *always or almost always* or *often* with over three-quarters of pupils (78%), which was significantly more than was reported among pupils in urban DEIS schools (53%). Similarly, mixed-ability grouping, individualised instruction, and pupils working independently were also reported less frequently in urban DEIS schools. The approach of grouping pupils of similar abilities was the only strategy reported more frequently in urban DEIS schools (48%) than in other types of schools (37%), but this difference was not significant.

Figure 5.8: Percentages of pupils in Ireland, in urban DEIS schools and other schools, whose teachers *always or almost always* or *often* used the following organisational approaches



Source: Appendix Table A5.16.

Text types used during reading activities

The teacher questionnaire included a question relating to the types of texts that were used during reading activities.

Text types used during reading activities in Ireland and internationally

Teachers were presented with the following six types of reading texts that might be used in class (whether in print or digital form): *short stories; longer fiction books (with chapters); plays; longer non-fiction books (with chapters); textbooks or non-fiction books in a subject area; non-fiction articles (e.g. newspaper articles)*. They were asked to indicate how often (*every day or almost every day, once or twice a week, once or twice a month*, or *never or almost never*) the text types were used. Table 5.3 shows the percentages of pupils by the frequency with which their teachers used various text types in reading lessons, in Ireland and on average across all PIRLS countries.

Table 5.3: Percentages of pupils by the frequency with which their teachers used various text types in reading lessons, in Ireland and on average across all PIRLS countries

	Never or almost never	Once or twice a month	Once or twice a week	Every day or almost every day
	Literary Reading Materials			
	Short Stories			
Ireland	2.0	9.7	49.9	38.4
Overall PIRLS	2.6	19.9	50.7	26.8
	Longer fiction books (with chapters)			
Ireland	3.2	20.4	39.8	36.6
Overall PIRLS	18.7	40.2	27.1	13.9
	Plays			
Ireland	66.1	32.6	0.7	0.6
Overall PIRLS	51.3	40.1	7.0	1.6
	Informational Reading Materials			
	Non-fiction subject area books or textbooks			
Ireland	0.3	16.7	50.8	32.2
Overall PIRLS	5.7	23.5	36.4	34.4
	Longer non-fiction books (with chapters)			
Ireland	26.1	40.9	24.0	9.0
Overall PIRLS	35.0	40.6	19.7	4.6
	Non-fiction articles			
Ireland	8.2	55.0	31.5	5.3
Overall PIRLS	14.7	46.3	30.9	8.1

Source: Appendix Table A5.17.

In Ireland, teachers were more likely to give pupils literary reading materials than informational reading materials on a frequent basis. Short stories were used most often, with the majority of pupils reading short stories either *every day or almost every day* (38%) or *once or twice a week* (50%). The popularity of short stories used on a daily or near-daily basis was also seen in Australia (37%) and New Zealand (32%), which were all above the average reported across all PIRLS countries (27%). Longer fiction books were also used regularly in Ireland, as teachers of over one-third of pupils reported using them close to daily (37%) with teachers of a further two-fifths (40%) reporting that they used them weekly. Plays were not commonly used in Ireland, which was also the case in many of the comparison countries.

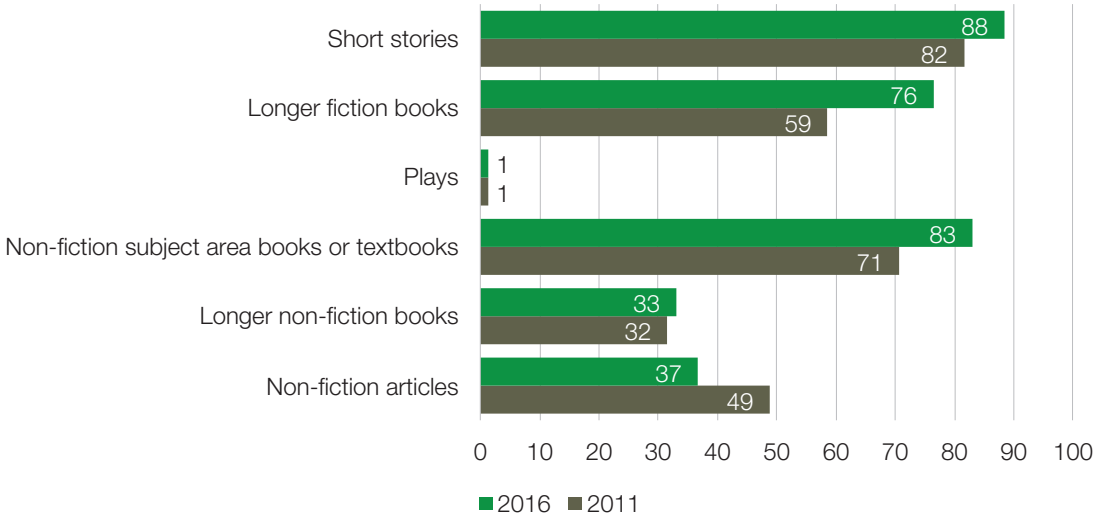
Among informational reading materials, non-fiction subject area books (such as textbooks) were most likely to be used on a daily or near-daily basis in Ireland (32%), followed by longer non-fiction books (9%) and non-fiction articles (5%). Higher proportions using non-fiction subject area books *every day or almost every day* were reported in Finland (76%), Poland (69%), and Norway (66%). Nonetheless, Ireland was similar to the average across all PIRLS countries on this measure (34%).

Trends in text types used in reading activities

In 2011, questions were also asked in relation to the text types used during reading lessons. Figure 5.9 presents percentages of pupils by the text types used at least weekly in 2011 and 2016 (Appendix Tables A5.18 and A5.19). Short stories were used most commonly in both 2011 (82%) and 2016 (88%), with plays used least commonly (1% in both 2011 and 2016). Short stories, longer fiction books and non-fiction subject

area books or textbooks were used significantly more often in 2016 than in 2011, while non-fiction articles were used significantly less often in 2016.

Figure 5.9: Percentages of pupils in Ireland whose teachers used various text types *at least weekly* in PIRLS 2016 and 2011



Source: Appendix Table A5.19.

School DEIS status and text types used in reading activities

The types of texts used in reading lessons did not differ significantly by school DEIS status. Table 5.4 presents the percentages of pupils whose teachers used the different text types at least weekly (*every day or almost every day* and *once or twice a week* combined) in urban DEIS and other school types. Taking standard errors into account, there were no significant differences by DEIS status in text types used.

Table 5.4: Percentages of pupils in Ireland, in urban DEIS schools and other schools, whose teachers used various text types *at least weekly*

	DEIS Urban		Other	
	%	% SE	%	% SE
Short stories	83.5	5.46	89.1	2.20
Longer fiction books with chapters	86.4	7.73	74.8	3.68
Plays	3.1	3.10	0.9	0.70
Non-fiction subject area books or textbooks	86.5	6.80	82.4	3.10
Longer non-fiction books with chapters	41.7	10.00	31.6	4.11
Non-fiction articles	29.3	9.27	37.9	3.94

Source: Appendix Table A5.20.

Use of digital devices during reading lessons

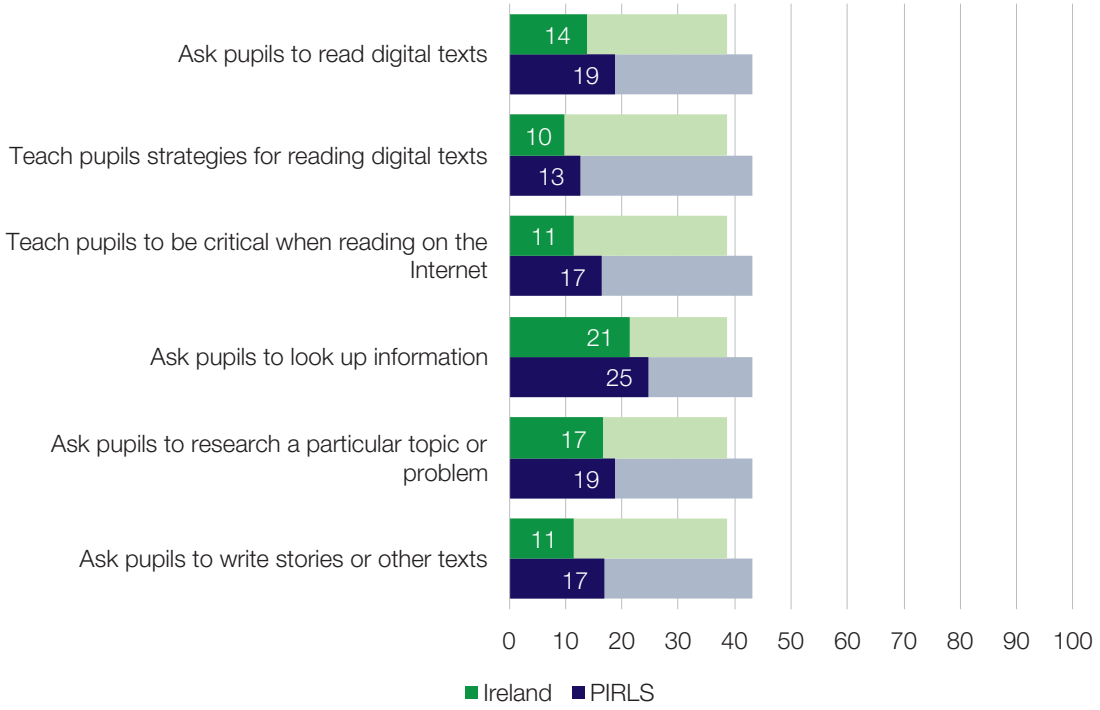
Teachers were asked questions relating to the use of digital devices during reading activities. A number of the findings about digital devices have been published in the context of a wider report on ICT in primary schools (Eivers, 2019), to which interested readers are referred for further details. Here, selected findings are presented as part of the picture of what typically happens in reading lessons.

Use of digital devices during reading lessons in Ireland and internationally

Almost two-fifths of pupils in Ireland (39%) sometimes had computers (which could include tablets) available to them during reading activities, which means that more than three-fifths (61%) did not have digital devices available to them for use during reading lessons at all in 2016 (Appendix Table A5.21a). Among comparison countries, New Zealand reported the highest proportion with computers available (93%), followed by Northern Ireland (77%), Australia (75%), Finland (72%), and the United States (70%) (Exhibit 9.7, Mullis et al., 2017). The proportion reported in Ireland was below the average across all PIRLS countries (43%) and was above the proportion in only two comparison countries: Hong Kong (35%) and Poland (25%). In Ireland, there was no significant difference between the mean PIRLS achievement scores of pupils who had access to devices (564) and those who did not have access (568). Additionally, there was no significant difference in the mean ePIRLS (digital reading) scores of pupils with and without access to devices during lessons (563 vs 567, respectively).

Teachers who indicated that there *were* digital devices available sometimes were asked to indicate the frequency with which they did the following activities involving computers during reading lessons: *ask pupils to read digital texts, teach pupils strategies for reading digital texts, teach pupils to be critical when reading on the Internet, ask pupils to look up information, ask pupils to research a particular topic or problem*, and *ask pupils to write stories or other texts.* Figure 5.10 presents the percentages of pupils whose teachers reported doing these activities at least weekly. In Ireland, it was most common to be asked on at least a weekly basis to look up information on a computer (21%, i.e. more than half of the pupils who had digital devices available, were asked to do this), to research a topic or problem (17%) and to read digital texts (14%). It was less common to be taught to be critical when reading on the Internet (11%), to be asked to write stories or other texts on the computer (11%), and to be taught strategies for reading digital texts (10%). In all cases, the percentages reported in Ireland were below those reported on average across all PIRLS countries, although in some cases the difference was very small.

Figure 5.10: Percentages of pupils, in Ireland and on average internationally, who had digital devices available (lighter bars) and whose teachers reported completing the following activities at least weekly during reading lessons (darker bars).



Source: Appendix Table A5.22.
Note: Lighter coloured bars represent the proportion of pupils who had access to digital devices during reading activities while the darker coloured bars represent the proportion who completed the various activities.

Trends in availability of digital devices during reading lessons

In 2011, over half of pupils (56%) had access to a computer during reading lessons, which was well above the proportion reported in 2016 (39%). In both cycles, 2011 and 2016, the availability of a computer during reading lessons was not significantly associated with mean achievement scores (Appendix Table A5.23).

School DEIS status and availability of digital devices during reading lessons

When asked about availability of digital devices during reading lessons, over half of pupils in urban DEIS schools (51%) had digital devices available to them during reading lessons in comparison with 37% of pupils in other schools. However, this difference is not statistically significant (Appendix Table A5.24).

Strategies and activities used during reading lessons

Teachers were asked a range of questions relating to the teaching and learning of reading. The first question asked teachers about the frequency with which they do the following activities during reading lessons: *read aloud to pupils; ask pupils to read aloud; ask pupils to read silently on their own; teach pupils strategies for decoding sounds and words; teach pupils new vocabulary systematically; teach pupils to summarise the main ideas;* and *teach or model skimming or scanning strategies.* The second question asked teachers to give a broad indication of what proportion of reading lessons involved specific teaching and learning strategies, including linking new content to pupils' prior knowledge, using materials which matched pupils' interests, and encouraging debate

and discussion about what has been read. The final question related to the tasks used to help develop reading comprehension skills. Teachers were asked to indicate the frequency with which they asked pupils to do a number of things, including comparing what they had read to their own experiences, locating information within the text, and making predictions about what would happen next in what they were reading.

Strategies and approaches used in Ireland and internationally

Table 5.5 presents the percentages of pupils by the frequency with which their teachers completed various teaching and learning activities during reading lessons in Ireland, and on average across PIRLS countries. Almost all activities were completed at least weekly by a large majority of pupils in Ireland. As regards daily or near-daily activities, being asked to read aloud was most common for pupils in Ireland (85%), followed by reading silently on their own (71%) and being read aloud to by their teacher (68%) (Appendix Table A5.25). In each case, this was well above the reported average across all PIRLS countries. When asked about teaching pupils new vocabulary systematically, teachers of nearly two-fifths (39%) reported doing this daily or near-daily, while teachers of over half (55%) reported doing this on a roughly weekly basis. Teaching strategies for decoding sounds and words was done similarly frequently (32% *every day or almost every day* and 53% *once or twice a week)*, with almost all remaining pupils receiving decoding instruction on a roughly monthly basis (14%). Teaching pupils to summarise main ideas and to use skimming and scanning strategies were not as common on a daily or near-daily basis (21% and 10% respectively). While very few pupils in Ireland had teachers who *never or almost never* used most of the listed approaches, it is notable that 10% were *never or almost never* taught skimming or scanning strategies (similar to the international average of 12%).

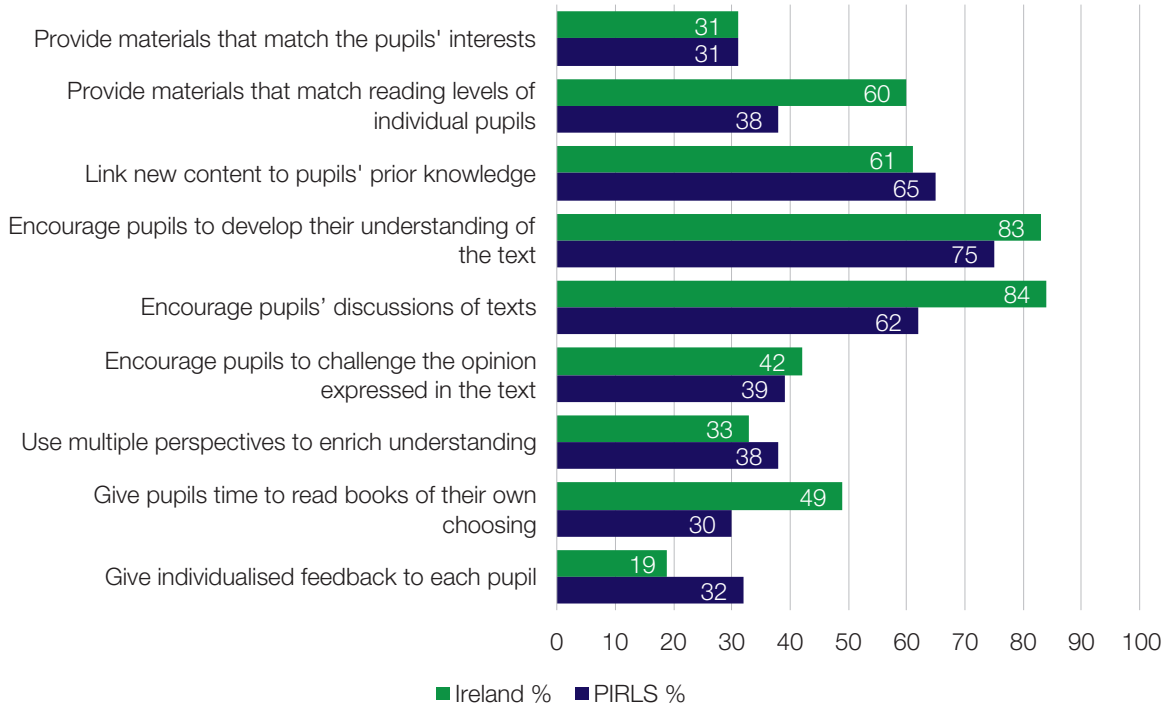
Table 5.5: Percentages of pupils by the frequency with which their teachers completed the following teaching and learning activities during reading lessons, in Ireland and on average across all PIRLS countries

	Never or almost never	Once or twice a month	Once or twice a week	Every day or almost every day
	Read aloud to pupils			
Ireland	1.2	4.8	25.6	68.4
Overall PIRLS	1.3	8.2	30.6	59.9
	Ask pupils to read aloud			
Ireland	0.0	0.0	15.1	84.9
Overall PIRLS	0.9	4.4	26.5	68.2
	Ask pupils to read silently on their own			
Ireland	0.4	0.0	29.0	70.6
Overall PIRLS	0.9	4.2	31.1	63.7
	Teach pupils strategies for decoding sounds and words			
Ireland	1.3	13.8	52.5	32.4
Overall PIRLS	11.7	18.1	37.0	33.3
	Teach pupils new vocabulary systematically			
Ireland	1.6	4.2	55.2	39.0
Overall PIRLS	1.7	9.2	37.0	52.0
	Teach pupils to summarise the main ideas			
Ireland	0.9	22.5	55.2	21.4
Overall PIRLS	2.1	16.2	42.9	38.9
	Teach or model skimming or scanning strategies			
Ireland	10.3	36.3	42.9	10.4
Overall PIRLS	12.0	27.1	37.7	23.2

Source: Appendix Table A5.25.

As regards specific teaching and learning strategies, most pupils in Ireland had teachers who reported encouraging pupils' discussion of texts (84%) and encouraging pupils to develop their understanding of the text (83%) in *every or almost every lesson* (Figure 5.11), which were above the averages across all PIRLS countries (62% and 75% respectively). Teachers of more than half of pupils in Ireland reported that in *every or almost every lesson* they linked new content to pupils' prior knowledge (61%) and provided materials that were appropriate for reading levels of individual pupils (60%), while teachers of more than two-fifths reported giving pupils time to read books of their own choosing (49%) and encouraging pupils to challenge the opinion expressed in the text (42%). Teachers of less than one-fifth of pupils (19%) gave individualised feedback to each pupil in *every or almost every lesson*, and this was the only activity for which Ireland was considerably below the PIRLS average (32%).

Figure 5.11: Percentages of pupils whose teachers completed the following activities during reading lessons *every or almost every lesson*, in Ireland, and on average across all PIRLS countries



Source: Appendix Table A5.26.

In Ireland, teachers reported assigning most tasks to help build comprehension skills on a very regular basis. Table 5.6 presents the percentages of pupils who were asked to complete the various tasks at least weekly (*every day or almost every day* and *once or twice a week)*. Almost all completed the following activities at least weekly: *identify the main ideas of what they have read* (99%); *locate information within a text* (98%); *explain or support their understanding of what they have read* (97%); *make predictions about what will happen next in the text they have read* (96%). Three other tasks were assigned on at least a weekly basis by teachers of 80-90% of pupils: *compare what they have read with experiences they have had* (90%); *make generalisations and draw inferences based on what they have read* (88%); *compare what they have read with other things they have read* (82%). Asking pupils to *describe the style and structure of the text they have read* (66%) and *determine the author's perspective or intention* (62%) were the only tasks for which the frequency in Ireland was below that on average across all PIRLS countries, although not substantially so.

