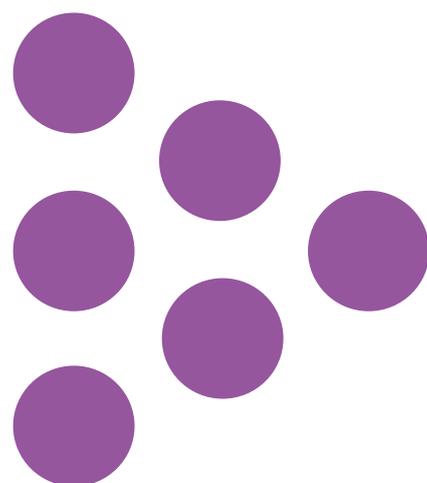


Report

Using PISA 2018 to inform policy: Learning from the Republic of Ireland

National Foundation for Educational Research (NFER)



Using PISA to inform policy: Learning from the Republic of Ireland

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Executive Summary

The Republic of Ireland has a history of high reading scores in the Programme for International Student Assessment (PISA), and is a country with many cultural similarities to the four UK nations (England, Scotland, Wales and Northern Ireland). This report focuses on reading policy in the Republic of Ireland, using data from PISA, policy reviews, surveys, and interviews with key policy stakeholders, to explore what can be learned for the UK.

How does the Republic of Ireland's PISA reading performance compare to the UK nations'?

In PISA 2018, 15-year-old pupils in the Republic of Ireland achieved significantly higher scores for reading literacy than their counterparts in the UK. The pattern of higher achievement was consistent across all the PISA reading cognitive processes of locating, understanding and evaluating, whether reading single or multiple texts, with no country showing particular strengths or weaknesses.

Compared to the other four nations, the Republic of Ireland had a smaller proportion of pupils working at the lowest PISA reading proficiency levels, whilst also having a high proportion working at the higher levels.

How has PISA reading performance changed over time in the UK nations and the Republic of Ireland?

With the exception of 2009, the Republic of Ireland has scored significantly above the UK nations in PISA reading literacy since 2006. Its 2009 performance is considered by researchers in the Republic of Ireland to be anomalous. Reading scores in the four UK nations have remained stable since 2006, the only exception being a dip in Scotland in 2015. None of the five nations in this study have significantly improved their reading score compared with PISA 2006.

The Republic of Ireland has consistently had a significantly lower proportion of pupils performing below the benchmark of basic literacy, PISA Level 2, than UK nations. It has also had comparatively high proportions of pupils achieving the highest proficiency levels. In PISA 2018, England had a similar proportion of high achieving pupils to the Republic of Ireland but, like all other UK nations, it also had a higher percentage of pupils at the lowest levels.

What are the key policies aimed at increasing reading performance in the Republic of Ireland?

Our policy review and survey identified many policies across the five nations that were designed to improve the reading attainment of the PISA 2018 cohort.

In the Republic of Ireland, two major policy initiatives were identified by policy experts as the most important for driving reading improvement: Delivering Equality of Opportunity in Schools (DEIS, pronounced 'desh', Irish for 'opportunity') launched in 2005, and the National Strategy: Literacy and Numeracy for Learning and Life 2011–2020.

DEIS was introduced when the PISA 2018 cohort was between two and three years old and was designed to build upon and integrate previous policies aimed at disadvantaged pupils into a single policy. Many of the previous policy initiatives contained within DEIS, such as the Home School Community Liaison programme, have existed in some form since the 1980s. The plan identifies and targets policies at a range of rural and urban schools that are considered to be most disadvantaged, providing a range of available interventions, including additional literacy and numeracy support, teacher professional development services and additional funding, some of which schools may select and implement at their discretion.

The National Strategy was introduced in 2011 and in many ways was a response to the 2009 dip in PISA performance. It contained six major pillars focusing on engagement with parents and the community, reforms of teaching and teacher training, a focus on leadership, changes to the curriculum, efforts to tackle educational disadvantage, and changes to assessment and evaluation within schools. Importantly, the priorities within the National Strategy are also linked to and build upon previous policy changes, including DEIS.