Table 5.6: Percentages of pupils whose teachers completed the following activities to help develop comprehension skills *at least weekly*, in Ireland, and on average across all PIRLS countries

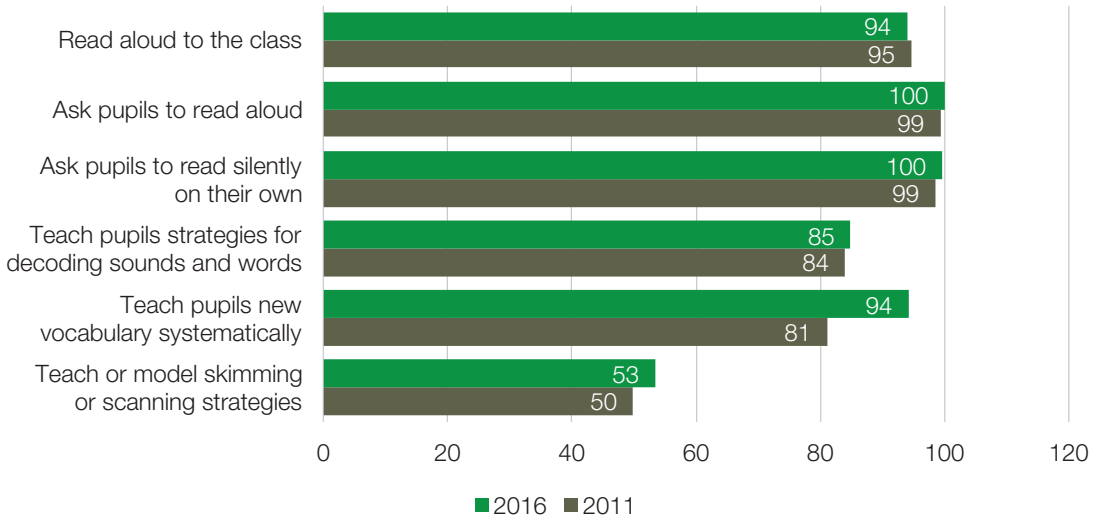
	Ireland		Overall PIRLS	
	%	% SE	%	% SE
Locate information within the text	98.0	0.87	96.3	0.18
Identify the main ideas of what they have read	98.5	0.75	94.1	0.24
Explain or support their understanding of what they have read	97.4	1.32	94.7	0.22
Compare what they have read with experiences they have had	89.9	2.08	83.1	0.36
Compare what they have read with other things they have read	81.9	2.51	74.5	0.40
Make predictions about what will happen next in the text they are reading	95.7	1.71	77.5	0.39
Make generalisations and draw inferences based on what they have read	88.3	2.33	81.7	0.36
Describe the style or structure of the text they have read	66.4	3.95	68.8	0.42
Determine the author's perspective or intention	62.0	3.92	65.7	0.43

Source: Appendix Table A5.30.

Trends in strategies and approaches used in reading lessons

A similar question about teaching and learning activities used during reading lessons was administered in 2011, with one statement differing in 2011 from 2016.[43] Figure 5.12 presents the comparable percentages of pupils whose teachers completed each teaching and learning activity during reading lessons at least weekly in 2011 and in 2016. The trend in responses is overall very consistent from 2011 to 2016. The only activity used at least weekly by a significantly higher proportion in 2016 (94%) than 2011 (81%) was *teaching pupils new vocabulary systematically*.

Figure 5.12: Percentages of pupils in Ireland whose teachers completed the following teaching and learning activities during reading lessons *at least weekly* in 2016 and 2011



Source: Appendix Table A5.29.

43 Specifically, the 2011 question included one statement which was moved in 2016 (*Give pupils time to read books of their own choosing*), and did not include one statement added in 2016 (*Teach pupils how to summarise the main ideas*).

The trend in the tasks assigned to help develop comprehension skills was also fairly consistent from 2011 to 2016 (Table 5.7). In 2016, teachers of 82% of pupils reported comparing what they had read with other things they had read at least weekly, which was significantly higher than the proportion reported in 2011 (68%). It is noted above that describing the style or structure of the text they had read and determining the author's perspective or intention were reported least frequently of all tasks in 2016, and this was also seen in 2011. However, in both instances, the frequency increased from 2011 to 2016, though not to a significant extent. For all other tasks, apart from locating information within the text which was a regular task for virtually all pupils in both cycles, frequency increased between 2011 and 2016, although sometimes marginally.

Table 5.7: Percentages of pupils in Ireland whose teachers assigned the following activities to help develop comprehension skills *at least weekly* in 2016 and 2011

	2011	2016
Locate information within the text	98.3	98.0
Identify the main ideas of what they have read	96.9	98.5
Explain or support their understanding of what they have read	95.9	97.4
Compare what they have read with experiences they have had	87.0	89.9
Compare what they have read with other things they have read	68.4	81.9
Make predictions about what will happen next in the text they are reading	91.4	95.7
Make generalisations and draw inferences based on what they have read	82.7	88.3
Describe the style or structure of the text they have read	57.8	66.4
Determine the author's perspective or intention	51.8	62.0

Source: Appendix Table A5.31.

School DEIS status and strategies and approaches used in reading lessons

In almost all cases, the frequency with which teachers used various activities, strategies and tasks during reading lessons did not vary significantly between urban DEIS and other schools. However, all pupils in urban DEIS schools (100%) had teachers who reporting reading aloud to the class on at least a weekly basis, a proportion higher than that in other schools (93%). (Appendix Table A5.32). Teachers of pupils in urban DEIS schools (78%) were significantly more likely to report providing materials that were appropriate for reading levels of individual pupils in *every or almost every lesson* than teachers of pupils in other schools (57%) (Appendix Table A5.33). When asked about reading tasks to help develop comprehension skills, in most cases responses did not vary significantly by school type. However, significantly fewer pupils in urban DEIS schools (63%) than other schools (85%) had teachers who asked them at least weekly to compare what they had read with other things they had read (Appendix Table A5.34).

Post-reading activities

Post-reading activities allow teachers to assess the learning and understanding of pupils, and allow pupils to further synthesise their learning and develop higher-order skills (DES, 2011b). Teachers in PIRLS were asked to report how often they completed the following activities after pupils had read something: *write something about or in response to what they have read; answer oral questions about or orally summarise what they have read; talk with each other about what they have read; take a written quiz or test about what they have read.*

Post-reading activities in Ireland and internationally

Table 5.8 presents percentages of pupils by the frequency with which their teachers completed various post-reading activities, in Ireland and on average across all PIRLS countries. Answering oral questions or orally summarising what they had read was the activity most likely to be completed *every day or almost every day* in Ireland (79%), well above the average across all PIRLS countries (60%). Teachers of approximately one-third of pupils in Ireland reported that daily or almost daily they asked pupils to *write something about or in response to what they have read* (32%) or *talk with each other about what they have read* (34%). The post-reading activity of taking a written quiz or test in response to what they have read was least likely to occur on a daily basis (7%), which was below the PIRLS average (12%). Almost one-quarter of pupils in Ireland (24%) had teachers who reported having *never or almost never* assigned a written quiz or test about what they had read, which was nearly double the average across all PIRLS countries (13%).

Table 5.8: Percentages and mean achievement of pupils by the frequency with which their teachers assigned various post-reading activities, in Ireland and on average across all PIRLS countries

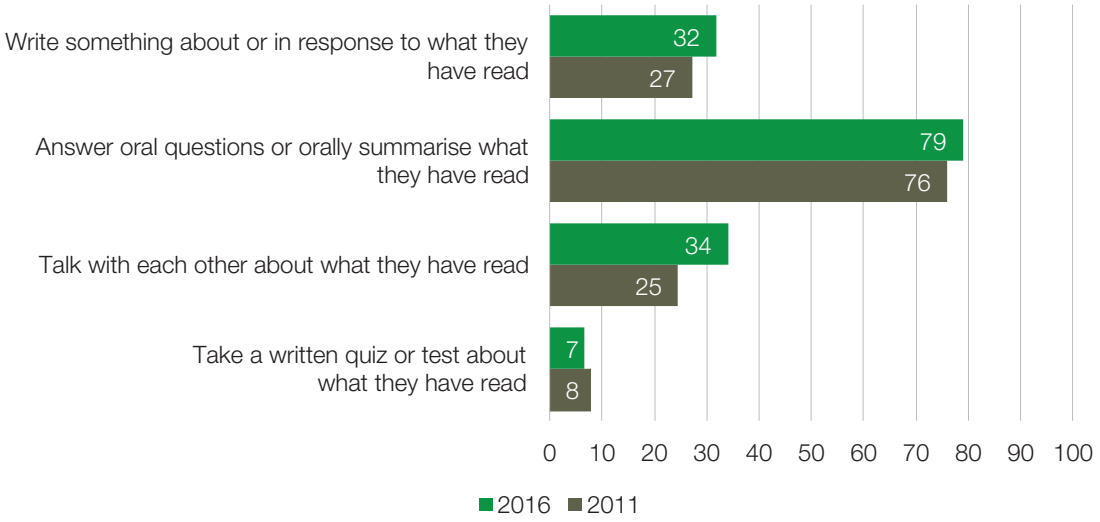
	Never or almost never	Once or twice a month	Once or twice a week	Every day or almost every day
	Write something about or in response to what they have read			
Ireland	0.0	10.9	57.2	31.8
Overall PIRLS	5.1	23.8	46.5	24.6
	Answer oral questions about or orally summarise what they have read			
Ireland	0.0	2.2	18.9	78.9
Overall PIRLS	0.6	7.2	32.3	59.9
	Talk with each other about what they have read			
Ireland	3.5	15.9	46.6	34.0
Overall PIRLS	4.8	18.1	42.5	34.7
	Take a written quiz or test about what they have read			
Ireland	24.2	33.4	35.7	6.7
Overall PIRLS	12.8	42.2	33.2	11.9

Source: Appendix Table A5.35.

Trends in post-reading activities

The same question was administered in 2011, allowing for a trend analysis to be completed. The trend in frequency of post-reading activities is generally consistent between 2011 and 2016. Figure 5.13 presents the percentages of pupils whose teachers assigned post-reading tasks *every day or almost every day.* All post-reading activities were reported to be used daily (or almost daily) for more pupils in 2016 than in 2011, with the exception of *taking a written quiz or test about what they have read* which remained rare in both 2011 (8%) and 2016 (7%). However, differences were not significant.

Figure 5.13: Percentages of pupils in Ireland whose teachers assigned the following post-reading tasks *every day or almost every day*, in 2016 and 2011



Source: Appendix Table A5.36.

School DEIS status and post-reading activities

There were some differences in the frequency with which teachers reported completing the various post-reading activities in urban DEIS and other school types. Answering oral questions about or orally summarising what they had read was the activity most likely to be completed on a daily basis in urban DEIS schools (66%) and in other school types (81%) but this difference in percentages was not significant (Appendix Table A5.37). Each of the other activities occurred more often on a daily basis in urban DEIS schools than other schools. Teachers of almost one-tenth (8%) of pupils in urban DEIS schools reported that they *never or almost never* asked pupils to talk with each other about what they have read, which was above the proportion reported in other schools (3%), although it should be remembered that 8% of urban DEIS pupils represents only a small number of classrooms. Teachers of 16% of pupils in urban DEIS schools *never or almost never* assigned pupils to take a written quiz or test about what they had read, but this was lower than the proportion reported in other schools (25%).

Resources for pupils who struggle with reading

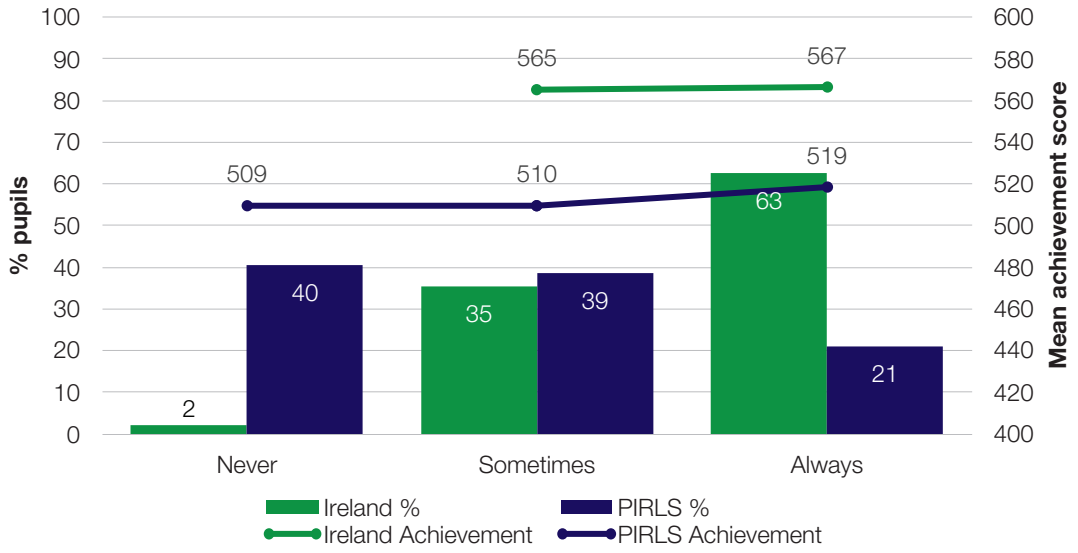
The teacher questionnaire included a section on reading difficulties and asked teachers two questions related to the resources available for pupils who struggled with reading. The first question asked teachers to indicate the frequency (*always, sometimes,* or *never)* with which a specialised professional (e.g. Learning Support teacher,[44] speech therapist), a classroom assistant, and an adult/parent volunteer were available to work with pupils who had difficulties with reading. The second question asked teachers to indicate whether they used the following approaches if a pupil began to fall behind in reading: *have a pupil work with a specialised professional (e.g. Learning Support teacher, speech therapist); wait to see if performance improves with maturation; spend more time working on reading individually with that pupil; ask the parents to help the pupil with reading; recommend that the pupil be enrolled in a special reading programme.*

44 This term was in use when PIRLS 2016 was administered, but has since been replaced by the term Special Education Teacher (SET).

Resources available for pupils who struggle with reading in Ireland and internationally

In Ireland, the majority of pupils (63%) were in classes that *always* had a specialised professional (e.g. Learning Support teacher, speech therapist) available to help pupils who have difficulties with reading, which is nearly three times the average reported across all PIRLS countries (21%) (Figure 5.14). In Ireland and on average across PIRLS countries, similar proportions reported having a specialised professional *sometimes* (35% vs 39% respectively) while only 2% of pupils in Ireland *never* had a specialised professional available, compared with 40% of pupils on average across all PIRLS countries.

Figure 5.14: Percentages and mean achievement of pupils by the frequency with which they have a specialised professional available to help pupils who have difficulty reading, in Ireland, and on average across all PIRLS countries

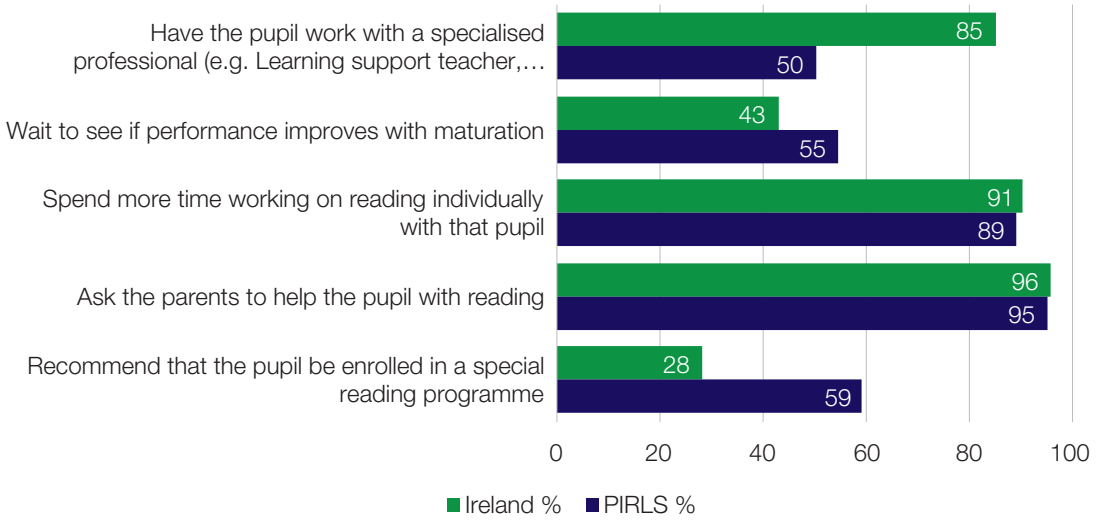


Source: Appendix Table A5.38.
Note. Mean achievement for *Never* in Ireland is not reported due to insufficient data.

The proportions of pupils in Ireland who had a classroom assistant available *always* (10%), *sometimes* (25%), and *never* (65%) are somewhat more in line with the proportions reported on average across all PIRLS countries (14%, 32%, and 55% respectively). Very few pupils in Ireland had an adult or parent volunteer to help pupils who struggle with reading (87% reported *never* having an adult or parent volunteer, compared to 70% on average across PIRLS countries).

When teachers were asked what they did when a pupil began to fall behind, the most common response in Ireland (96%) and on average across all PIRLS countries (95%) was that they asked the parents to help the pupil with reading (Figure 5.15). In Ireland, most pupils had teachers who spent more time working on reading individually with struggling pupils (91%) and assigned such pupils to work with a specialised professional (85%). The high proportion reported in Ireland for having the pupil work with a specialised professional may be linked to the high proportion who reported *always* having a specialised professional available. Teachers of more than two-fifths of pupils in Ireland (43%) reported waiting to see if performance would improve with maturation, while more than one-quarter (28%) reported recommending that the pupil be enrolled in a special reading programme.

Figure 5.15: Percentages of pupils whose teachers indicated doing the following activities when a pupil begins to fall behind in reading, in Ireland and on average across all PIRLS countries



Source: Appendix Table A5.40.

Trends in resources available for pupils who struggle with reading

Similar questions were asked about the resources available for pupils who struggled with reading in 2011 and 2016. Almost all pupils had access to a specialised professional at least *sometimes* in both 2011 (99%) and 2016 (98%). In 2011, more than three-quarters (78%) of pupils had a specialised professional (e.g. Learning Support teacher, speech therapist) *always* available which was significantly higher than in 2016 (63%) (Appendix Table A5.42). In 2011, 21% of pupils had a classroom assistant available *always*, compared to 10% in 2016, while the proportion that reported *never* having a classroom assistant increased between cycles (47% in 2011, compared to 65% in 2016). As previously reported, in 2016, most pupils did not have an adult or parent volunteer to help pupils who are struggling with reading (87%), which has increased marginally from 2011 (84%). In 2011, teachers of 2% of pupils reported *always* having an adult or parent volunteer available, and this fell to below 1% in 2016.

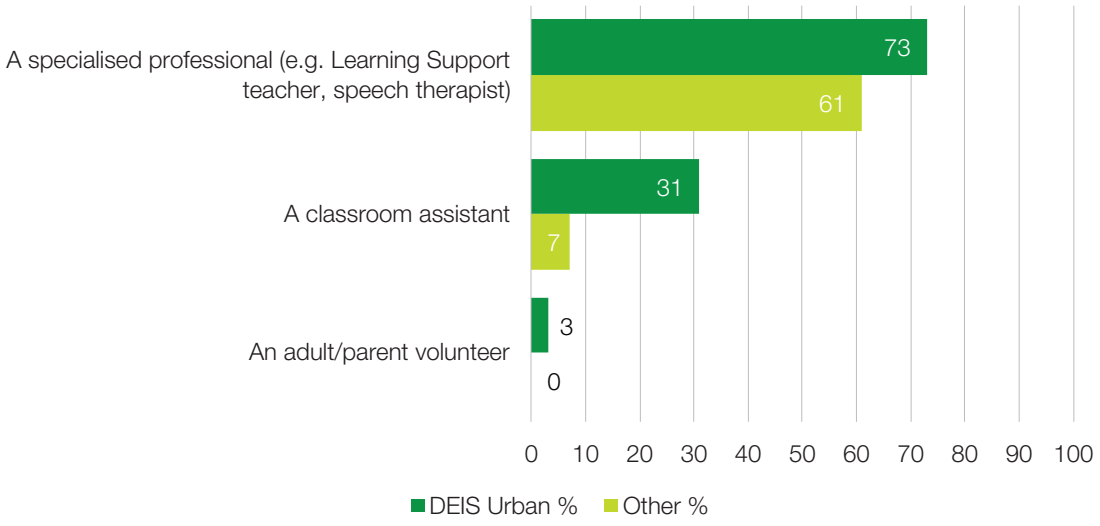
In 2011, teachers were also asked about what they did if a pupil began to fall behind in reading. In both cycles, the most common approaches were to ask a parent to help the pupil with reading (95% in 2011 and 96% in 2016) and to spend more time working on reading individually with that pupil (89% in 2011 and 91% in 2016). Teachers of significantly more pupils reported having the pupil work with a specialised professional in 2016 (85%) than in 2011 (74%)[45] (Appendix Table A5.44). The proportion of pupils whose teachers reported that they wait to see if performance improves with maturation also increased from 2011 (37%) to 2016 (43%), but this difference was not significant.

45 It should be noted that the 2011 statement referred to having the pupil work with 'a specialised professional (e.g., Learning Support *or resource teacher*)' while the 2016 statement referred to 'a specialised professional (e.g., Learning Support teacher, *speech therapist*)' (italics added). There was no such difference in phrasing between cycles in the question about availability of a specialised professional, where the listed examples were '(e.g., Learning Support teacher, speech therapist)' on both occasions.

School DEIS status and resources available for pupils who struggle with reading

Regarding the availability of resources for pupils who struggle with reading, the proportion that *always* had these resources was higher in all cases in urban DEIS schools than in other schools, as might be expected (Figure 5.16; see also Appendix Tables A5.45 and A5.46). The proportion that reported *always* having a classroom assistant available in urban DEIS schools (31%) is four times the proportion reported in other schools (7%), which is substantial and significant. More than three-fifths in other schools reported *always* having a specialised professional (61%), but this rose to almost three-quarters in urban DEIS schools (73%). A small proportion of pupils in urban DEIS schools had teachers who reported *always* having an adult or parent volunteer (3%), in comparison to none in the other schools.

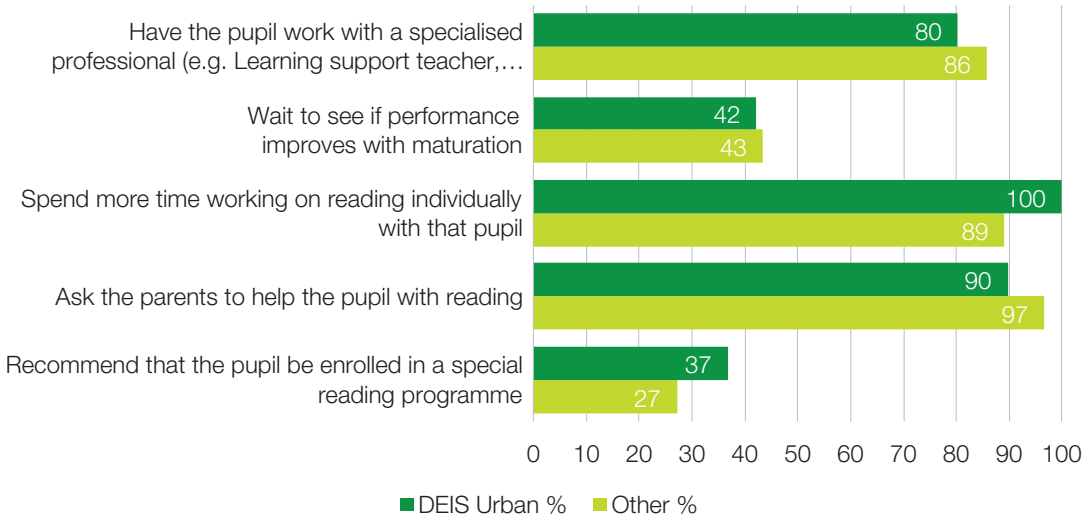
Figure 5.16: Percentages of pupils in Ireland, in urban DEIS schools and other schools, whose teachers indicated that they *always* have the following resources available to help pupils who struggle with reading



Source: Appendix Table A5.45.

Figure 5.17 presents the percentages of pupils whose teachers reported using the various approaches if a pupil began to fall behind in reading in urban DEIS and other schools. Teachers of all pupils in urban DEIS schools (100%) reported spending more time working on reading individually with that pupil, which was more than in other schools (89%). The proportion that reported having the pupil work with a specialised professional and asking the parents to help the pupil with reading was lower in urban DEIS schools than in other schools, although these approaches remained common across both school types. Conversely, the proportion reported for *I recommend that the pupil be enrolled in a special reading programme* was higher in urban DEIS schools (37%) than in other school types (27%), though not significantly so (Appendix Table A5.47).

Figure 5.17: Percentages of pupils in Ireland whose teachers reported the following strategies if a pupil begins to fall behind in reading, in urban DEIS schools and other schools



Source: Appendix Table A5.47.

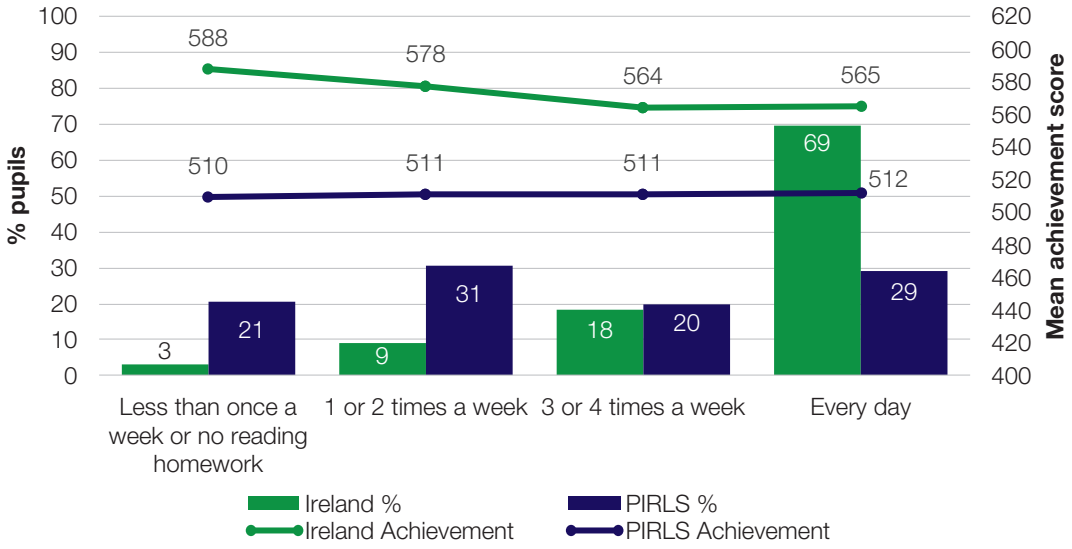
Reading homework

Teachers were asked three questions relating to reading homework. The first question asked how often they assigned reading as part of homework (*I do not assign reading for homework, less than once a week, 1 or 2 times a week, 3 or 4 times a week* or *every day*). The second question asked how much time they expected pupils to spend on homework involving reading (for any subject) each time they assigned it. Teachers were asked to choose from the following options: *15 minutes or less; 16-30 minutes; 31-60 minutes; more than 60 minutes.* The final question asked teachers how often (*always or almost always, sometimes* or *never or almost never)* they did the following with reading homework assignments for the class: *correct assignments and give feedback to pupils; discuss the homework in class; monitor whether or not the homework was completed.*

Reading homework in Ireland and internationally

Most pupils in Ireland (69%) received reading homework *every day*, which is more than twice the average across all PIRLS countries (29%). A further 18% and 9% of pupils received reading homework *3 or 4 times a week* or *1 or 2 times a week* respectively (compared to 20% and 31% internationally). This shows that nearly all pupils in Ireland received reading homework on a very regular basis. Figure 5.18 presents the percentages and mean achievement scores of pupils by the frequency with which their teacher assigned reading homework in Ireland, and on average across all PIRLS countries. As frequency of reading homework increases, the mean achievement of pupils decreases before stabilising, but caution must be used in interpreting these data due to the size of some standard errors (Appendix Table A5.48 – see also note below Figure 5.18). It is clear that the responses reported in Ireland differ greatly from the average across all PIRLS countries.

Figure 5.18: Percentages and mean achievement of pupils by the frequency with which their teacher assigned reading homework, in Ireland, and on average across all PIRLS countries



Source: Appendix Table A5.48[46]
Note: Category - Less than once a week or no reading homework:
Due to the small percentage of pupils in Ireland in this category, standard errors are high and achievement data in particular must be interpreted with a high degree of caution. Ireland's data: 3.16% (SE 1.36) and achievement 587.98 (SE 13.02))

When asked how long teachers expect pupils to spend on reading homework each time it is assigned, teachers of the majority of pupils in Ireland that received homework (55%) reported *15 minutes or less*, while a further 35% reported *between 16 and 30 minutes* (Appendix Table A5.49). No teachers in Ireland reported that they expected pupils to spend *more than 60 minutes* on reading homework each time it was assigned. The responses in Ireland vary from those reported on average across all PIRLS countries, where the majority (55%) reported *16 – 30 minutes* and one-quarter reported *15 minutes or less*. In other words, on average across all PIRLS countries, teachers expected pupils to spend more time on reading homework activities than in Ireland. This may be due in part to the fact that teachers in Ireland required pupils to complete reading homework on a more regular basis than teachers internationally – a "little and often" approach.

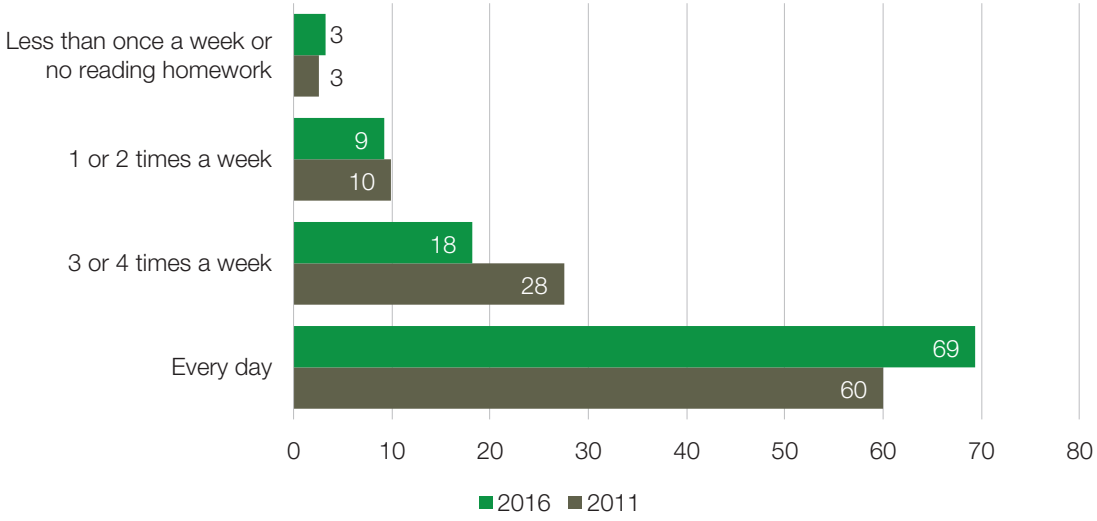
Almost all pupils that received reading homework had the completion of their homework monitored *always or almost always* in Ireland (90%) and on average across all PIRLS countries (89%) (Appendix Table A5.50). In Ireland, teachers of high proportions of pupils that received homework reported *always or almost always* correcting assignments and giving feedback to pupils (80%) and discussing the homework in class (77%). In each of these cases, the proportions in Ireland were above those reported on average across all PIRLS countries.

Trends in reading homework

In 2011, 88% of pupils had reading homework assigned either *3 or 4 times a week* or *every day*, which is in line with the proportion reported in 2016 (Figure 5.19). However, in 2011, 60% of pupils had reading homework assigned *every day* (compared to 69% in 2016) and 28% had reading homework assigned *3 or 4 times a week* (compared to 18% in 2016). There were very slight differences in the proportions reported for the *no reading homework, less than once a week* or *1 or 2 times a week* categories.

46 Due to the small proportion of students whose teachers do not assign reading homework, this category has been combined with that of those assigned homework less than once a week for the graphs in this section.

Figure 5.19: Percentages of pupils in Ireland by how often reading homework was assigned in 2016 and 2011



Source: Appendix Table A5.51.

In 2011, over three-fifths of pupils (61%) had teachers who expected them to spend *15 minutes or less* on reading homework, which is slightly above the proportion reported in 2016 (55%) but not significantly so (Appendix Table A5.52). Similar proportions in both cycles were expected to spend *between 16 and 30 minutes* on their reading homework. Teachers of one in twenty pupils (5%) of pupils in 2011 reported expecting *between 31 and 60 minutes*, with this proportion doubling in 2016 (10%).

Significantly more pupils that received reading homework had teachers who *always or almost always* monitored whether or not the homework was completed in 2011 (97%) than in 2016 (90%) (Appendix Table A5.54). The proportions remained consistent between 2011 and 2016 when teachers were asked if they corrected assignments and gave feedback to pupils (82% in 2011 and 80% in 2016) and discussed the homework in class (76% in 2011 and 77% in 2016).

School DEIS status and reading homework

Significantly more pupils in urban DEIS schools received reading homework *every day* (84%) in comparison to pupils in other schools (67%) (Appendix Table A5.55). Additionally, teachers of fewer pupils in urban DEIS schools (43%) expected their pupils to spend *15 minutes or less* on their reading homework than in other schools (57%), although this difference was not significant (Appendix Table A5.56). The proportion of pupils that received reading homework whose teachers reported *always or almost always* monitoring whether or not the homework was completed was higher, although not significantly so, in urban DEIS schools (95%) than in other schools (89%) (Appendix Table 5.57).

Assessing reading

Teachers were asked to indicate how much emphasis (*major emphasis, some emphasis,* or *little or no emphasis)* they placed on the following sources to monitor pupils' progress in reading: *assessment of pupils' ongoing work; classroom tests (for example, teacher-made or textbook tests); national or regional achievement tests.*

Assessing reading in Ireland and internationally

In Ireland and internationally, major emphasis was placed on the assessment of pupils' ongoing work in reading. Teachers of over three-quarters of pupils in Ireland (77%) reported placing *major emphasis* on the assessment

of pupils' ongoing work with over four-fifths reported on average internationally (82%) (Table 5.9). Nearly all teachers put at least *some emphasis* on the assessment of pupils' ongoing work. In Ireland, a similar proportion reported placing *major emphasis* on classroom tests (45%) and national or regional achievement tests (43%). This was below the average internationally for classroom tests (60%) and above the average internationally for national or regional achievement tests (33%). Teachers of less than 5% of pupils in Ireland reported placing *little or no emphasis* on national or regional achievement tests while the average internationally was over four times greater than the proportion reported in Ireland. The mean achievement scores of pupils did not differ greatly based on the emphasis placed by their teachers on the various approaches to assessment of reading.[47]

Table 5.9: Percentages of pupils by the emphasis their teachers placed on various sources for monitoring pupils' progress in reading, in Ireland and on average across all PIRLS countries

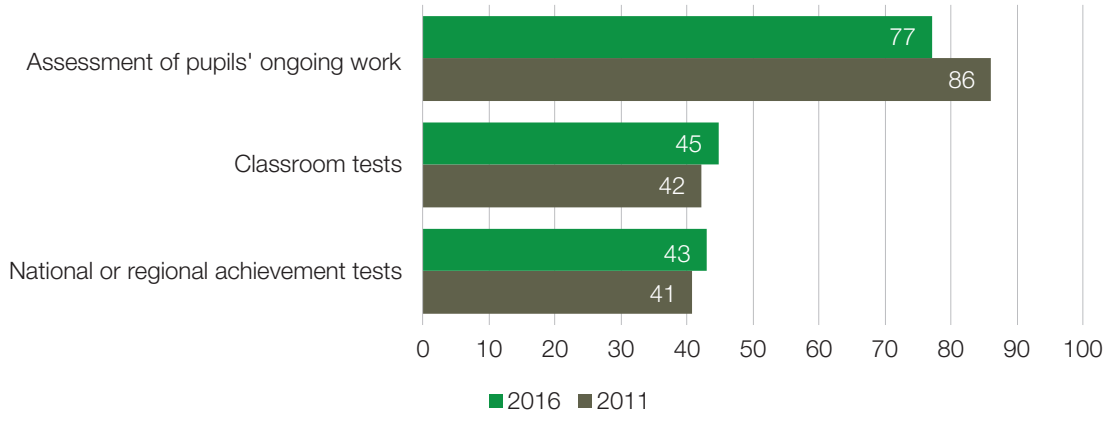
	Major emphasis	Some emphasis	Little or no emphasis
	Assessment of pupils' ongoing work		
Ireland	77.2	22.4	0.5
Overall PIRLS	82.4	17.2	0.4
	Classroom tests (for example, teacher-made or textbook test)		
Ireland	44.7	53.4	1.8
Overall PIRLS	60.1	35.9	4.1
	National or regional achievement tests		
Ireland	43.0	52.9	4.1
Overall PIRLS	33.2	46.9	19.9

Source: Appendix Table A5.58.

Trends in assessment of reading

The same question was asked in 2011 as part of the teacher questionnaire, which allows for a comparison across cycles. In 2011, teachers of 86% of pupils reported placing *major emphasis* on the assessment of pupils' ongoing work, which is significantly more than in 2016 (77%) (Figure 5.20). The emphasis placed on classroom tests and national or regional achievement tests did not differ greatly from 2011 to 2016.

Figure 5.20: Percentages of pupils in Ireland whose teachers placed *major* emphasis on the following sources to monitor pupils' progress in reading in 2011 and 2016



Source: Appendix Table A5.60.

47 In some instances, the mean achievement scores were greater for the *little or no emphasis* category but due to the small proportions reported in this category (and large standard errors) the differences are not significant.

School DEIS status and assessing reading

Overall, there is little variation by school DEIS status in the emphasis placed on various types of assessment of reading. More teachers indicated placing *major emphasis* on classroom tests and national or regional tests in urban DEIS schools than in other school types, but not to a significant extent (Appendix Table A5.62).

Table 5.10: Percentages of pupils in Ireland in urban DEIS schools and other schools by the emphasis their teachers placed on various sources to monitor pupils' progress in reading

	Major emphasis	Some emphasis	Little or no emphasis
	Assessment of pupils' ongoing work		
DEIS Urban	75.6	24.4	0.0
Other	77.4	22.0	0.5
	Classroom tests (for example, teacher-made or textbook test)		
DEIS Urban	50.6	46.5	2.9
Other	43.8	54.5	1.7
	National or regional achievement tests		
DEIS Urban	58.4	33.9	7.6
Other	40.5	55.9	3.5

Source: Appendix Table A5.61.

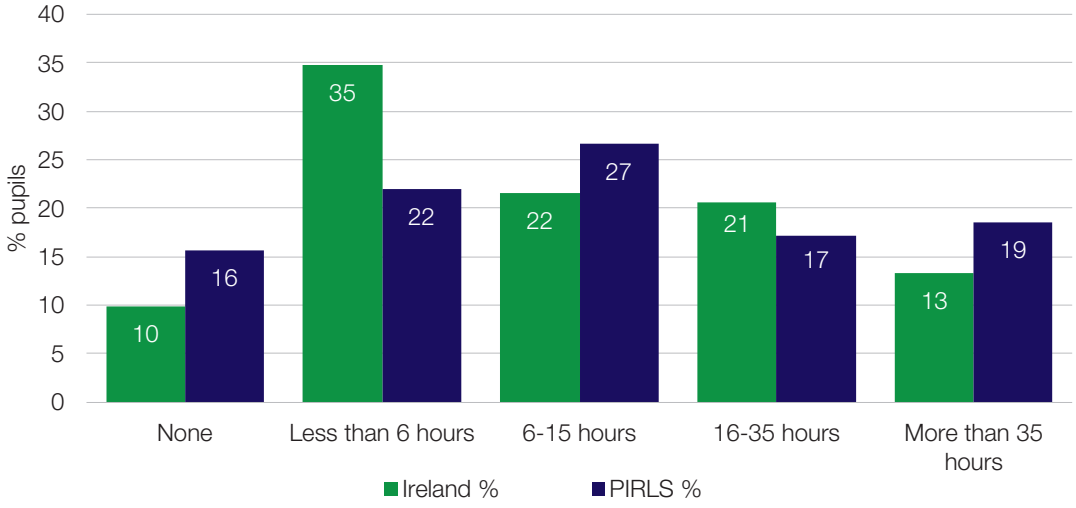
Teacher professional development

The National Strategy for Literacy and Numeracy highlighted the need for continuing high-quality professional development to maintain and enhance the professional practice of teachers and hence the learning of pupils (DES, 2011b). As part of the teacher questionnaire, teachers were asked to indicate how many hours of formal professional development they had completed, in the previous two years, that dealt directly with reading or teaching reading. They were provided with five response options: *None, less than 6 hours, 6-15 hours, 16-35 hours*, or *more than 35 hours*.

Teacher professional development in Ireland and internationally

In Ireland, one in ten pupils were taught by teachers who had completed no professional development in reading or teaching reading in the previous two years (Figure 5.21). This is below the average internationally (16%). The most frequent response in Ireland was *less than 6 hours*, as reported by teachers of one-third of pupils. Teachers of just over one-fifth of pupils reported completing between six and 15 hours of professional development related to reading, while a similar proportion reported between 16 and 35 hours. On average internationally, almost one-fifth reported completing more than 35 hours of professional development, which is above the proportion reported in Ireland (13%).