Examining the cost of implementing these initiatives relative to equivalent policies in the UK nations is outside of the scope of this report, which was focused only on the content of the policies.

What has been the impact of policies aimed at increasing reading attainment in the Republic of Ireland?

Evaluations of DEIS by the Republic of Ireland government and educational research organisations have found that it has increased reading assessment scores in enrolled primary schools and attendance in almost all primary schools and half of post-primary schools. Longitudinal analyses have recorded that there has also been a slight, but significant, narrowing of the gap between DEIS and non-DEIS schools at post-primary level. An interim review of the National Strategy (2017) noted the first significant improvements in reading test scores in nearly 30 years.

In our interviews, policy experts from the Republic of Ireland indicated key reasons for the success of DEIS and the National Strategy. These include: integrated policymaking, further autonomy for schools and teachers, reform of continued professional development and teacher training, engagement with families and the local community, meaningful collaboration with key stakeholders, a wider culture of reading and support for schooling, and a history of policy that tackles disadvantage.

However, PISA reading scores have been higher than the UK nations since 2006, excluding the previously explained 2009 dip. This sustained difference between the Republic of Ireland and the UK nations may point to the importance of policies that have existed for longer periods of time, and/or to other factors, such as cultural differences, playing a role.

Have the factors associated with good reading attainment in PISA changed since 2009?

In general, the factors associated with higher reading achievement were similar for the Republic of Ireland and the UK nations, and were unchanged since 2006. There were, however, some factors which relate to higher reading attainment that were different for pupils in the Republic of Ireland compared with UK pupils. They reported greater enjoyment of reading, higher aspirations for the future (though this was similar to pupils in England) and having more cultural possessions in their home, such as classic literature, works of art or musical instruments.

Are there lessons that can be applied more widely?

The following approaches to support future policy development have been drawn from the key findings of this review of national policies and PISA 2018 data.

Consider:

- an approach to policy that values continuity and an approach to policy development that integrates existing policies into new initiatives
- policies that build a collaborative culture between schools, families and local communities
- building review, evaluation and measures of success into the policy creation process
- a continued focus on identifying and supporting pupils at the lower end of the attainment distribution
- further work to explore the key elements of teacher training and CPD reform in the Republic of Ireland.

1 Introduction

The Programme for International Student Assessment (PISA) assesses 15-year-olds' proficiency in reading, mathematics and science and also collects a wealth of background information from pupil and school questionnaires. In 2018, 79 countries participated in PISA. PISA 2018 was the first cycle since PISA 2009 to have a major focus on reading literacy, providing a unique opportunity to review trends in reading performance over time. The Republic of Ireland, while culturally similar to the UK nations in many ways, has consistently scored higher than the UK nations in reading, including in PISA 2018.

The comparison of reading attainment across countries is highly topical and of value to various stakeholders within the sector. The use of PISA contextual and attainment data, with its applied focus, ensures that reading literacy development is framed as an area for which all post-primary teachers have responsibility. Rather than being presented as a single examinable subject, PISA conceptualises reading literacy as a life skill, relevant for employment, further education and lifelong learning. By the time pupils have left primary school, it is assumed by many that, for the vast majority of pupils, reading does not need to be taught; but we know that functional literacy is vital for success in the workplace and further education and training. As such, a focus on the development of pupils' reading abilities should always be regarded as an important priority in post-primary education as it is in primary school, thereby ensuring that pupils leave school with at least the basic literacy skills they needed to equip them for life.

This study shines a light on what has contributed to the sustained reading literacy performance in the Republic of Ireland. We focus on reading policy in the Republic of Ireland, using PISA data, policy reviews, surveys, and interviews with key policy stakeholders to answer the following five questions with a view to providing evidence to inform and support future policy:

1. How does the Republic of Ireland's PISA reading performance compare to the UK nations'?
2. How has PISA reading performance changed over time in the UK nations and the Republic of Ireland?
3. What are the key policies aimed at increasing reading performance in the Republic of Ireland?
4. What has been the impact of policies aimed at increasing reading attainment in the Republic of Ireland?
5. Have the factors associated with good reading attainment in PISA changed since 2009?