Figure 5.21: Percentages of pupils by how many hours their teachers had spent during the previous two years in formal professional development activities that dealt directly with reading or teaching reading, in Ireland and on average across all PIRLS countries

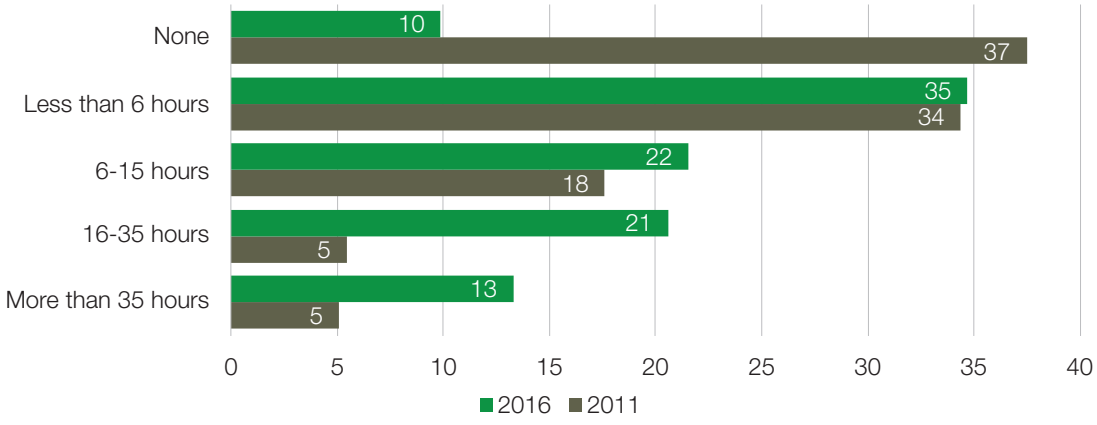


Source: Appendix Table A5.63.

Trends in teacher professional development

The question was also administered as part of PIRLS 2011, which allows for trend analysis. Figure 5.22 presents the proportion of pupils by how many hours of professional development in reading their teachers had completed in the past two years. There was a substantial and significant decrease in the proportion of pupils whose teachers did not complete any formal professional development that dealt directly with reading or the teaching of reading. In 2011, teachers of almost two-fifths (37%) reported completing no professional development that focused on reading or the teaching of reading, which dropped to teachers of one-tenth in 2016. The proportion reported for between 16 and 35 hours was four times greater in 2016 (21%) than in 2011 (5%), while teachers of twice as many pupils reported completing more than 35 hours in 2016 (13%) than in 2011 (5%). This indicates a noteworthy overall increase in teachers' uptake of reading-related professional development from 2011 to 2016.

Figure 5.22: Percentages of pupils in Ireland, in 2011 and 2016, by how many hours their teachers had spent during the previous two years in formal professional development activities that dealt directly with reading or teaching reading



Source: Appendix Table A5.64.

School DEIS status and teacher professional development

Table 5.11 presents the percentages of pupils in urban DEIS and other school types by how many hours their teachers spent during the previous two years in formal professional development activities that dealt directly with reading or teaching reading. Across school types, a similar proportion reported having not completed any professional development. Teachers of more pupils in urban DEIS schools (19%) than in other school types (12%) reported completing more than 35 hours. However, the difference in the proportion reported for the second-longest option of between 16 and 35 hours was significant (23% in other school types and 8% in urban DEIS schools).

Table 5.11: Percentages of pupils in Ireland, in urban DEIS schools and other schools, by how many hours their teachers spent in formal professional development activities that dealt directly with reading or teaching reading.

	DEIS Urban	Other
None	8.0	10.2
Less than 6 hours	41.4	33.6
6-15 hours	24.1	21.2
16-35 hours	7.8	22.6
More than 35 hours	18.8	12.4

Source: Appendix Table A5.65.

Chapter summary

Most Fourth class pupils in Ireland were *very engaged* in reading lessons (62%), with just 4% being *less than engaged*, which was in line with the international average. The mean achievement scores of those who were *very engaged* did not differ significantly from the mean scores of those who were *somewhat engaged* or *less than engaged*. Pupils were at least as likely to agree with each of the statements used to create the *Students Engaged in Reading Lessons* scale in 2016 as they were in 2011. Significantly more girls than boys were *very engaged* in reading lessons, while twice as many boys as girls were *less than engaged*. This was somewhat similar to the pattern observed on average across all PIRLS countries.

In Ireland, almost one-quarter of total instruction time was spent on English language instruction, which was slightly below the average reported internationally. The 2011 National Strategy to Improve Literacy and Numeracy provided for an extra hour per week to be spent on the development of literacy skills, especially in the school's first language, and almost four-fifths of pupils in English-medium schools had teachers who reported meeting or exceeding this requirement. Since 2011, the average time spent on English language instruction in Ireland appears to have increased. In Ireland, 16% of total instruction time is spent on *reading* instruction, again slightly below the average internationally (18%). There was no substantial change in the time spent on reading instruction in Ireland from 2011 to 2016.

In Ireland, whole-class instruction was the most frequent organisational approach used during reading lessons, which was also the pattern internationally. Group work, including same-ability grouping and mixed-ability grouping, was used less frequently, and less than on average internationally. Teachers in urban DEIS schools reported using whole-class instruction less often than teachers in other schools.

In Ireland and internationally, teachers were somewhat more likely to use literary reading materials than informational reading materials during reading lessons. In Ireland, short stories were the most commonly

used text type, followed by longer fiction books and non-fiction subject area books or textbooks. The trend in the text types used from 2011 to 2016 was generally consistent. However, short stories, longer fiction books, and non-fiction subject area books or textbooks (the most frequently used text types in 2016) were used significantly more often in 2016 than in 2011. On the other hand, non-fiction articles were used less often in 2016 than in 2011.

Almost two-fifths of pupils in Ireland had computers (which may include tablets) available to them during reading activities, which is below the average internationally. The mean achievement of pupils who had a digital device available during reading lessons did not differ significantly in paper PIRLS or ePIRLS from the achievement of those who did not have a digital device available. Counter-intuitively, fewer pupils had access to a computer during reading lessons in 2016 than in 2011 (see also Eivers, 2019).

Teachers of most pupils in Ireland completed the following activities during reading lessons at least weekly: reading aloud to pupils; asking pupils to read aloud; asking pupils to read silently on their own; teaching pupils strategies for decoding sounds and words; teaching pupils new vocabulary systematically. It was somewhat less common to teach pupils to summarise the main ideas of a text, and to teach or model skimming or scanning strategies. High proportions of pupils also had teachers who reported using various teaching and learning strategies in *every or almost every* lesson, which was in line with or above the average internationally. Teachers also reported completing activities to help build comprehension skills on a regular basis, again generally above the average internationally.

The most common post-reading activities completed on a daily or almost daily basis in Ireland included pupils orally answering questions about a text, writing something about or in response to what they had read, and talking with each other about what they had read. The activity of taking a written quiz or test was used least often. The trend in post-reading activities since 2011 is generally consistent.

Most pupils in Ireland *always* had a specialised professional available to help pupils who have difficulties with reading. In comparison, teachers of fewer pupils reported having classroom assistants or adult or parent volunteers available. If pupils began to struggle with reading, teachers in Ireland were most likely to ask the parents to help the pupil with reading, spend more time working on reading individually with that pupil, and/or have the pupil work with a specialised professional. The proportions reported in all cases were above the averages internationally. In 2011, significantly more pupils than in 2016 *always* had a specialised professional available to help pupils who struggle with reading. As might be expected, the proportion of pupils in urban DEIS schools whose teachers reported having resources available for pupils who struggle with reading was higher than in other schools.

Pupils in Ireland received reading homework on a more regular basis than on average internationally, with most pupils receiving it every day. A majority of pupils were expected to spend 15 minutes or less on their reading homework, which was reported as being *always or almost always* monitored, corrected, and discussed by the majority of teachers. There were no significant differences in the frequency with which reading homework was assigned in 2011 and 2016. Significantly more pupils in urban DEIS schools received reading homework daily than in other schools.

In Ireland and internationally, a strong emphasis is placed on assessing pupils' progress in reading, with almost all pupils' teachers placing at least some emphasis on the assessment of pupils' ongoing work. In Ireland, over two-fifths reported placing *major emphasis* on other sources of assessment such as classroom tests and national or regional assessments. Placing *major emphasis* on the assessment of pupils' ongoing work was reported significantly more in 2011 than in 2016, with the proportions emphasising other forms of assessment remaining generally consistent. The emphasis on the assessment of reading did not differ substantially or significantly by DEIS status.

Almost all teachers reported completing some formal professional development that dealt with reading or the teaching of reading in the two years previous to PIRLS 2016. This represented a large and significant increase from just over three-fifths in 2011. In 2016, more teachers also reported spending longer amounts of time on reading-related professional development, and teachers of over one-tenth of pupils reported completing more than 35 hours over the previous two years.

Chapter 6:
Key findings and discussion

Pupils' perspectives: Reading attitudes, confidence, and behaviour

Reading attitudes

Pupils in Ireland held more positive attitudes to reading than those in many comparison countries, and pupils who liked reading more tended to achieve higher reading scores, although this association was weak-to-moderate.[48] Overall, the reading attitudes of pupils in Ireland remained very stable between 2011 and 2016. This stability is a welcome contrast to an international trend of deteriorating attitudes to reading at primary level (Hooper, 2020), and to a pattern, seen in Ireland as well as internationally, of deteriorating attitudes at post-primary level (McKeown et al., 2019; Schleicher, 2019; Shiel et al., 2022).

More than four in five pupils in Ireland agreed (*a lot* or *a little*) that they enjoyed reading, learned a lot from reading, liked to read things that made them think, and liked it when a book helped them imagine other worlds. However, pupils were less likely to agree that they liked talking about what they read with other people – and, between 2011 and 2016, the proportion that *agreed a lot* with this statement decreased.

Boys in Ireland liked reading significantly less than girls, reflecting the findings of other studies (e.g. Clerkin & Creaven, 2013; Kavanagh et al., 2015; McCoy, Smyth & Banks, 2012; McNamara et al., 2021; Shiel et al., 2022). One in five boys in Ireland, compared to one in ten girls, *did not like* reading – a figure which is of concern, especially when considered in conjunction with the lower frequency of boys' recreational reading (discussed under 'Reading behaviours', below). The positive association between attitude to reading and reading achievement was of similar strength (weak-to-moderate) for both boys and girls in Ireland, whereas some research in other contexts has found evidence of a stronger relationship between attitude and achievement for boys than girls (e.g. Logan & Johnson, 2009). While a gender gap in attitudes to reading was seen across participating countries, this gap was wider in Ireland than on average internationally.[49]

Previous analysis of the extent to which pupils in Ireland enjoyed specific PIRLS 2016 texts found that boys were somewhat less positive than girls about the Literary (typically narrative) texts, and more positive than girls about some Informational (factual, often non-continuous) texts (Eivers & Delaney, 2018). However, these gender differences were typically smaller in Ireland than on average internationally. In this context, it is of interest that two attitudinal statements on which only small gender gaps were observed in Ireland (with strong majorities of both boys and girls agreeing) were: 'I like to read things that make me think', and 'I like it when a book helps me imagine other worlds'. This suggests that a large proportion of boys as well as girls in primary school have had positive experiences of challenging texts, and perhaps of fantasy-type fiction.[50] A

48 In Gilleece and Eivers' (2018) multilevel model of reading achievement in Ireland in PIRLS 2016, extent of agreement with the statement *I enjoy reading* did not explain a significant proportion of variance once other variables were held constant, although frequency of reading for enjoyment positively predicted achievement in the final model.

49 In contrast, in PIRLS 2011, the gender gap in attitude to reading in Ireland was marginally smaller than the international average (Clerkin & Creaven, 2013). However, it should be borne in mind that the components of the *Students Like Reading* scale were slightly different in 2011 and 2016 (as described in Chapter 3), and that the list of participating countries also differed across the two cycles.

50 However, it is possible that pupils may, legitimately, have interpreted 'other worlds' to refer to the landscapes of factual texts that deal with different historical periods and/or cultures, as well as to fictional/supernatural scenarios.

larger gender gap was observed in pupils' responses to 'I like talking about what I read with other people', the statement about which pupils in Ireland overall, but boys especially, were least convinced. For comparison, in PISA 2018, a minority of 15-year-old girls (44%) and about half that proportion of 15-year-old boys (23%) *agreed* or *strongly agreed* that they liked talking about books with other people (Shiel et al., 2022).

There was no significant difference observed between the extent to which pupils in urban DEIS schools, and their peers in other schools, liked reading. This finding is (tentatively)[51] encouraging, as it suggests that attitudes to reading are, on average, relatively positive across primary schools that serve more and less disadvantaged communities.[52] In contrast, at post-primary level, 15-year-old students in DEIS schools have reported significantly lower enjoyment of reading, on average, than students in non-DEIS schools (Gilleece et al., 2020).

Reading confidence

The reading confidence of pupils in Ireland was higher than that of peers in most comparison countries. There was a moderate-to-strong positive association between reading confidence and reading achievement, and confidence has been shown to remain a strong predictor of PIRLS 2016 achievement when other variables, including socioeconomic status, are controlled for (Gilleece & Eivers, 2018). As with reading attitudes, reading confidence remained consistent in Ireland between the 2011 and 2016 PIRLS cycles.

Reading confidence was very similar across gender groups in Ireland in PIRLS 2016 – despite the fact that reading achievement was significantly higher, on average, among girls. The moderate-to-strong association between reading confidence and reading achievement held for both boys and girls. However, at each index point on the reading confidence scale, the mean achievement of girls was 11 – 12 score points higher than that of boys. For example, the mean achievement of boys who were *not confident* was 499, while for girls who were *not confident* it was 511; the mean achievement of boys who were *very confident* was 587, while for girls it was 599. This might be interpreted as boys being relatively more likely to overestimate their own reading proficiency, and/or as girls being relatively more likely to underestimate theirs. Findings from Ireland's PISA 2018 data indicate that, by the age of 15, the balance tips so that girls are more likely than boys to perceive themselves as having difficulty with reading – although they continue to outperform boys in reading assessments, and there is no significant difference by gender on an index of self-perceived *competence* at reading. The association between reading confidence and reading achievement is evident at post-primary as well as primary level: in a multilevel model, PISA reading achievement in Ireland was positively predicted by self-perceived reading competence and negatively predicted by self-perceived difficulty with reading (Shiel et al., 2022).

There was no significant difference between the reading confidence of pupils in urban DEIS schools and those in other schools, although, as described in Chapter 1, average reading achievement was lower in urban DEIS schools (particularly Urban Band 1 schools).

Reading behaviours

Pupils in Ireland typically spent more of their free time reading than on average internationally, with three in five pupils in Ireland spending at least half an hour per day reading outside of school. Ireland and Northern

51 Readers are reminded that two caveats must be borne in mind for all analyses based on DEIS status in this report. First, the subsample of pupils in urban DEIS schools is relatively small. Second, differences between the contexts of Urban Band 1 and Band 2 DEIS schools may be elided, as (excluding the report of mean achievement in Chapter 1) they are analysed here as a single category. The same applies to differences between the contexts of DEIS Rural and non-DEIS schools.

52 The reading attitudes of urban DEIS pupils in PIRLS 2016 also seem broadly in line with those of a much larger sample of urban DEIS pupils collected in the same year as part of a large-scale evaluation of the DEIS programme. Kavanagh et al. (2017) found that 82% of Third class pupils and 79% of Fifth class pupils in urban DEIS schools *strongly agreed* or *agreed* that they liked reading. In PIRLS 2016, 86% of Fourth class pupils in urban DEIS schools agreed *a lot* or *a little* that they enjoyed reading – a loosely similar finding. Findings related to reading achievement and attitudes in Urban DEIS schools, using NAMER 2021 data, will be published in 2023.

Ireland reported very similar patterns on this, with the Nordic comparison countries (Finland and Norway) reporting much less time spent reading outside school. Two caveats should be noted when interpreting these data. First, although reading for homework was not explicitly mentioned in this question, some pupils may have included it when deciding on their response – and pupils in Ireland and Northern Ireland received homework with similar (high) frequency, as will be discussed later. Second, pupils were not explicitly prompted to consider reading in digital as well as print form when answering questions about their reading habits. Given that they completed the questionnaire immediately after taking a paper-based reading test, many may have thought predominantly about paper-based reading when answering.

When asked about how often they read *for fun*, pupils in Ireland were slightly above the international average, with 43% reading for fun *every day or almost every day* and only 13% *never or almost never* doing so. However, pupils in Ireland read *to find out things they wanted to learn* (outside school) slightly less frequently than pupils on average internationally. The frequency of library use in Ireland was slightly higher than on average internationally, but lower than that in several comparison countries, including Australia, New Zealand, and the US, where majorities used libraries on at least a weekly basis and fewer than 10% never did so. This is likely to reflect higher funding for school libraries in some jurisdictions.

Comparing reading behaviours of pupils in Ireland in 2011 and 2016 revealed broadly similar patterns, but a few interesting differences. There was a very slight but statisically significant decrease (from 12% to 10%) in the percentage that spent the *longest* daily amount of time – two hours or more – reading outside school. The frequency of reading for fun remained stable across the two time points, which is encouraging in light of the decline in frequency of reading for enjoyment among post-primary students between PISA 2009 and PISA 2018 (McKeown et al., 2019; Shiel at al., 2022). The frequency of reading to find out things that pupils wanted to learn decreased significantly between 2011 and 2016, with a drop of 8% in the proportion that did this on a near-daily basis. Very frequent (at least weekly) library usage also became less common, with a drop of 7% from 2011 to 2016.

It is worth considering these findings in light of the association of each behavioural variable with reading achievement. The bivariate analyses in this report found that daily time spent reading outside school and frequency of reading for fun were each positively associated with reading achievement. However, very frequent (daily) reading to find things out and very frequent (weekly) library use were *negatively* associated with achievement, compared to more moderate frequencies of each of these. As suggested by Gilleece and Eivers (2018),[53] it may be that specific homework task types, e.g. looking up and retrieving factual information, are more often assigned to pupils who have difficulty with reading than to pupils who do not. Similarly, it may be that very frequent use of a school (and/or local) library forms part of a designated programme of support for pupils at risk of reading difficulties in some schools, while higher-achieving pupils may tend to use libraries on a more flexible basis.

Boys spent less time than girls reading outside school on a day-to-day basis, while twice as many boys as girls *never or almost never* read for fun. When these findings are examined in relation to findings from other studies, they seem to presage a more alarming pattern at post-primary level: notably, the finding in PISA 2018 that 56% of male 15-year-olds in Ireland, and 39% of their female peers, did not read for enjoyment at all (McKeown et al., 2019; Shiel et al., 2022). In fact, this comparison between PIRLS 2016 and PISA 2018 data may spark concerns about what is happening to reading enjoyment among children and young people in *both* gender groups as they grow older. The more glaring concern is for boys: PIRLS data suggest that the habit of spending time reading, as well as the connection between reading and fun, is less robustly established among boys than girls in Fourth class, which may mean that boys are less likely to establish these behaviours and associations in the future (Williams et al., 2018). However, there is also a concern to be flagged for girls: given

53 In Gilleece and Eivers' (2018) multilevel models of reading achievement in Ireland in PIRLS and ePIRLS 2016, frequency of reading to find things out was negatively associated with outcomes on both the paper-based and digital reading tests.

the strong propensity of Fourth class girls in Ireland to read for fun (with 80% doing so on at least a weekly basis), the much lower enthusiasm of girls sitting PISA at age 15 may suggest a steep decline in its own right.

Some significant differences in reading behaviours were observed between pupils in urban DEIS schools and their peers in other schools. Pupils attending urban DEIS schools spent less time on average reading outside school (with close to half spending less than 30 minutes per day doing this). They also read for fun less often (with nearly one-fifth *never or almost never* reading for fun). As with the gap based on gender, a gap based on school DEIS status appears to be present at primary level before becoming exacerbated at post-primary level. In PISA 2018, 58% of students in DEIS schools, compared to 44% of those in non-DEIS schools, did not read for enjoyment at all (Gilleece et al., 2020).

While the sample numbers in PIRLS 2016 mean that comparisons by gender within urban DEIS schools should be interpreted very cautiously, it is striking that more than one-quarter of the Fourth class boys in urban DEIS schools *never or almost never* read for fun. In a post-primary context, Gilleece et al. (2020) have noted that gender appears to be more strongly associated than school DEIS status with enjoyment of reading, although both variables are salient. In PISA 2018, male students in both non-DEIS and DEIS schools were less likely than female students in either school type to enjoy reading, with the lowest enjoyment reported by male students in DEIS schools.

Reading and the home environment

Data from PIRLS 2016 provided insights into several aspects of literacy in pupils' home environments. These can loosely be grouped as follows: first, parents' own reading attitudes and behaviours; second, parents' recollections of their children's literacy activities and skills in early childhood; and, third, home resources for literacy at the time of PIRLS testing.

Parents' reading attitudes and behaviours

Parents in Ireland, like their children, were relatively positive towards reading (with almost half *very much liking* reading), compared with parents in many other countries. Parental attitudes in Ireland were fairly stable between 2011 and 2016, although parents in 2016 were slightly more likely to agree that they only read if they needed information, and to wish that they had more time for reading – perhaps suggesting that it can be increasingly challenging for parents to find time for leisure reading. Internationally, there was a decline in parents' attitudes towards reading during the same period (Hooper, 2020). From an Irish standpoint, while there was not a clear decline, it may be noted that parental attitudes towards reading did not improve during the first five years of the National Strategy to Improve Literacy and Numeracy, which emphasised both enabling parents to support children's literacy development and improving public attitudes to literacy more generally (DES, 2011b). Parents whose children attended urban DEIS schools had less positive attitudes to reading, on average, than those whose children attended other schools, and about one-fifth of parents with children in urban DEIS schools *did not like* reading.

Parents' reading attitudes were moderately positively associated with their children's reading *achievement*, which was similar to the association observed at post-primary level in PISA 2018 (Shiel et al., 2022). However, there was a weaker positive association between parents' reading attitudes and children's reading *attitudes*. Other studies have also found the effect of 'intergenerational continuity' in reading attitudes to be relatively small (e.g., Pfost et al., 2016). This might suggest that factors other than the attitudes modelled at home – for example, school-based experiences, peer interaction, and/or the development of individual interests – could be important in shaping pupils' outlooks on reading. It might be assumed that any impact of parental values on children's values should weaken as children grow older and gain further exposure to external influences.

However, in Ireland, the correlation between the attitudes to reading of primary school pupils and their parents (as observed in PIRLS 2016) was smaller than that between the attitudes to reading of post-primary students and their parents (as observed in PISA 2018) (Shiel et al., 2022).[54]

The parents who responded to the PIRLS 2016 questionnaire in Ireland were predominantly women. Some previous research has suggested that mothers' attitudes to reading influence the attitudes of daughters more than of sons (e.g., Mullan, 2010). If this held in Ireland, we might expect to see observed parental attitudes to reading (i.e., mainly maternal attitudes) correlate more strongly with the attitudes of girls than of boys. However, no difference was found in the strength of this relationship across pupil gender groups.

Turning to reading behaviours, almost half of parents in Ireland spent at least six hours per week reading for themselves (that is, for work and/or leisure, in print and/or digital format),[55] while about one in ten spent less than an hour per week doing so. When asked specifically about reading for enjoyment, a strong majority of parents in Ireland (80%) reported that they did this on at least a weekly basis, with close to half reporting it on a roughly daily basis. Internationally, this represents a high reported level of parental engagement in reading. It is also consistent with the behaviour reported by the parents of 15-year-olds in PISA 2018, a majority of whom spent at least some time most days reading for enjoyment (Shiel et al., 2022).

It would be useful, in future studies, to learn more about what subtypes of reading both pupils and parents mentally include when responding to questions about reading for enjoyment – for example, to what extent they are thinking of print versus digital media; narrative versus informational texts; social media, instant messages, etc. The Programme for International Assessment of Adult Competencies (PIAAC, a study of the OECD) is of interest in this regard, since it assesses the types of reading that adults engage with during work and out of work (even if it cannot directly inform us about intergenerational transmission as it is a study of adults only). The results of the next cycle of PIAAC, in which Ireland is participating, are expected towards the end of 2024.[56]

Early literacy environment, skills, and language(s)

Caveats

When interpreting the responses of parents in PIRLS to questions about their children's early literacy activities and skills, it should be noted that it is more difficult to recall a situation from more than four years ago with accuracy than it is to report on a current situation.

Additionally, when interpreting international comparisons about early literacy environments, caution is needed due to variation in how these questions were adapted in different countries. The international versions of the questions referred to literacy activities carried out 'before the start of primary/elementary school' and literacy skills possessed at the start of 'the first grade of primary/elementary school'. In Ireland, in 2016, these questions were adapted to refer to activities carried out before First class, and skills possessed at the start of First class. However, a number of other jurisdictions, including some with loosely comparable system structures (e.g. New Zealand, which has eight class levels in primary school, with most children starting school at age 5 – see Chamberlain, 2017), adapted these questions to refer to 'beginning primary school'.

In PIRLS 2011, Ireland had adapted these questions to refer to the start of primary school (rather than First class). Trend comparisons for these variables have not been included in this report in light of the

54 It should be noted that these figures are not directly comparable due to the different instruments and methodologies used in the studies.

55 Unlike pupils, parents were explicitly prompted to consider these various forms of reading when responding to the question about how often they read for themselves.

56 See https://www.oecd.org/skills/piaac/about/piaac2ndcycle/.

different adaptations across cycles. International comparisons on these questions are also difficult to align fully in either cycle. However, examining the data from 2011 and 2016, it appears that parents in Ireland answered the questions about activities fairly similarly on both occasions, but answered the questions about skills quite differently.[57] (This makes intuitive sense, as, while the two grades of Junior and Senior Infants might have some impact on literacy *activities* in the home (e.g. if teachers promoted such activities), they would be expected to have a major impact on the development of literacy *skills*.) On this basis, we suggest that international comparisons about early literacy *activities* can be drawn with a moderate level of confidence, as this question seems relatively unaffected by differences in adaptations. However, international comparisons about early literacy *skills* should be interpreted with a strong caveat.

Early literacy activities

Parents in Ireland reported carrying out early literacy activities with their children in early childhood more often than on average internationally, with more than half *often* having engaged in such activities and just 1% *never or almost never* having engaged in them. Children who had engaged in these activities with their parents more often tended to achieve higher reading scores in PIRLS (an association of moderate strength). Some early literacy activities were more common than others in Ireland: for instance, while at least seven in 10 parents had *often* read books with their children or talked about things they had done together, only four in 10 had *often* talked with their children about things they had *read*. It is possible that parents may find it easier to recall reading with the child (likely to be associated with specific settings and texts) than talking about reading (likely to be less anchored to routines, places and objects). Nonetheless, this finding is of interest in light of the fact that, as mentioned earlier, Fourth class pupils were less enthused by talking with others about what they had read than by other reading-related activities.

Girls' parents engaged somewhat more frequently in early literacy activities with them than boys' parents, which is consistent with Clerkin et al.'s (2020) findings from TIMSS 2015. The widest gender gaps in favour of girls related to activities associated with oral communication (singing songs; talking together about things they had read), and with writing letters of the alphabet.

Parents of pupils attending urban DEIS schools were less likely to report having engaged *often* in early literacy activities with their children than parents of pupils attending other schools, although almost all parents in both groups engaged at least *sometimes* in these activities. The largest observed difference related to the frequency of reading books with young children. The disparity by school DEIS status echoes Clerkin et al.'s (2020) findings that, in TIMSS 2015, parents in families with fewer home resources for learning engaged less frequently in early literacy and numeracy activities with children. It also echoes the GUI finding that reading to young children was more common among parents with a higher educational qualification (Williams et al., 2013).

The pupils who took part in PIRLS 2016 passed through early childhood prior to the introduction of the Strategy, and largely prior to the introduction of the ECCE scheme, which has offered one year (2010-2018) or two years (2018-present) of free pre-school education to all children, with uptake increasing to about 95% by 2019 (DCYA, 2019). In PIRLS 2021, it will be of interest to observe to what extent the landscape in Ireland has

57 In 2011, parents of 50%, 49% and 1% of pupils in Ireland reported carrying out the early literacy activities *often, sometimes* and *never* respectively, prior to the start of primary school (Mullis et al., 2012). This is relatively similar to the 2016 pattern of 55%, 45% and 1% that carried out the activities *often, sometimes* and *never* respectively, prior to the start of First class. 2011 data for Ireland on the *Early Literacy Tasks* scale as a whole are not available. However, comparing the individual variables that contribute to this scale, the percentages of parents who thought their children could do the activities *very well* at the start of school (2011) and at the start of First class (2016) were: 48% vs 79% (recognising letters of the alphabet); 24% vs 62% (reading some words); 11% vs 49% (reading sentences); 28% vs 65% (writing letters of the alphabet); and 16% vs 55% (writing some words). (Parents were not asked in 2011 about how well their child could read a story.) In other words, parents in 2016 were substantially more confident about their children's literacy skills *at the start of First class* than their 2011 counterparts were about their children's literacy skills *at the start of primary school*.

changed in relation to early literacy and numeracy activities – overall, and in terms of disparities by children's gender and socioeconomic circumstances.

Early literacy skills

Parents in Ireland appeared to be more positive than parents in any other participating PIRLS country[58] in their assessment of their children's early literacy skills. However, as discussed above, this should be interpreted with significant caution due to differences in the adaptation of the question across countries. About three in five parents in Ireland indicated that their child could perform early literacy tasks *very well* at the start of First class. From a national perspective, it is encouraging that parents in Ireland generally had positive views of their children's literacy skills at the start of First class – with almost all children (96%) considered either *very well* or *moderately well* able to perform the basic task of recognising letters of the alphabet, and more than three-quarters able to perform the more complex task of reading a story. The positive correlation in Ireland between early literacy skills (as assessed retrospectively by parents) and reading achievement in PIRLS was at the upper end of the moderate range.

While Ireland, relative to comparison countries, had a large gender difference in the reported frequency of early literacy *activities*, it had one of the smallest gender differences in reported proficiency in early literacy *skills* (with parents of just 5% more girls than boys reporting that their children could complete the tasks *very well*). The implementation of the curriculum in the Infants classes in Ireland may have had a partial mitigating effect on any 'lag' caused for boys through less frequent exposure to early literacy activities in the home. However, while gender gaps in favour of girls were small when parents estimated their children's proficiency on early *reading* tasks, wider gaps were observed when parents estimated proficiency on early *writing* tasks.

Parents of pupils attending urban DEIS schools were less positive about their children's literacy skills at the start of First class than parents of pupils in other schools. However, it is still broadly encouraging that more than half of parents in urban DEIS schools thought their children could complete the tasks *very well*, and just 15% (compared to 10% in other schools) considered that their children could *not* complete the tasks well. The gap in (parent-perceived) proficiency by school DEIS status was largest on skills relating to recognising and writing letters of the alphabet, and reading words.

Language(s) used in early childhood

A large majority (93%) of pupils in Ireland spoke English at home before they started school, according to their parents. This figure has remained stable since PIRLS 2011 (Eivers, 2013). Most of this group spoke English only, while 8% of pupils spoke English and at least one other language. The mean PIRLS achievement score for pupils who did not speak English prior to starting school was lower, by about one-third of a standard deviation, than that of pupils who spoke English only. This broadly replicates the finding, in PIRLS 2011, that pupils who spoke English at home before starting school (irrespective of whether they also spoke another language(s)) scored an average 39 points higher in PIRLS than their peers who did not speak English prior to starting school (Eivers, 2013). However, the 2016 analysis also showed that pupils who spoke English *and* at least one other language (which could include Irish) before starting school had a mean score that was similar (higher, although not significantly so) to the mean score of pupils who spoke English only. Furthermore, at the time of the PIRLS test, more than four-fifths of pupils who had spoken English and another language(s) before school now *always* or *almost always* spoke English at home, compared to about half the pupils who had not spoken English at home before starting school. It seems important to consider children who do not speak English at all before school and children who speak English as one of two or more languages as separate subgroups of interest from a policy perspective.

58 Northern Ireland, England and the US, all of which would be comparators of particular interest for Ireland on this index, did not administer the questions about early literacy tasks.

Ongoing home resources and parental input

Home resources for learning

The PIRLS *Home Resources for Learning* scale, often treated as a proxy for socioeconomic status, takes a number of variables into account: number of books and children's books in the home; whether pupils had their own room, and/or an Internet connection; and parents' occupations and education levels. In PIRLS 2016, pupils in Ireland had more home resources for learning than on average internationally, although fewer than peers in comparison countries including Norway and Australia. The availability of a number of resources increased in Ireland between 2011 and 2016. In particular, the likelihood of having an Internet connection increased (rising from 90% in 2011 to 95% in 2016, reflecting the increasing prevalence of digital technology in day-to-day life), as did the level of parental education.

As expected, there was significant disparity in home resources for learning between pupils attending urban DEIS and other schools. In particular, 6% of pupils attending urban DEIS schools, compared to 1% of pupils attending other schools, had *few* home resources for learning. Less than half of pupils in urban DEIS schools reported having more than 25 books in their home, compared to almost three-quarters of pupils attending other schools. However, there were no notable differences by school DEIS status as regards access to technology, with the vast majority of pupils in both urban DEIS and other schools reporting having a digital device at home and being able to access the Internet. That said, PIRLS 2016 did not seek information about level of access to the digital device (e.g., whether it belonged to the child or was shared by several family members), or about the quality of the Internet connection.

The *Home Resources for Learning* scale was a moderate to strong predictor of achievement in Ireland, with pupils who had *many* resources achieving higher scores in the reading test than those with *some* or *few* resources. Further evidence in this regard is provided by Gilleece and Eivers (2018), who found that, controlling for other variables, PIRLS (and ePIRLS) achievement in Ireland was predicted by each of parental education, number of books in the home, access to the Internet, and (at class level) a measure of socioeconomic status based on parental occupation. Similarly, in a multivariate analysis of PIRLS 2011 data in Ireland, achievement was predicted by number of books in the home (more strongly for boys than girls) and maternal education (more strongly for girls than boys) (Cosgrove & Creaven, 2013).

Parental involvement in homework

Parents in Ireland virtually all reported that their children did homework at least three times a week, with slightly under half reporting that homework was a daily occurrence. Compared to the average across PIRLS countries, and in all comparison countries except Northern Ireland, this represents very frequent engagement in homework. The regularity of homework for primary school pupils in Ireland is consistent with findings from previous studies including PIRLS and TIMSS 2011 (Eivers & Creaven, 2013), NAMER 2014 (Kavanagh et al., 2015), and TIMSS 2015 (Clerkin et al., 2020).

Parents in Ireland checked very regularly whether homework had been completed, but engaged less frequently in more hands-on forms of support such as helping with homework and reviewing homework. This pattern is broadly similar to that reported in PIRLS and TIMSS 2011 (Eivers & Creaven, 2013), although the questions were framed slightly differently in that cycle.[59] In Ireland, achievement was highest among pupils

59 In 2011, parents were asked how often they checked if children had done homework and how often they helped children with homework, with response options as 'Every day or almost every day', 'Once or twice a week', 'Once or twice a month', and 'Never or almost never'. The option of 'Every day or almost every day' was selected by 92% of parents in Ireland for checking whether homework was completed, and by 69% of parents in Ireland for helping with homework (Eivers & Creaven, 2013). Both percentages are higher than those that reported checking completion and helping with homework *every day* in 2016, but it is likely that some parents who do these activities 'almost every day' selected the option of '3 to 4 times a week' in 2016.

whose parents monitored, helped with, and reviewed homework moderately frequently (three to four times per week), as opposed to every day. This may suggest that pupils with lower achievement are perceived by their parents as needing more active support with homework than those with higher achievement.

Parents provided similar support for homework to boys and girls in Ireland, which contrasts with recent GUI findings that boys received more frequent help with homework than girls (McNamara et al., 2021). Parents also provided similar support for homework for pupils in urban DEIS and other schools. In this context, it is of note that almost all Home-School-Community Liaison (HSCL) Coordinators surveyed by Weir et al. (2018) in DEIS schools believed that their work had improved parents' confidence about helping children with homework either *to a great extent* or *to some extent*. Some pupils in DEIS schools – typically, pupils with lower achievement (Kavanagh & Weir, 2018) – may also have access to school-based support through a homework club.

Reading in the classroom context

In Chapter 5, the experiences of pupils while reading at school were examined, based on data from pupils (on their engagement during reading lessons) and from teachers (on their instructional practices and professional development relating to literacy). The themes considered may be grouped as follows: pupil engagement; instructional time; characteristics of reading lessons and post-reading activities; resources for pupils experiencing reading difficulties; teachers' approaches to reading homework and assessment; and teacher professional development.

Pupil engagement during reading lessons

Pupils in Ireland reported a level of engagement in their reading lessons in line with the average across all PIRLS countries. Also, between 2011 and 2016, agreement levels either remained stable or marginally increased for the statements used in both cycles. However, engagement in reading lessons – unlike attitude to reading and reading behaviour outside school – was not significantly related to reading achievement in Ireland in 2016, while the average relationship internationally was statistically significant, but only weakly positive. In comparison, in TIMSS 2015, Fourth class pupils in Ireland who were *not engaged* in their maths lessons scored significantly lower in maths, on average, than those who were *very engaged*, while there was not a clear relationship between engagement in science lessons and science achievement (Perkins et al., 2020).

Previously, using data from PIRLS and TIMSS 2011, Martin et al. (2013) found that school-level correlations between pupil engagement in lessons (across several subjects) and achievement varied widely among countries, from weak-to-moderate negative correlations (e.g., -.23, Poland) to strong positive correlations (e.g., .62, Botswana). The international variation in the relationship between engagement and achievement, and the non-significance of this relationship in Ireland in PIRLS 2016, may reflect the fact that most of the statements presented to pupils to assess their engagement focused on their teacher (e.g., *my teacher gives me interesting things to read; I know what my teacher expects me to do*). It is possible that pupils' responses reflected their views of their (current) teacher's approach, rather than their longer-term experiences of reading instruction throughout primary school. Viewed in this light, the responses of pupils in Ireland are consistent with the strong positivity towards their teachers that has been found in other Irish studies at primary level (e.g., McNamara et al., 2021; Williams et al., 2009). However, since a significant association between in-class engagement and achievement has been found in Ireland for maths (Perkins et al., 2020), but not for reading, it seems that there is also a subject-specific element at play.

Girls reported being more engaged than boys in reading lessons, and Ireland had one of the largest gender gaps among comparison countries on this variable. Mirroring the pattern seen for liking reading

(analysed in Chapter 3), this gap was characterised by, on average, girls in Ireland being more engaged than girls internationally, and boys in Ireland being about as engaged as boys internationally. If we accept that the measure of engagement in reading lessons at least in part reflects pupils' attitudes to their teachers, this chimes with other findings that girls in Ireland tend to like their teachers more than boys do (McNamara et al., 2021; Williams et al., 2009). When similar questions about engagement in maths and science lessons were presented to Fourth class pupils in TIMSS 2015, girls also found science lessons more engaging than boys did, although there was no significant gender difference in engagement in maths lessons (Perkins et al, 2020).

Pupils in urban DEIS schools did not differ from pupils in other schools in terms of their engagement in reading lessons. This is consistent with previous research indicating that pupils in DEIS and non-DEIS primary schools had broadly similar attitudes to reading as a school subject (McCoy, Smyth & Banks, 2012), and liked their teachers to a similar degree (McCoy et al., 2014).

Instructional time

Teachers were asked to estimate the amount of time per week that they spent on: (a) English language instruction, and (b) reading instruction. In Ireland, these questions were of particular interest in PIRLS 2016, since a key measure implemented on foot of the Strategy was an increase in the required instructional time spent on literacy skills, as described in Chapter 2 (DES, 2011a; DES, 2011b). Comparing the responses of teachers in PIRLS 2011 (pre-Strategy implementation) and PIRLS 2016 (post-implementation) may shed light on the extent to which this requirement was implemented. It should be noted that there was considerable variation in teachers' responses to these questions. This may indicate that the questions – which were worded in a complex manner – were interpreted differently by different respondents.

In English-medium schools, 4.5 hours per week on English language instruction was identified as a reasonable threshold to indicate implementation of the Strategy requirement. In Irish-medium schools, 3.5 hours per week on English language instruction remained the threshold for implementation.[60]

Over three-quarters of pupils in English-medium schools had teachers who met or exceeded the implementation threshold, with a slight majority receiving between 5 and 7 hours of English language instruction per week. In Irish-medium schools (attended by about 8% of pupils), more than nine in ten pupils had teachers who met or exceeded the requirement for English language instruction, with a majority spending at least four hours per week on this. Between 2011 and 2016, the median time spent on English language instruction increased by 30 minutes (to 5 hours per week), and the percentage of pupils whose teachers spent more than 7 hours per week on this more than tripled (to 18%). Taken together, these findings broadly suggest that the additional instructional time mandated following the Strategy was widely implemented, and that some teachers may have increased the time allocated to language instruction by considerably more than what was specified. The findings are also consistent with the increase in time spent on English observed in NAMER 2014 compared to NAMER 2009 (Kavanagh et al., 2015).

When it comes to time spent on *reading* instruction, the pattern is somewhat different. (This question in PIRLS was intended to refer to reading instruction in any language; however, the variation in responses in Ireland suggests that some teachers included reading in Irish, while others did not.) While most pupils' teachers reported spending somewhere between two and six hours per week on reading instruction, significant minorities had teachers who spent less than two hours (16%) or more than six hours (17%) on this. Interestingly, no increase was observed in the time spent on reading instruction between 2011 and 2016, with the median time declining slightly from three hours and 30 minutes in 2011 to three hours and 20 minutes in

60 Data on time spent on Irish language instruction were not collected as part of PIRLS. This is because, to date, the test has been administered only in English in Ireland, and the question on instructional time sought information specifically about instruction in the language of the test.