For this study we used a mixed-methods approach comprising:

1. A comparative review of policy relating to literacy development in the UK and the Republic of Ireland
2. Comparative analyses of PISA reading data and trends
3. An online survey of national representatives/policy makers from the four UK nations and the Republic of Ireland on key policies and their impact
4. In-depth interviews with selected senior educational professionals in the Republic of Ireland from the Department of Education and educational research organisations with a wide understanding and experience of policy history and implementation.

While this study relies heavily on the perception of policy experts in the Republic of Ireland, this provides a unique view of PISA that goes beyond statistical analyses and explanations of the data. By combining PISA data with policy analysis and taking a comparative approach to reading policy across the UK and the Republic of Ireland, this study should provide a new contribution to the PISA literature.

1.1 Background to the study

Key background points

- The Republic of Ireland has consistently scored higher than the UK nations in reading scores since PISA 2006.
- There was one exception to this pattern in PISA 2009. However, the 2009 dip in reading scores is considered to be anomalous for a variety of complex factors, with pupil performance in that cycle of PISA not accurately representative of Republic of Ireland pupils' skills¹.

Republic of Ireland consistently scores above the UK nations for reading in PISA

The Republic of Ireland has consistently scored significantly² higher than UK nations in PISA's assessment of reading. England and Northern Ireland achieved very high levels of attainment in primary school reading in the Progress in International Reading Literacy Study³ (PIRLS). However, the performance of 15-year-old pupils in PISA has been much closer to the international average – although significantly above it, except in Wales.

The Republic of Ireland, however, manages to maintain its position among the highest performing countries for reading at post-primary. The exception to this was in PISA 2009, but the results for that cycle in the Republic of Ireland are now regarded as anomalous.

Republic of Ireland considers the PISA 2009 results to be an anomaly

The PISA 2009 results in the Republic of Ireland showed an unexpected and significant dip in performance across all subjects compared to earlier results. Performance reverted to the previous high levels in PISA 2012. In the years following the publication of the PISA 2009 results, a series of research papers by policymakers and research organisations in the Republic of Ireland suggested that the dip in PISA scores was more likely to be an anomaly, as opposed to an actual fall in standards. It is now generally accepted that a range of factors underlie the observed change in the PISA scores in the Republic of Ireland in 2009, making its interpretation quite complex. Further information on this is provided in Appendix 1⁴.

Accepting these findings, it is reasonable to conclude that the Republic of Ireland has been outperforming the UK nations throughout the previous two decades.

¹ See Appendix 1 for further details.

² When statistical significance is reported, it indicates that the compared means are significantly different at the 5% level.

³ Scotland and Wales do not participate in PIRLS

⁴ A number of papers have been published addressing the 2009 dip in the Republic of Ireland, a comprehensive summary of the issues is available in Cosgrove *et al* (2014).

The results of PISA 2009 are important, however, in that they resulted in a lot of media commentary and precipitated a major policy response in the Republic of Ireland in the form of the National Literacy and Numeracy Strategy, introduced in 2011.