2016. We might tentatively interpret this as suggesting that, while teachers have by-and-large implemented extra time for language and literacy instruction since 2011, this time has not necessarily been focused on *reading* instruction specifically.

Characteristics of reading lessons

Classroom organisation

In Ireland, and internationally, whole-class instruction was the most frequently-used organisational approach during reading lessons, with about three-quarters of pupils in Ireland experiencing this *often* or *always or almost always*. Very frequent use of whole-class instruction became slightly less common in Ireland between 2011 and 2016. Group work for reading was comparatively rarer in Ireland, which is also the case for primary maths and science lessons (Clerkin et al., 2017). Mixed-ability groups for reading were used less often in Ireland than on average internationally, as was individualised instruction. Across comparison countries, patterns of classroom organisation during reading lessons varied considerably (Mullis et al., 2017, Exhibit 9.3).

All organisational approaches, except for same-ability groups, were used somewhat less frequently in urban DEIS than other schools. While there is evidence that same-ability grouping tends to be used more in DEIS than in non-DEIS contexts at post-primary level (e.g. Smyth et al., 2015), there are limited data available on this at primary level – although some recent research exploring negative socioemotional outcomes of ability grouping has focused specifically on DEIS primary schools (McGillicuddy & Devine, 2020). In PIRLS 2016, although same-ability grouping in reading lessons was reported more frequently in urban DEIS schools than other schools, this difference was not statistically significant.

Text types

Pupils in Ireland were given access to a range of text types on a fairly frequent basis. Narrative texts (short stories and longer fiction books), along with non-fiction subject area books or textbooks, were most commonly used. More than three-quarters of pupils had teachers who used each of these on at least a weekly basis, and the frequency of use for each increased between 2011 and 2016. Other informational texts, including longer non-fiction books and non-fiction articles, were used less often, with most pupils exposed to these on a roughly monthly or roughly weekly basis – although about one-quarter of pupils had teachers who *never or almost never* used longer non-fiction books with them. Plays were very rarely used during reading lessons in Ireland in both 2011 and 2016. This may be partly to do with the fact that Drama is a separate subject in the 1999 primary curriculum, and the main emphasis of the Drama specification is on the process of making drama as opposed to reading scripts (although, by Fourth class, pupils are expected to 'begin the process of using script as a pre-text') (DES/NCCA, 1999a, p. 28). It is also worth noting that poetry, a genre afforded a 'special place' within the reading experience by the 1999 English curriculum (DES/NCCA, 1999c, p. 8), was not listed as a text type in the PIRLS 2011 or 2016 questionnaires.[61] The frequency with which the various text types were used did not differ significantly between urban DEIS and other schools.

Digital devices

About three in five pupils in Ireland *never* had digital devices available to use during their reading lessons in 2016 (see also Eivers, 2019). This represents lower access to devices than on average internationally or in most comparison countries. While somewhat higher levels of access were reported in urban DEIS than in other schools, this difference was not significant. In TIMSS 2015, the proportion of pupils in Ireland that *never* had digital devices available during their maths and science lessons was also about three-fifths (Clerkin et al.,

61 A question on the frequency with which poetry is used in reading lessons has been included in PIRLS 2021.

2017). This similarity across reading, maths, and science suggests that, rather than being subject-specific, ICT use or lack thereof may be determined by the availability of devices.

The 2016 figures also mark a substantial drop from the 2011 level of access to devices during reading lessons in Ireland. Eivers (2019) has highlighted the limited funding available for schools to purchase ICT equipment during the period between these PIRLS cycles, coupled with the probable obsolescence, by 2016, of devices purchased with earlier grants. Since then, to support the Digital Strategy for Schools 2015-2020 (DES, 2015), significant ICT funding was provided to schools between 2017 and 2020 for the acquisition of equipment and infrastructure, although not for maintenance or technical support services. During the ongoing evaluation of the Digital Learning Framework (2018-present), considerable variation has been observed in teachers' views of the availability of computing devices, the age and condition of these devices, and the quality of broadband/wireless in their schools (Cosgrove et al., 2019; Feerick et al., 2021). Teachers' reports of ICT usage in PIRLS 2021 may help to show whether the allocated funding – along with other changes, such as the forced reliance on digital instruction during periods of 2020-21 due to the COVID-19 pandemic – has led to increased use of computers in reading lessons.[62]

The two-fifths of pupils who did have devices available during reading lessons in 2016 were most commonly asked to use them to look up information, research topics, and read digital texts (in Ireland and internationally). Pupils were more rarely asked to write digital texts. They were also more rarely taught to be critical when reading on the Internet, or taught strategies for reading digital texts. That said, pupils in Ireland performed just as well on the digital ePIRLS Interpret & Evaluate subscale, which required some critical appraisal of simulated "website" content, as on the more straightforward Retrieve & Infer subscale (Eivers et al., 2017).

Strategies and approaches used

In Ireland, large majorities of pupils had teachers who asked them to read aloud and to read silently on their own on a daily basis. It was also common for teachers to read aloud to pupils, and this occurred more often in urban DEIS than in other schools. Teaching decoding strategies, teaching new vocabulary systematically, and teaching pupils to summarise the main ideas of a text were less frequent, although sizeable majorities of pupils still experienced each of these at least weekly. Teaching or modelling skimming and scanning strategies was the only general approach listed to which a significant minority in Ireland (10%) were *never or almost never* exposed. The frequency with which most of these strategies were used stayed stable in Ireland between 2011 and 2016 – with the exception of systematically teaching new vocabulary to pupils, which became more common between cycles. It is possible that the introduction of mandatory standardised testing and reporting of results (DES, 2011a) may have influenced this behaviour. At least some of the standardised reading tests normed in Ireland include substantial sections that target reading vocabulary knowledge, and O'Leary et al.'s (2019) survey of primary school teachers in Ireland found that about one-fifth of respondents spent a week or more revising curriculum topics they thought relevant to standardised tests.

About half of pupils in Ireland were given time to read books of their own choosing in (almost) every reading lesson, but teacher-led provision of materials to match pupils' interests was rarer, suggesting an emphasis on child-directed choice of reading material. Differentiation was evident in the frequency with which teachers provided *materials* to match the reading levels of individual pupils: three-fifths of pupils experienced this in *every lesson or almost every lesson*, and pupils in urban DEIS schools experienced it more often than others (as also found by McCoy, Smyth & Banks, 2012). However, providing individualised *feedback* to each pupil was comparatively much rarer.

62 Note that a new Digital Strategy for Schools to 2027 was released by the Department of Education in April 2022 – see https://www.gov.ie/en/publication/69fb88-digital-strategy-for-schools/.

As regards specific tasks to develop comprehension skills when reading texts, almost all pupils in Ireland were asked on at least a weekly basis to locate information, identify main ideas, explain or support their understanding, and make predictions about what would happen next. Pupils were also commonly asked to compare what they had read to their own experiences and to generalise or draw inferences from texts. There was a significant increase between 2011 and 2016 in the frequency with which pupils were asked to compare what they had read to other things they had read, suggesting a growing emphasis in primary classrooms on linking texts and considering intertextual similarities and differences. However, this task was less commonly assigned in urban DEIS than in other schools. While the relatively small number of urban DEIS classrooms in the PIRLS sample means that caution is needed, it might be worth exploring whether there are different perceptions among teachers in urban DEIS versus other schools about the breadth and depth of pupils' prior reading experiences.

Pedagogical approaches associated with critical literacy, such as encouraging pupils to challenge the opinion expressed in the text or using multiple perspectives to enrich understanding, were experienced in *every or almost every lesson* by minorities of pupils in Ireland. Similarly, the critical and evaluative skills of describing text style or structure and determining an author's perspective were less frequently practised in Ireland than other comprehension skills; however, their frequency did increase between 2011 and 2016. In considering these findings, it is useful to note that pupils in Ireland in PIRLS 2016 performed just as well on the 'higher-order' Interpret & Evaluate subscale as they did on the 'lower-order' Retrieve & Infer subscale, and that they made significant gains on both subscales between 2011 and 2016 (Eivers et al., 2017).

Post-reading activities

Almost four in five pupils in Ireland were asked to answer oral questions about what they had read on a near-daily basis. Large majorities were also asked to write something about what they had read and to talk with one another about what they had read on at least a weekly basis, and the latter activity became more frequent between 2011 and 2016. Pupils were more rarely asked to take a written quiz or test about what they had read, with one-quarter *never or almost never* experiencing it. Overall, this may reflect a general preference on the part of primary teachers in Ireland for less formal methods of formative assessment. In this context, it is also relevant that more than three-quarters of PIRLS pupils had teachers who placed a *major emphasis* on ongoing assessment of pupils' learning as a method of monitoring progress, while less than half had teachers who placed a *major emphasis* on classroom tests for this purpose.

Resources for pupils having reading difficulties

Pupils in Ireland were much more likely than pupils internationally to be in a class that *always* had a specialised professional (e.g., Learning Support teacher,[63] speech therapist, etc.) available to help pupils struggling with reading, and almost all pupils were in a class that at least *sometimes* had access to such a professional. Nevertheless, there was a statistically significant decline in the extent to which these specialists were *always* available between PIRLS 2011 and 2016. Despite this, teachers were more likely in 2016 than in 2011 to indicate that they would refer a pupil experiencing reading difficulties to a specialised professional. This might signal growing awareness among teachers of the resources offered by specialised professionals, and/or a reduction in the threshold of reading difficulty perceived as necessary to access these. It is possible that an increasing policy focus on Personalised Pupil Plans (PPP) for children with special educational needs, as outlined in Circular 0030/2014 (DES, 2014a), may have had an impact here. It is also possible that teachers' increased readiness to refer pupils to a specialised professional could, in itself, have contributed to a reduction in the percentage of pupils for whom such a professional was *always* (as opposed to *sometimes*) available. Since PIRLS 2016, a new

63 This term was in use when PIRLS 2016 was administered, but has since been replaced by the term Special Education Teacher (SET).

resource allocation model for Special Education Teachers (SETs) has been introduced (in 2017); it will be useful to observe whether and how availability of and referral to SETs has changed in PIRLS 2021.

It was considerably less common in Ireland to have a classroom assistant available, with a majority of pupils in Ireland in classes where an assistant was *never* available. However, classroom assistants were about four times as likely to be *always* available for pupils in urban DEIS schools than for those in other schools. Having an adult/parent volunteer available to assist pupils struggling with reading was widely uncommon in Ireland.

Reading homework and assessment

Reading homework

Teachers' reports of setting reading homework were broadly consistent with parents' reports of their children's (general) homework activity (as analysed in Chapter 4). In Ireland, teachers assigned reading homework more frequently than on average internationally: most pupils received reading homework at least three times a week, and pupils in urban DEIS schools were particularly likely to receive reading homework on a daily basis. However, teachers in Ireland expected pupils to spend comparatively little time on reading homework each time it was assigned. A slight majority were expected to spend 15 minutes or less on reading homework, while no pupils were expected to spend longer than an hour at a time on reading homework. This is broadly similar to the pattern reported in 2011 (Clerkin, 2013), although both the frequency and expected duration of homework assignments increased slightly in 2016. On the other hand, there was a decline in the extent to which teachers monitored completion of reading homework (although monitoring remained extremely high in urban DEIS schools). It is possible that an increasing homework load has made it more difficult for teachers to consistently monitor completion. However, the extent to which teachers corrected and provided feedback on reading homework, and discussed the homework in class, remained stable across cycles.

Assessment of reading

Teachers of a majority of pupils in Ireland placed a *major emphasis* on assessment of pupils' ongoing work as a means of monitoring progress in reading, although this proportion declined between 2011 and 2016. There was no notable change across cycles in the extent to which teachers viewed either classroom tests or national achievement tests as important for monitoring progress. This is of interest, considering that the profile of nationally standardised tests increased after their administration was made mandatory in line with the Strategy (DES, 2011b). However, other recent research has highlighted the mixed attitudes of primary teachers to standardised testing (Devine et al., 2020), as well as their need and appetite for further professional development opportunities on the administration, interpretation, and use of standardised tests (O'Leary et al., 2019).

Teachers' professional development in relation to reading

The vast majority (90%) of pupils in Ireland had teachers who, during the two years preceding PIRLS 2016, had completed some professional development focused on reading or teaching reading. This represents stronger overall teacher engagement with professional development than on average internationally.

It also represents substantially stronger engagement than that seen in Ireland in 2011, when nearly two in five pupils had teachers who had not engaged in any reading-related professional development in the previous two years (Clerkin, 2013). This is consistent with the increase in teacher professional development observed between the 2009 and 2014 cycles of NAMER (Kavanagh et al., 2015). It is likely that the increase can at least partly be attributed to the Strategy, which prioritised professional development support for literacy (and numeracy) through the establishment of dedicated subject area teams within the Professional Development

Service for Teachers (PDST) (DES, 2011b; DES, 2017c). The increase may also reflect teachers' awareness of, and interest in, the (then) ongoing development of the Primary Language Curriculum and professional development support offered in this regard.

Engagement with professional development in reading was broadly similar in urban DEIS and other schools, which may seem slightly surprising as the Strategy sought to prioritise DEIS schools for literacy (and numeracy) support. However, the relatively small number of urban DEIS schools in the PIRLS sample should, again, be borne in mind.

Implications

In this section, five implications from the current report are discussed. Several of these have close links with recommendations made in the recent report on post-primary (PISA) reading by Shiel et al. (2022). These links, where applicable, are flagged.

1. **Enjoyment of reading: the probable decline between primary and post-primary is a cause for concern**

   It is encouraging that, between 2011 and 2016, Fourth class pupils in Ireland remained largely positive about their attitudes to reading, confidence as readers, reading habits outside school, and engagement in their reading lessons. However, this contrasts with the situation at post-primary level, where PISA findings suggest a decline over time in the prevalence of reading for enjoyment (McKeown et al., 2019; Shiel et al., 2022). The contrast raises questions about what is happening to children's attitudes to reading and reading behaviours between the ages of ~9-11 (PIRLS) and 15 (PISA).

   During this period, children typically enter adolescence and transition to post-primary education – a transition which can be a stressful experience (e.g., Smyth, 2017). Leading up to and following this transition, particular focus should be applied to fostering conditions that support reading for interest and pleasure – including access to resources, space, time, choice, guidance, and positive peer and adult interactions related to reading. Curricular continuity across this transition period is also important. About one-third of teachers in Ireland surveyed in PISA 2018 did not believe that there was good continuity between the (1999) primary school English curriculum and the Junior Cycle English specification (Shiel et al., 2022). However, during the development of the Primary Language Curriculum (implemented in 2019), alignment and continuity with the Junior Cycle English and Irish specifications was an area of focus, so it seems likely that there may now be improved continuity in language learning between primary and post-primary settings. The new Draft Primary Curriculum Framework (NCCA, 2020) also places a welcome emphasis on the importance of continuity of learning experiences through transitions.

   The period between ages ~9-11 and 15 sees children gain increasing access to digital technology, particularly mobile phones and social media. Figures from GUI suggest that while at least two in five children own mobile phones by the age of 9, virtually all do by the age of 13 (Dempsey et al., 2019). Many social media applications (e.g. TikTok, Snapchat, Instagram) require account holders to be at least 13, although there is evidence to suggest that many children in Ireland access these at a younger age (CyberSafeKids, 2020). The relationship of various uses of digital technology with reading for enjoyment is not well understood. Also, in PIRLS (and PISA), questions that ask about reading for enjoyment do not prompt pupils to include (or to exclude) digital reading. It is possible that children read more on phones or other devices than in print as they grow older, and they may not think of this as a form of reading when answering questions about how often they read for fun. However, it is also possible that some forms of engagement with digital media may eat into the time and energy that children previously dedicated to reading. Further research is needed to examine the effect, if any, of device use on attitude to reading and on time spent reading for pleasure. If particular forms of digital

reading are both enjoyable for pupils and beneficial for their literacy learning, it will be important to portray these as valid – in other words, to ensure that pupils think of themselves as reading when engaging in these activities, and understand reading as an activity and ability that is transmodal.

Consistent with previous findings, teachers' and parents' reports indicate that (reading) homework tends to be assigned very regularly, but that pupils are not generally expected to spend long on it each day. However, its frequency may point towards an area worth examining further. In the context of a focus on reading for enjoyment, it would be useful to explore which homework practices are most likely to promote the development of regular leisure reading habits in an Irish context.

In their report on reading in PISA 2018, Shiel et al. (2022, p. 148) recommend that 'a sustained, focused strategy to foster and promote enjoyment of reading and attitudes to reading, starting young, and appropriate to the evolving nature of reading development, is needed'. We reiterate this recommendation, and suggest that there is a particular need to understand and address the development of reading habits and attitudes as children move through the final grades of primary and the early grades of post-primary education.

2. Gender differences: there is scope for a critical-literacy-based focus on boys' enjoyment of reading

This study found that, on average, boys in Ireland liked reading less than girls, spent less time reading, and found their reading lessons less engaging. These findings are consistent with other research and with a persistent policy concern to improve boys' experiences of learning to read and reading for pleasure, as well as their reading achievement (e.g., DCYA, 2014; DES, 2011b; DES, 2017c).

It is of interest that parents engaged less often in early literacy activities with boys than girls, although these differences were not large. A project to raise parents' awareness of how gendered norms may impact on their interactions with young children could be of value. This could focus not only on challenging the bias in favour of girls where early literacy activities are concerned, but simultaneously on challenging the bias in favour of boys in some early numeracy activities such as playing with building blocks or construction toys (as reported by Clerkin & Gilligan, 2018; Clerkin et al., 2020). Providing training for early childhood education practitioners on working supportively with parents to raise awareness of, and counteract, gendered stereotyping is one possible approach (Kollmayer et al., 2018). Currently, *Aistear, the Early Childhood Curriculum Framework* (NCCA, 2009) advocates for adults engaging with young children to encourage non-stereotypical play and to model non-stereotypical roles; it may be useful to build upon and enhance this recommendation in the context of the ongoing review of *Aistear.*

Previously, policy approaches aimed at engaging boys have sometimes focused on text type: for example, the National Strategy to Improve Literacy and Numeracy specified that syllabuses should include 'non-literary texts and other texts in which boys tend to show interest' (DES, 2011b, p. 51). While it is positive to honour all children's reading interests, there is mixed evidence regarding the extent to which genre and subject-matter preferences differ systematically by gender. In Ireland, McNamara et al. (2021) recently found minimal gender difference in the extent to which children read 'books that explain things'; moreover, both boys and girls were more likely to read stories or novels than any other type of text. The present report has highlighted the shared enthusiasm of children across gender groups for reading things that make them think and that help them to imagine other worlds. There may be a risk, then, of exaggerating between-gender differences in reading preferences while underplaying the diversity of tastes within each gender group (e.g., Scholes, 2019; Scholes et al., 2021). While all children should be exposed to a broad range of subjects, characters, text types, and modes in their reading material, and while their individual reading interests should be respected and nurtured, it is important to avoid stereotyping specific subjects or text types as 'for' a specific gender group.

Critical literacy approaches have been recognised as offering developing readers a set of tools with which to identify the means whereby gender, and other aspects of identity, are constructed within texts. This may in turn help readers to challenge gendered norms they encounter in daily life, including in relation to reading habits and preferences (Francis & Skelton, 2005; Perkins et al., 2011). Following the incorporation of learning outcomes associated with critical literacy[64] in the Primary Language Curriculum (NCCA, 2019), it may be useful to build on the resources of the Primary Language Toolkit to extend the support materials that teachers can use to help pupils to engage in critical exploration of questions that link gender and literacy: for example, how texts may be marketed as 'for' one gender group more than another, and how gendered identities are presented differently in different texts.

It seems necessary and sensible to direct particular focus to improving the reading experiences of lower-achieving boys as a group, as also recommended by Shiel et al. (2022). That said, it is also important not to lose sight of the fact that the seeming drop in reading enjoyment between primary and post-primary levels appears substantial for girls as well as boys, and thus remains a concern for children of all genders.

3. Pupils in urban DEIS schools: there is potential to build on positive attitudes and target early literacy supports, but more detailed data are needed

The comparisons based on school DEIS status in this report should be interpreted with caution, given the relatively small proportion (18%) of sampled pupils in DEIS schools and the necessity of collapsing Urban Band 1 and Urban Band 2 schools into one category and DEIS Rural and non-DEIS schools into another for analysis purposes. Nevertheless, several findings are of interest.