1.2 How has performance in PISA changed over time in the UK nations and the Republic of Ireland?

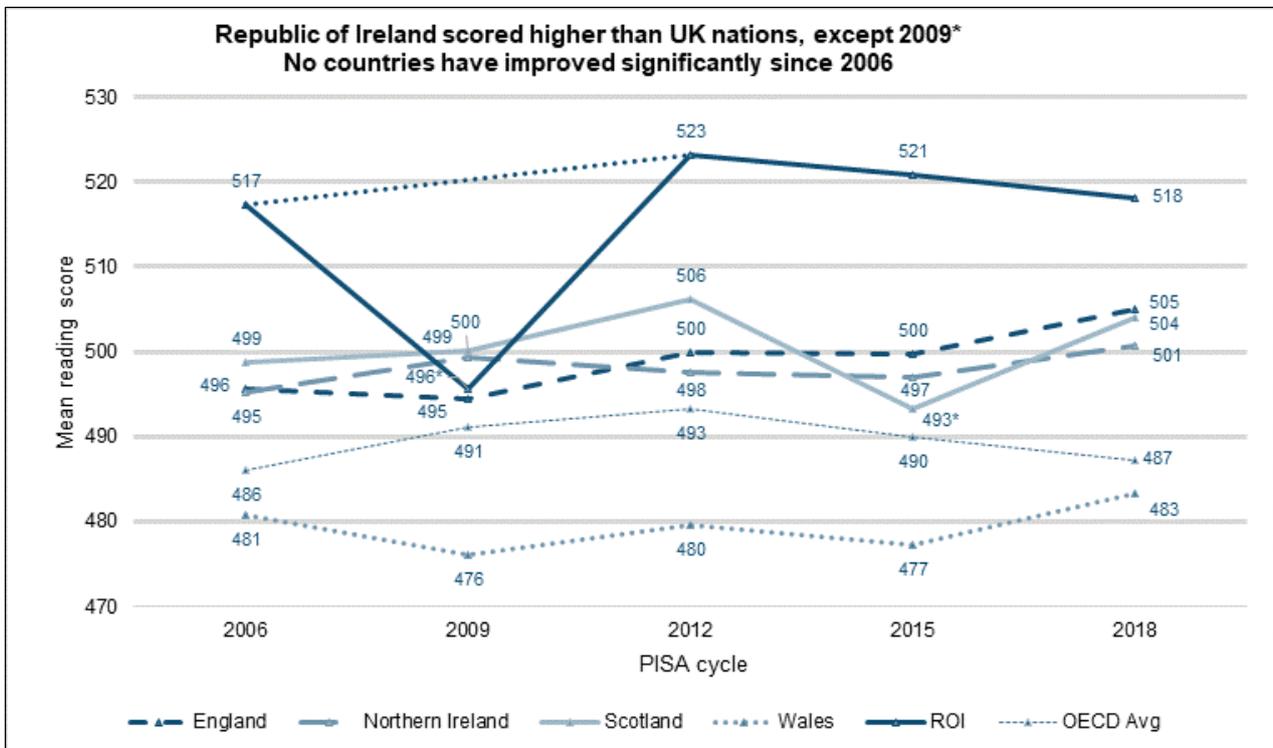
Trends in PISA scores from 2006 to 2018

- Pupils in the Republic of Ireland attained higher scores in reading than their counterparts in the UK in 2006 and from 2012 to 2018.
- In 2018, the Republic of Ireland had a significantly lower proportion of pupils working at the lowest levels of proficiency in reading.
- Over time, the Republic of Ireland has consistently had the lowest percentage of pupils working below basic literacy levels (below PISA Level 2) when compared with UK nations.
- England's mathematics score improved significantly between 2015 and 2018.
- All countries except England have significantly declined in science since 2006.

In this section, we compare the PISA reading scores in all four UK nations and the Republic of Ireland over time and examine the distributions of scores in each nation. We also look briefly at trends in PISA performance in mathematics and science across nations.

With the exception of 2009, the Republic of Ireland has maintained significantly higher performance in PISA reading than the UK nations

Figure 1: PISA reading scores over time 2006–2018



* Score differs significantly from 2018 traces the ROI line discounting the 2009 dip

Source: PISA 2018 database

None of the five nations' 2018 scores were a significant improvement on their scores in 2006. Over time, the only scores that were significantly different from those achieved in 2018 were in the Republic of Ireland in 2009 (as mentioned in section 1.1), and in Scotland in 2015. PISA reading scores in England, Wales and Northern Ireland have remained stable since 2006.