Firstly, it seems positive that pupils in urban DEIS schools and other schools were similar in the extent to which they liked reading, were confident as readers, and found their reading lessons engaging. However, some out-of-school behaviours, such as reading for fun, were less common among pupils in urban DEIS schools. This, along with the fact that a gap by DEIS status in reading attitudes and reading confidence becomes evident at post-primary level (Gilleece et al., 2020), suggests that pupils in DEIS schools should be a priority group in any measures that seek to maintain stable reading engagement and behaviours across the transition to second-level. While the sample numbers are not conducive to comparisons by gender within urban DEIS schools in this study, it is worth bearing in mind that boys in DEIS schools appear to be particularly at risk in terms of negative reading attitudes and limited reading behaviours. It may be possible to build on the positive reading *attitudes* of pupils in urban DEIS schools to support and facilitate reading *habits* that may, in the longer term, sustain both enjoyment of reading and the development of reading proficiency.

In line with expectations, pupils in urban DEIS schools, on average, had substantially fewer home resources for learning than their peers in other schools. They also had more limited exposure to literacy activities and the development of related skills in early childhood. In particular, parents of urban DEIS pupils were less confident than parents of other pupils about how well their children had been able to complete alphabetic tasks – recognising letters and writing letters – at the start of First class. It would be useful to explore options for providing additional targeted supports for early literacy development (including, but not limited to, alphabetic tasks, as too narrow a focus may be counterproductive) to children from more disadvantaged backgrounds.

While literary instruction was reported to be broadly similar in urban DEIS and other schools, some observed patterns may reflect previous findings that teachers in DEIS schools tend to use more

64 For example, pupils in Third to Sixth classes are expected to 'compare, contrast and critically reflect on the intent of different authors and discuss various interpretations of text in a wide range of genres', while pupils in Fifth and Sixth classes should be able to 'recognise and examine the implications of culture and identity on the creation of texts across a range of genres' (NCCA, 2019, p. 27)

structured and teacher-led pedagogical approaches than teachers in other schools (McCoy, Smyth & Banks, 2012). For example, pupils in urban DEIS schools were less likely than peers in other schools to be invited to compare the reading material to other things they had read. Again, however, the limited number of DEIS schools in the PIRLS sample restricts the extent to which conclusions can be drawn. NAMER 2021 (www.erc.ie/studies/NAMER) incorporates a larger sample of urban DEIS schools, which will allow for comparisons between urban DEIS and other schools to be made with greater confidence.

4. Literacy in the home: strengthening links between education policy and other policies (e.g. housing, immigration) is needed to address inequity

While some aspects of literacy in the home environment changed slightly between 2011 and 2016 – with Internet access and parental education level increasing somewhat – the relationship between home resources and reading achievement remains strong, consistent with other research. Parental involvement in children's education has been a key aim of the Strategy (DES, 2011b), and also of the Early Start programme (a pre-school scheme for children from disadvantaged backgrounds, linked to specific DEIS schools) (DES, 2014b). Through the Aistear framework, parental involvement is also an important pillar within the Early Childhood Care and Education (ECCE) programme (now available to all children within the qualifying age range), and there are useful tip sheets for parents available from the NCCA (NCCA, n.d.-a; see also https://ncca.ie/en/early-childhood/for-parents/).[65] It seems important that the continued provision of such resources would form part of a future Strategy for literacy and numeracy. In particular, providing literacy supports that are accessible for parents of children who do not speak either English or Irish at home is a priority. This can be linked to Shiel et al.'s (2022) recommendation that, at post-primary level, targeted supports are required for English language learners, taking their home environments into account. Following Russia's invasion of Ukraine in 2022, the urgency of this recommendation is heightened by the arrival in Ireland of close to 12,000 (to date)[66] school-age Ukrainian children and their families.

While factors such as parental knowledge, time, and energy are important, the physical resources and infrastructure needed to facilitate learning activities at home are also key – for example, books, paper, implements for writing or drawing; a home environment that is quiet and spacious enough to allow child and parent to focus on what they are doing; and access to an interesting and print-rich environment outside the home. Enduring structural inequalities result in a lack of access to these basics for certain groups of children.[67] An equity-based approach to improving early learning experiences in children's homes will need to consider the intersection of education policy with other policy decisions that constrain the opportunities of specific groups of children: 'while education can significantly enhance a given *individual's* capabilities and life chances, it cannot overcome structural (group-based) injustices arising from economic inequalities as the generative site of those injustices is not located within the education system in the first instance' (Lynch & Crean, 2018, p. 142).

65 These include tip sheets on themes such as 'Enjoying books with your baby' (https://ncca.ie/media/5615/enjoying-books-with-your-baby_ef-8.pdf) and 'Enjoying books with your toddler' (https://ncca.ie/media/5617/enjoying-books-with-your-toddler_ef7.pdf).

66 This figure represents the number of Ukrainian children enrolled in primary and post-primary schools in Ireland at the start of October, 2022 (Carswell & Holland, 2022).

67 For example, recent reports by the Ombudsman for Children's Office (OCO) have highlighted that many children living in direct provision centres and in 'hubs' for homeless families suffer from a lack of space and privacy and from excessive noise (OCO, 2019; OCO, 2020). Children in some direct provision centres are also isolated from lively (and print-rich) urban settings and community activities, due to the remote locations of these centres combined with the lack of transport options for residents (OCO, 2020).

5. Classroom instruction: the picture is broadly positive, although an increased focus on digital, critical, and social aspects of literacy is desirable

In the primary classroom, the impact of the Strategy seems evident in a slight increase in instructional time since 2011 (for English language, but not for reading), and a sharp increase in uptake of reading-related professional development by teachers. The variety that was typical in reading lessons in Ireland – in terms of text types, pedagogical approaches, reading tasks, and post-reading activities – paints a generally positive picture of the quality of reading instruction at Fourth class in Ireland.

However, the comparative rarity of digital devices being used in reading lessons, and the decline in their availability between 2011 and 2016, is notable (see also Eivers, 2019).

Additionally, critical and evaluative reading skills received comparatively limited attention (both in print-based and, where available, digital reading lessons), although it must be acknowledged that pupils in Ireland performed strongly overall on the PIRLS and ePIRLS questions that targeted these skills (Eivers et al., 2017). In the post-primary context of PISA data, Shiel et al. (2022) recommend a stronger focus on students' comprehension of digital texts, including their ability to integrate information, handle conflict in texts, and assess the quality and credibility of texts. The foundations for applying these critical and evaluative skills flexibly across print and digital modes should be laid at primary school.

The social and communicative aspects of reading may also merit further attention in a classroom context. Most teachers asked pupils to talk with one another about what they had read on at least a weekly basis (81%), and this post-reading activity became more frequent between 2011 and 2016. However, pupils were less enthusiastic about talking about what they read with other people than about most other reading-related activities. In their early childhood, their parents had also been less likely to talk with them about things they had *read* than either to read books with them or to talk with them about things they had *done*.

The extent to which conversation about reading (between children and adults, and between child peers) is beneficial for children's reading development may be contingent on the nature and quality of the conversation. Hunt (2017) suggests that exploratory conversations about texts, which allow for egalitarian participation and the sharing of literary and personal experiences, are important. However, the exploratory nature of this talk may be constrained if participants are focused too rigidly on decoding or extracting information from the text itself, or (in the case of an adult-child conversation) if the adult is too directive. It would be of interest to explore what kinds of 'reading talk' children in Ireland experience most frequently, in the classroom and in other contexts. That said, it is also possible that some children who enjoy reading more than they enjoy talking about it simply value private aspects of the reading experience above (some) social aspects.

Looking ahead

The inter-relationships between reading proficiency, reading attitudes, and reading behaviours are clearly complex and merit further exploration. It may be useful, in future research, to draw on PIRLS data to identify different profiles of readers, and to investigate whether and how these profiles may vary by subgroups such as gender and socioeconomic status. This could in turn provide insights to support appropriate targeting of specific policy approaches and teaching and learning practices.

Five years on from PIRLS 2016, the PIRLS 2021 data collection took place in an educational landscape shaken, nationally and globally, by the impact of the COVID-19 pandemic. The data from the 2021cycle are due for release in 2023.

It will be challenging to interpret these data, and in particular to establish causes for any changes in trends. Significant policy developments have taken place between the PIRLS 2016 and 2021 cycles (most notably the Interim Review and final years of the Strategy; the rollout of the Primary Language Curriculum; 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, with the new Digital Strategy launched a few months after the PIRLS 2021 data collection). However, pupils participating in PIRLS 2021, along with their families and teachers, will also have experienced extended and unprecedented periods of school closures and remote learning in 2020 and 2021 due to the COVID-19 pandemic. The effects of these periods may have had different effects on proficiency, self-efficacy, and wellbeing for different groups. Some pupils will have had continuous access to a device, to a variety of texts, and to input from parents with the time, knowledge, and skills to guide them when needed, while others would have had some or none of these advantages.

The questions of most immediate concern are likely to relate to pupils' reading achievement – specifically, whether there are changes to Ireland's mean achievement, overall and on the various text type and comprehension process subscales; to the proportions of pupils reaching each benchmark; to the gender gap in achievement; and to the impact of socioeconomic status on achievement. However, this will also be an important juncture at which to explore whether, and how, pupils' broader experiences of reading may have altered. The present report provides a pre-COVID-19 reference point from which to conduct this exploration.

References

Baker, L., & Scher, D. (2002). Beginning readers' motivation for reading in relation to parental beliefs and home reading experiences. *Reading Psychology*, 23(4), 239-269. https://doi.org/10.1080/713775283

Baroody, A.E., & Diamond, K.E. (2013). Measures of preschool children's interest and engagement in literacy activities: Examining gender differences and construct dimensions. *Early Childhood Research Quarterly,* 23(2), 291-301. https://doi.org/10.1016/j.ecresq.2012.07.002

Bracken, S.S. & Fishel, J.E., (2008). Family reading behavior and early literacy skills in preschool children from low-income backgrounds. *Early Education and Development,* 19(1), 45-67. https://doi.org/10.1080/10409280701838835

Brozo, W.B., Shiel, G. & Topping, K. (2007). Engagement in reading: Lessons learned from three PISA countries. *Journal of Adolescent & Adult Literacy,* 51(4), 304-315. http://dx.doi.org/10.1598/JAAL.51.4.2

Brozo, W., Sulkunen, S., Shiel, G., Garbe, C., Pandian, A., & Valtin, R. (2014). Reading, gender, and engagement: lessons from five PISA countries. *Journal of Adolescent & Adult Literacy*, 57(7), 584–593. http://doi.org/10.1002/jaal.291

Carswell, S. & Holland, K. (2022, October 3). Number of Ukrainian children in Irish schools rises by 60% over summer months. *The Irish Times.* https://www.irishtimes.com/ireland/2022/10/03/number-of-ukrainian-children-in-irish-schools-rises-by-60-over-summer-months/

Centre for Early Childhood Development and Education (CECDE). (2006). *Síolta: The national quality framework for early childhood education*. https://siolta.ie/index.php

Chamberlain, M. (2017). New Zealand. In I.V.S. Mullis, M.O. Martin, S. Goh, & C. Prendergast (Eds.), *PIRLS 2016 Encyclopedia: Education policy and curriculum in reading.* http://timssandpirls.bc.edu/pirls2016/encyclopedia/

Clark, C. & Teravainen-Goff, A. (2018). *Mental wellbeing, reading and writing: How children and young people's mental wellbeing is related to their reading and writing experiences*. National Literacy Trust. https://cdn.literacytrust.org.uk/media/documents/Mental_wellbeing_reading_and_writing_2017-18_-_FINAL2_qTxyxvg.pdf

Clerkin, A. (2013). Teachers and teaching practices. In E. Eivers & A. Clerkin (Eds.), *National schools, international contexts: Beyond the PIRLS and TIMSS test results* (pp. 77-104). Educational Research Centre. https://www.erc.ie/documents/pt2011_ch5.pdf

Clerkin, A. & Creaven, A-M. (2013). Pupil engagement. In E. Eivers & A. Clerkin (Eds.), *National Schools, international contexts: Beyond the PIRLS and TIMSS test results* (pp. 33-35). Educational Research Centre. https://www.erc.ie/documents/pt2011_ch3.pdf

Clerkin, A. & Gilligan, K. (2018). Pre-school numeracy play as a predictor of children's attitudes towards mathematics at age 10. *Journal of Early Childhood Research*, 16(3), 319-334. https://doi.org/10.1177/1476718X18762238

Clerkin, A., Perkins, R., & Chubb, E. (2017). *Inside the primary classroom: What happens in Fourth Class?* Educational Research Centre. https://www.erc.ie/wp-content/uploads/2017/12/Inside-the-primary-classroom-online-final-version.pdf

Clerkin, A., Perkins, R., & Chubb, E. (2020). *The home learning environment in Ireland: Insights from TIMSS 2015*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2020/11/Home-Report-Online-FINAL.pdf

Concannon-Gibney, T. & Murphy, B. (2012). Reading comprehension instruction in Irish primary classrooms: Key insights into teachers' perspectives on classroom practices. *Irish Educational Studies*, 31(4), 433-449. https://doi.org/10.1080/03323315.2012.673908

Cosgrove, J., Butler, D., Leahy, M., Shiel, G., Kavanagh, L., & Creaven, A-M. (2014). *The 2013 ICT census in schools. Main report.* Educational Research Centre & St Patrick's College. http://www.erc.ie/documents/ict_cencus2013_mainreport.pdf

Cosgrove, J. & Creaven, A-M. (2013). Understanding achievement in PIRLS and TIMSS 2011. In E. Eivers & A. Clerkin (Eds.), *National schools, international contexts: Beyond the PIRLS and TIMSS test results*, (pp. 201-239). Educational Research Centre. https://www.erc.ie/documents/pt2011_ch10.pdf

Cosgrove, J., Moran, E., Feerick, E. & Duggan, A. (2019). *Digital Learning Framework (DLF) national evaluation: Starting off – Baseline Report.* Educational Research Centre. https://www.erc.ie/wp-content/uploads/2020/01/DLF-national-evaluation-baseline-report.pdf

CyberSafeKids. (2021). *Annual Report 2020*. Author. https://www.cybersafekids.ie/wp-content/uploads/2021/09/CSK_Annual_Report_2020_web.pdf

Department of Children and Youth Affairs (DCYA). (2019). *First 5: A whole-of-government strategy for babies, young children and their families, 2019-2028*. Author. https://first5.gov.ie/userfiles/pdf/5223_4966_DCYA_EarlyYears_INTERACTIVE_Booklet_280x215_v1.pdf

DCYA. (2014). *Better outcomes, brighter futures: The national policy framework for children and young people, 2014-2020*. Author. https://assets.gov.ie/23796/961bbf5d975f4c88adc01a6fc5b4a7c4.pdf

DCYA. (2019). *An end of Year One review of the Access and Inclusion Model (AIM)*. Author. https://aim.gov.ie/app/uploads/2021/05/AIM-end-of-year-one-review.pdf

Dempsey, S., Lyons, S. & McCoy, S. (2019). *Later is better: Mobile phone ownership and child academic development - Evidence from a longitudinal study*. Economic and Social Research Institute (ESRI). https://www.esri.ie/system/files/publications/RB201903_01.pdf

Department of Education (DoE). (2022). *Digital strategy for schools to 2027*. Author. https://assets.gov.ie/221285/6fc98405-d345-41a3-a770-c97e1a4479d3.pdf

Department of Education and Science (DES) / National Council for Curriculum and Assessment (NCCA). (1999a). *Primary school curriculum. Arts education. Drama*. Stationery Office. https://curriculumonline.ie/getmedia/f2199a0a-9562-4643-b95f-a2fc272ccf13/PSEC04b_Drama_Curriculum.pdf

DES / NCCA. (1999b). *Primary school curriculum. Introduction*. Stationery Office. https://www.curriculumonline.ie/getmedia/c4a88a62-7818-4bb2-bb18-4c4ad37bc255/PSEC_Introduction-to-Primary-Curriculum_Eng.pdf

DES / NCCA. (1999c). *Primary school curriculum. Language. English*. Stationery Office. https://www.curriculumonline.ie/getmedia/5b514700-e65c-46a7-a7d0-c8e05e115bf9/PSEC01a_English_Curriculum.pdf

DES. (2005). *DEIS [Delivering Equality of Opportunity in Schools]. An action plan for educational inclusion*. Author. https://assets.gov.ie/24465/40677432ed49418d8c27bfb524f12a7b.pdf

Department of Education and Skills (DES). (2011a). *Circular 0056/2011. Initial steps in the implementation of the National Literacy and Numeracy Strategy*. Author. https://assets.gov.ie/13643/037a8791893f466fa4bf439c47f6d8fa.pdf

DES. (2011b). *Literacy and numeracy for learning and life: The national strategy to improve literacy and numeracy among children and young people, 2011- 2020*. Author. https://assets.gov.ie/24520/defd56aec10946798ab2d32a42dc0d86.pdf

DES. (2014a). *Circular 0030/2014. The Special Needs Assistant (SNA) scheme to support teachers in meeting the care needs of some children with special educational needs, arising from a disability*. Author. https://assets.gov.ie/13324/62fdf3b19c674eab80fd98468a00290a.pdf

DES. (2014b). *Focussed policy assessment: Early Start programme*. Author. https://assets.gov.ie/24911/67c8e9e5f7d34710bd437c679b60cf3c.pdf

DES. (2015). *Digital Strategy for schools 2015-2020: Enhancing teaching, learning and assessment*. Author. https://assets.gov.ie/25151/52d007db333c42f4a6ad542b5acca53a.pdf

DES. (2017a). *DEIS Plan 2017. Delivering equality of opportunity in schools*. Author. https://assets.gov.ie/24451/ba1553e873864a559266d344b4c78660.pdf

DES. (2017b). *Digital Learning Framework for primary schools*. Author. https://www.pdsttechnologyineducation.ie/app/uploads/2021/07/Digital-Learning-Framework-for-Primary-Schools.pdf

DES. (2017c). *National Strategy: Literacy and numeracy for learning and life 2011-2020. Interim review 2011-2016. New targets: 2017-2020*. Author. https://assets.gov.ie/24960/93c455d4440246cf8a701b9e0b0a2d65.pdf

DES. (2018). *Digital Learning Planning Guidelines for primary schools*. Author. https://www.pdsttechnologyineducation.ie/app/uploads/2021/07/Digital-Learning-Planning-Guidelines-compressed_1.pdf

Devine, D., Symonds, J., Sloan, S., Cahoon, A., Crean, M., Farrell, E., Davies, A., Blue, T., & Hogan, J. (2020). *Children's School Lives: An introduction. Report No.1*. University College Dublin (UCD) & NCCA. https://a115i2ikt0k3wno971cywnm1-wpengine.netdna-ssl.com/wp-content/uploads/2020/12/CSL-Annual-Report-1-Final.pdf

Eccles, J.S, Jacobs, J.E. & Harold R.D. (1990). Gender role stereotypes, expectancy effects and parents' socialization of gender differences. *Journal of Social Issues*, 46(2),183-201. https://doi.org/10.1111/j.1540-4560.1990.tb01929.x

Eivers, E. (2013). Pupils' languages. In E. Eivers & A. Clerkin (Eds.), *National Schools, international contexts: Beyond the PIRLS and TIMSS test results* (pp. 55-76). Educational Research Centre. https://www.erc.ie/documents/pt2011_ch4.pdf

Eivers, E. (2019). *Left to their own devices: Trends in ICT at primary school level.* Irish Primary Principals' Network (IPPN). https://issuu.com/ippn/docs/left_to_their_own_devices_final

Eivers, E. & Chubb, E. (2017). *Shaping schools: What TIMSS tells us about education systems*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2017/12/Shaping-Schools-Series-1.pdf

Eivers, E. & Clerkin, A. (2012). *PIRLS & TIMSS 2011: Reading, mathematics and science outcomes for Ireland*. Educational Research Centre. https://www.erc.ie/documents/pt_2011_main_report.pdf

Eivers, E., Close, S., Shiel, G., Millar, D., Clerkin, A., Gilleece, L., & Kiniry, J. (2010). *The 2009 National Assessments of English Reading and Mathematics*. Educational Research Centre. http://www.erc.ie/documents/na2009_report.pdf

Eivers, E., & Creaven, A-M. (2013). Home-school interaction. In E. Eivers, & A. Clerkin, (Eds), *National schools, international contexts: Beyond the PIRLS and TIMSS test results* (pp. 105-128). https://www.erc.ie/documents/pt2011_ch6.pdf

Eivers, E. & Delaney, M. (2018). *PIRLS and ePIRLS 2016: Test content and Irish pupils' performance*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2018/08/Report-series-4-Online-version.pdf

Eivers, E., Gilleece, L. & Delaney, E. (2017). *Reading achievement in PIRLS 2016: Initial report for Ireland*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2017/12/PIRLS-2016_inital-report-IRL.pdf

Eivers, E., Shiel, G., Perkins, R., & Cosgrove, J. (2005). *Succeeding in reading? Reading standards in Irish primary schools*. Stationery Office. https://www.erc.ie/documents/naer04_succeeding_in_reading.pdf

Feerick, E., Cosgrove, J., & Moran, E. (2021). *Digital Learning Framework (DLF) national longitudinal evaluation: One year on – Wave 1 report*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2021/06/DLF-W1-full-report.pdf

Feerick, E., Clerkin, A., & Cosgrove, J. (2022). Teachers' understanding of the concept of 'embedding' digital technology in education. *Irish Educational Studies*, 41(1), 27-39. https://doi.org/10.1080/03323315.2021.2022521

Foy, P., & Yin, Y. (2017). Scaling the PIRLS 2016 achievement data. In M. O. Martin, I. V. S. Mullis, & M. Hooper (Eds.), *Methods and Procedures in PIRLS 2016* (pp. 12.1-12.38). TIMSS & PIRLS International Study Center & IEA. https://timssandpirls.bc.edu/publications/pirls/2016-methods/chapter-12.html

Francis, B., & Skelton, C. (2005). *Reassessing gender and achievement: Questioning contemporary key debates*. Routledge. https://doi.org/10.4324/9780203412923

Gilleece, L. (2015). Parental involvement and pupil reading achievement in Ireland: Findings from PIRLS 2011. *International Journal of Educational Research*, 73, 23-36. https://doi.org/10.1016/j.ijer.2015.08.001

Gilleece, L. & Eivers, E. (2018). Characteristics associated with paper-based and online reading in Ireland: Findings from PIRLS and ePIRLS 2016. *International Journal of Educational Research*, 91, 16-27. https://doi.org/10.1016/j.ijer.2018.07.004

Gilleece, L., Nelis, S.M., Fitzgerald, C., & Cosgrove, J. (2020). *Reading, mathematics and science achievement in DEIS schools: Evidence from PISA 2018*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2022/03/ERC-DEIS-PISA-2018-Report1_Sept-2020_A4_Website.pdf

Growing Up in Ireland Study Team. (2018). *Growing Up in Ireland. Key findings: Cohort '08 at 9 years old. No. 2: School and learning*. ESRI/ TCD / DCYA. https://www.growingup.ie/pubs/Growing-Up-in-Ireland-School-and-Learning-.pdf

Hooper, M. (2020). *Troubling trends: An international decline in reading attitudes. IEA Compass: Briefs in Education No. 8*. IEA. https://www.iea.nl/sites/default/files/2020-03/Compass_brief_8_Troubling-trends.pdf

Hunt, G. (2017). Talking about reading. In P. Goodwin (Ed.), *The articulate classroom: Talking and learning in the primary school* (pp. 53-61). Routledge.

IEA (2019). IEA International Database Analyzer (IDB Analyzer) (Version 4.0). Author. www.iea.nl/data-tools/tools

Kavanagh, L. (2019). Relations between children's reading motivation, activity and performance at the end of primary school. *Journal of Research in Reading*, 42(3-4), 562-582. https://doi.org/10.1111/1467-9817.12284

Kavanagh, L., Shiel, G., Gilleece, L., & Kiniry, J. (2015). *The 2014 National Assessments of English Reading and Mathematics. Volume II: Context report*. Educational Research Centre. http://www.erc.ie/wp-content/uploads/2016/09/NA-Context-Report-Oct_2016.pdf

Kavanagh, L. & Weir, S. (2018). *The evaluation of DEIS: The lives and learning of urban primary school pupils, 2007-2016*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2018/09/DEIS_2018_Online.pdf

Kavanagh, L., Weir, S., & Moran, E. (2017). *The evaluation of DEIS: Monitoring achievement and attitudes among urban primary school pupils from 2007 to 2016*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2017/06/DEIS-report-2017.pdf

Kent. G., & Pitsia, V. (2018). A comparison of the home learning environment of families at risk of socio-economic disadvantage to national norms in Ireland. *Irish Educational Studies*, 37(4), 505-521. https://doi.org/10.1080/03323315.2018.1471409

Kollmayer, M., Schober, B., & Spiel, Christiane. (2018). Gender stereotypes in education: Development, consequences, and interventions. *European Journal of Developmental Psychology*, 15(4), 361-377.

LaRoche, S. & Foy, P. (2017). Sample implementation in PIRLS 2016. In M.O. Martin, I.V.S. Mullis & M. Hooper (Eds.), *Methods and procedures in PIRLS 2016*. TIMSS & PIRLS International Study Center & IEA. https://pirls.bc.edu/publications/pirls/2016-methods/chapter-5.html

Logan, S. & Johnston, R. (2009). Gender differences in reading ability and attitudes: examining where these differences lie. *Journal of Research in Reading*, 32(2), 199-214. http://doi.org/10.1111/j.1467-9817.2008.01389.x

Lynch, K. & Crean, M. (2018). Economic inequality and class privilege in education: Why equality of economic condition is essential for equality of opportunity. In J. Harford (Ed.), *Education for all? The legacy of free post-primary education in Ireland* (pp. 139-160). Peter Lang. Via UCD Research Repository: https://researchrepository.ucd.ie/handle/10197/9563

Martin, M.O., Foy, P., Mullis, I.V.S., & Dwyer, L.M. (2013). Effective schools in reading, mathematics and science at the Fourth grade. In M.O. Martin & I.V.S. Mullis (Eds.), *TIMSS and PIRLS 2011: Relationships Among Reading, Mathematics, and Science Achievement at the Fourth Grade – Implications for Early Learning* (pp. 109-178). TIMSS and PIRLS International Study Center & IEA. https://timssandpirls.bc.edu/timsspirls2011/downloads/TP11_Relationship_Report.pdf

Martin, M.O., Mullis, I.V.S., Foy, P., & Arora, A. (2012). Creating and interpreting the TIMSS and PIRLS 2011 context questionnaire scales. In M.O. Martin & I.V.S. Mullis (Eds.), *Methods and procedures in TIMSS and PIRLS 2011*. TIMSS & PIRLS International Study Center & IEA. https://timss.bc.edu/methods/t-context-q-scales.html

Martin, M. O., Mullis, I. V. S., & Hooper, M. (Eds.). (2017). *Methods and procedures in PIRLS 2016*. TIMSS & PIRLS International Study Center & IEA. https://timssandpirls.bc.edu/publications/pirls/2016-methods.html

McCoy, S., Quail, A., & Smyth, E. (2012). *Influences on 9-year-olds' learning: Home, school, and community*. ESRI / TCD / DCYA. https://www.esri.ie/system/files/publications/BKMNEXT204.pdf

McCoy, S., Quail, A., & Smyth, E. (2014). The effects of school social mix: unpacking the differences. *Irish Educational Studies*, 33(3), 307–330. http://dx.doi.org/10.1080/03323315.2014.955746

McCoy, S., Smyth, E., & Banks, J. (2012). *The primary classroom: Insights from the Growing Up in Ireland study*. NCCA / ESRI. https://www.esri.ie/system/files/publications/BKMNEXT205.pdf

McGeown, S.P., Johnston, R.S., Howatson, K., Stockburn, A., & Dufton, P. (2015). The relationship between young children's enjoyment of learning to read, reading attitudes, confidence and attainment. *Educational Research*, 57(4), 389-402. https://doi.org/10.1080/00131881.2015.1091234

McGeown, S., & United Kingdom Literacy Association (UKLA). (2013). *Reading motivation and engagement in the primary classroom: Theory, research and practice*. UKLA.

McGillicuddy, D. & Devine, D. (2020). 'You feel ashamed that you are not in the higher group' – Children's psychosocial response to ability grouping in primary school. *British Educational Research Journal*, 46(3), 553–573. https://doi.org/10.1002/berj.3595

McKeown, C., Denner, S., McAteer, S., Shiel, G., & O'Keeffe, L. (2019). *Learning for the future: The performance of 15-year-olds in Ireland on reading literacy, science and mathematics in PISA 2018*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2020/07/B23321-PISA-2018-National-Report-for-Ireland-Full-Report-Web-4.pdf

McNamara, E., Murray, A., O'Mahony, D., O'Reilly, C., Smyth, E., & Watson, D. (2021). *Growing Up in Ireland: The lives of nine-year-olds of Cohort '08*. ESRI. https://www.growingup.ie/pubs/Lives-of-9YOs.pdf

Min, I., Cortina, K.S., & Miller K.F. (2016). Modesty bias and the attitude-achievement paradox across nations: A reanalysis of TIMSS. *Learning and Individual Difference*, 51(6), 359-366. https://doi.org/10.1016/j.lindif.2016.09.008

Molfese, V.J, Modglin, A, & Molfese, D.L. (2003). The role of environment in the development of reading skills: A longitudinal study of preschool and school-age measures. *Journal of Learning Disabilities*, 36(1), 59–67. https://doi.org/10.1177/00222194030360010701

Morgan, P.L. & Fuchs, D. (2007). Is there a bidirectional relationship between children's reading skills and reading motivation? *Exceptional Children*, 73(2), 165-183. https://doi.org/10.1177/001440290707300203

Mullan, K. (2010). Families that read: A time-diary analysis of young people's and parents' reading. *Journal of Research in Reading*, 33(4), 414-430. https://doi.org/10.1111/j.1467-9817.2010.01438.x

Mullis, I. V. S., & Martin, M. O. (Eds.). (2015). *PIRLS 2016 assessment framework* (2nd ed.). TIMSS & PIRLS International Study Center & IEA. http://timssandpirls.bc.edu/pirls2016/framework.html

Mullis, I.V.S., Martin, M.O., Foy, P., & Drucker, K.T. (2012). *PIRLS 2011 international results in reading.* TIMSS & PIRLS International Study Center & IEA. https://timssandpirls.bc.edu/pirls2011/international-results-pirls.html

Mullis, I. V. S., Martin, M. O., Foy, P., & Hooper, M. (2017). *PIRLS 2016 international results in reading*. TIMSS & PIRLS International Study Center & IEA. http://timssandpirls.bc.edu/pirls2016/international-results/

National Council for Curriculum and Assessment (NCCA). (n.d.-a) *Aistear/Síolta Practice Guide: Resources for sharing*. Author. https://www.aistearsiolta.ie/en/play/resources-for-sharing/

NCCA. (n.d.-b) *The what, why and how of your child's learning*. Author. https://ncca.ie/media/4084/helping_your_child_in_junior_and_senior_infants.pdf

NCCA. (2007). A*ssessment in the Primary School Curriculum. Guidelines for schools.* Author. https://ncca.ie/media/1351/assessment-guidelines.pdf

NCCA. (2009). *Aistear: The early childhood curriculum framework*. Author. https://curriculumonline.ie/Early-Childhood/

NCCA. (2014). *Consultation on the Draft Primary Language Curriculum: Junior Infants to Second Class. Interim report*. Author. https://ncca.ie/media/2046/consultation-on-the-draft-primary-language-curriculum-interim-report.pdf

NCCA. (2015). *Draft Primary Language Curriculum. English-medium schools: English Language 1 and Gaeilge Teanga 2. Stage 1: Junior and Senior Infants. Stage 2: First and Second Class. For consultation: April 9th to July 11th*. Author. https://ncca.ie/media/1871/final_for_consultation_primary_language_curriculum.pdf

NCCA. (2019). *Primary language curriculum*. Department of Education and Skills (DES). https://curriculumonline.ie/getmedia/2a6e5f79-6f29-4d68-b850-379510805656/PLC-Document_English.pdf

NCCA. (2020). *Draft Primary Curriculum Framework. For consultation*. Author. https://ncca.ie/media/4456/ncca-primary-curriculum-framework-2020.pdf

National Parents Council (NPC). (n.d.-a) *Homework*. Author. https://www.npc.ie/images/uploads/downloads/Homework.PDF

NPC. (n.d.-b). *Supporting your child's learning at home*. Author. https://www.npc.ie/images/uploads/downloads/LearningatHome.PDF

Nelis, S.M., Gilleece, L., Fitzgerald, C., & Cosgrove, J. (2021). *Beyond achievement: Home, school and wellbeing findings from PISA 2018 for students in DEIS and non-DEIS schools.* Educational Research Centre. https://www.erc.ie/wp-content/uploads/2021/06/FINAL_Web_version_ERC-PISA-DEIS-Report-II_May-2021.pdf

Neuman., M.M. (2016). A socioeconomic comparison of emergent literacy and home literacy in Australian pre-schoolers. *European Early Childhood Education Research Journal,* 24(4), 555-566. https://doi.org/10.1080/1350293X.2016.1189722

O'Leary, M., Lysaght, Z., Nic Craith, D., & Scully, D. (2019). *Standardised testing in English reading and mathematics in the Irish primary school: A survey of Irish primary teachers*. Dublin City University Centre for Assessment Research, Policy and Practice (DCU CARPE) & Irish National Teachers' Organisation (INTO). https://www.dcu.ie/sites/default/files/inline-files/CARPE-INTO-Standardised-Testing-Survey-2019.pdf

Ombudsman for Children's Office (OCO). (2019). *No place like home: Children's views and experiences of living in Family Hubs*. Author. https://www.oco.ie/app/uploads/2019/04/No-Place-Like-Home.pdf

OCO. (2020). *Direct division: Children's views and experiences of living in Direct Provision*. Author. https://www.oco.ie/directdivision/direct-division-report/

Organisation for Economic Cooperation and Development (OECD). (2019). *PISA 2018 Results (Volume II): Where All Students Can Succeed*. Author. https://doi.org/10.1787/b5fd1b8f-en.

Ozturk, G., Hill, S., Yates, G.C.R. (2016). Girls, boys and early reading: Parents' gendered views about literacy and children's attitudes toward reading. *Early Child Development and Care,* 186(5), 703-715. https://doi.org/10.1080/03004430.2015.1053477

Park, H. (2008). Home literacy environments and children's reading performance: A comparative study of 25 countries. *Educational Research and Evaluation*, 14(6), 489-505. https://doi.org/10.1080/13803610802576734

Perkins, R., Clerkin, A., & Chubb, E. (2020). *Students' perspectives on learning mathematics and science: Results from TIMSS 2015 in Ireland*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2020/11/B23354-Students-perspectives-on-learning-maths-and-science-online.pdf

Perkins, R., Moran, G., Cosgrove, J., & Shiel, G. (2010). *PISA 2009: The performance and progress of 15-year-olds in Ireland. Summary report*. Educational Research Centre. https://www.erc.ie/documents/p09national_summary_report2009.pdf

Perkins, R., Moran, G., Shiel, G., & Cosgrove, J. (2011). *Reading literacy in PISA 2009: A guide for teachers.* Educational Research Centre. http://www.erc.ie/documents/p09teachersguide.pdf

Petscher, Y. (2010). A meta-analysis of the relationship between student attitudes towards reading and achievement in reading. *Journal of Research in Reading*, 33(4), 335–355. https://doi.org/10.1111/j.1467-9817.2009.01418.x

Pfost, M., Schiefer, I.M., & Artelt, C. (2016). Intergenerational continuity in attitudes toward reading and reading behavior. *Learning and Individual Differences*, 51, 179-188. https://doi.org/10.1016/j.lindif.2016.09.002

Professional Development Service for Teachers (PDST). (2020). *Literacy development in the primary classroom: Six key components*. Author. https://www.pdst.ie/sites/default/files/Literacy%20Development%20in%20the%20Primary%20Classroom.pdf

Saçkes, M., Işıtan, S., Avci, K., & Justice, L.M. (2016). Parents' perceptions of children's literacy motivation and their home-literacy practices: What's the connection? *European Early Childhood Education Research Journal*, 24(6), 857-872. https://doi.org/10.1080/1350293X.2014.996422

Schleicher, A. (2019). *PISA 2018: Insights and interpretations*. OECD. https://www.oecd.org/pisa/PISA%202018%20Insights%20and%20Interpretations%20FINAL%20PDF.pdf

Scholes, L. (2019). Differences in attitudes towards reading and other school-related activities among boys and girls. *Journal of Research in Reading*, 42(3-4), 485-503. https://doi.org/10.1111/1467-9817.12279

Scholes, L., Spina, N., & Comber, B. (2021). Disrupting the 'boys don't read' discourse: Primary school boys who *love* reading fiction. *British Educational Research Journal*, 47(1), 163-180. https://doi.org/10.1002/berj.3685

Sénéchal, M. (2006). Testing the home literacy model: Parent involvement in kindergarten is differentially related to Grade 4 reading comprehension, fluency, spelling, and reading for pleasure. *Scientific Studies of Reading*, 10(1), 59-87. https://doi.org/10.1207/s1532799xssr1001_4

Sénéchal, M., and LeFevre, J-A. (2002). Parental involvement in the development of children's reading skills: A five-year longitudinal study. *Child Development*, 73(2), 445-460. https://doi.org/10.1111/1467-8624.00417

Shiel, G., Kavanagh, L., & Millar, D. (2014). *The 2014 National Assessments of English Reading and Mathematics. Volume 1: Performance report*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2016/11/NA_2014_Vol1_Final-updated.pdf

Shiel, G., Kelleher, C., McKeown, C., & Denner, S. (2016). *Future ready? The performance of 15-year-olds in Ireland on Science, Reading Literacy and Mathematics in PISA 2015*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2016/12/PISA2015_FutureReady.pdf

Shiel, G., McHugh, G., Denner, S., Delaney, M., Cosgrove, J., & McKeown, C. (2022). *Reading literacy in Ireland in PISA 2018: Performance, policy and practice*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2022/05/20-ERC-Reading-Literacy-PISA-2018-Report_A4_Digital-2-FINAL.pdf

Skibbe, L.E., Bindman, S.W., Hindman, A.H., Aram, D., & Morrison, F.J. (2013). Longitudinal relations between parental writing support and pre-schoolers' language and literacy skills. *Reading Research Quarterly*, 48(4), 387-401. https://doi.org/10.1002/rrq.55

Smyth, E. (2017). *Growing Up in Ireland. National Longitudinal Study of Children. Off to a good start? Primary school experiences and the transition to second-level education. Child Cohort. Report 5*. Stationery Office. https://www.growingup.ie/pubs/Off-to-a-Good-Start-Report.pdf

Smyth, E., McCoy, S., & Kingston, G. (2015). *Learning from the evaluation of DEIS*. ESRI. https://www.esri.ie/system/files/publications/RS39.pdf

van Bergen, E., van Zuijen, T., Bishop, D., & de Jong, P.F. (2017). Why are home environment and children's reading skills associated? What parental skills reveal. *Reading Research Quarterly*. 52(2), 147-160. https://doi.org/10.1002/rrq.160

van Tonder, B., Arrow, A., & Nicholson, T. (2019). Not just storybook reading: Exploring the relationship between home literacy environment and literate cultural capital among 5-year-old children as they start school. *Australian Journal of Language and Literacy*, 42(2), 87–102. https://search.informit.org/doi/10.3316/ielapa.391279468267528

Weir, S., Archer, P., Gilleece, L., & O'Flaherty, A. (2011). *A report on the first phase of the evaluation of DEIS*. Educational Research Centre. https://www.erc.ie/documents/deis_p1_main.pdf

Weir, S., Kavanagh, L., Moran, E., & Ryan, A. (2018). *Partnership in DEIS schools: A survey of Home-School-Community Liaison coordinators in primary and post-primary schools in Ireland*. Educational Research Centre. https://www.erc.ie/wp-content/uploads/2018/11/HSCL-report-2018.pdf

Wilkinson, K., Andries, V., Howarth, D., Bonsall, J., Sabeti, S., & McGeown, S. (2020). Reading during adolescence: Why adolescents choose (or do not choose) books. *Journal of Adolescent & Adult Literacy*, 64(2), 157-166.

Williams, J., Greene, S., Doyle, E., Harris, E., Layte, R., McCoy, S., McCrory, C., Murray, A., Nixon. E., O'Dowd, T., O'Moore, M., Quail, A., Smyth, E., Swords, L., & Thornton, M. (2009). *Growing Up in Ireland. The lives of 9-year-olds. Child cohort. Report 1*. The Stationery Office. https://www.esri.ie/system/files/publications/BKMNEXT154.pdf

Williams, J., Murray, A., McCrory, C., & McNally, S. (2013). *Growing Up in Ireland. Development from birth to three years. Infant cohort. Report 5.* ESRI / TCD/ DCYA. https://www.esri.ie/system/files/publications/BKMNEXT243.pdf

Williams, J., Thornton, M., Morgan, M., Quail, A., Smyth, E., Murphy, D., & O'Mahony, D. (2018). *Growing Up in Ireland. The lives of 13-year-olds. Child cohort. Report 6*. ESRI / TCD / DCYA. https://www.growingup.ie/pubs/Lives-of-13-Year-olds-report.pdf

Yang, G., Badri, M., Al Rashedi, A., & Almazroui, K. (2018). The role of reading motivation, self-efficacy, and home influence in students' literacy achievement: A preliminary examination of fourth graders in Abu Dhabi. *Large-scale Assessments in Education,* 6(10). https://doi.org/10.1186/s40536-018-0063-0

Yeo, L.S., Ong, W.O., & Ng, C.M., (2014). The home literacy environment and preschool children's reading skills and interest. *Early Education and Development*, 25(6), 791-814. https://doi.org/10.1080/10409289.2014.862147

Foras Taighde ar Oideachas
Educational Research Centre

ISBN 978-1-911678-07-6