Reading subscales

The PISA 2018 reading literacy framework⁵ identifies three main processes that readers use when engaging with a text. These are 'locating information', 'understanding', and 'evaluating and reflecting'. It also classifies whether a text is composed of single or multiple sources.

In terms of these PISA subscales, pupil scores broadly reflect the patterns of overall scores in each country, with no country demonstrating notable strengths or weaknesses when broken down by these variables.

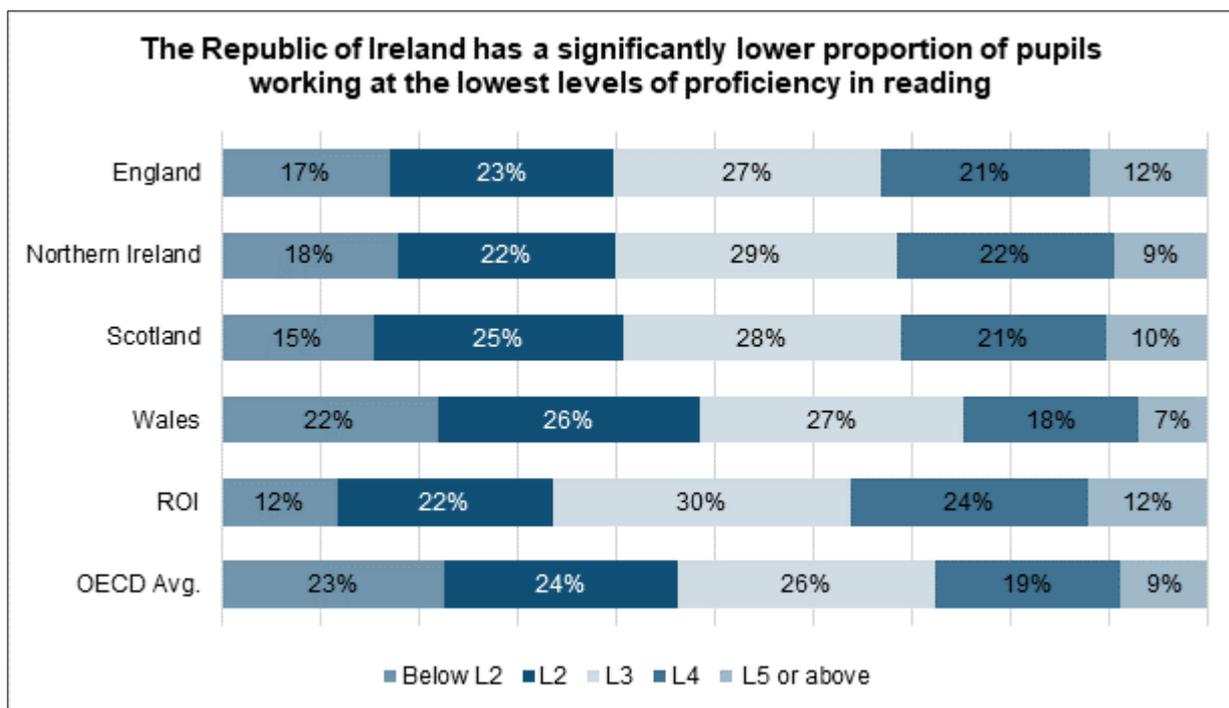
⁵ Explanations of each of the subscales are outlined in the PISA 2018 International report (OECD, 2019b).

The Republic of Ireland has the lowest proportion of pupils working below basic literacy levels, significantly below UK nations and the OECD average

A helpful way of examining the spread of attainment in each country is to look at the proportions of pupils working at the different PISA proficiency levels (Figure 2).

PISA defines a set of reading proficiency levels which describe reading progression in terms of the skills pupils exhibit at each level. The skills demonstrated at each level are shown in detail in Appendix 2. Pupils who score below Level 2 are considered low performers, that is, below the level of basic literacy, and those that perform at Level 5 or above are considered top performers (OECD, 2019b).

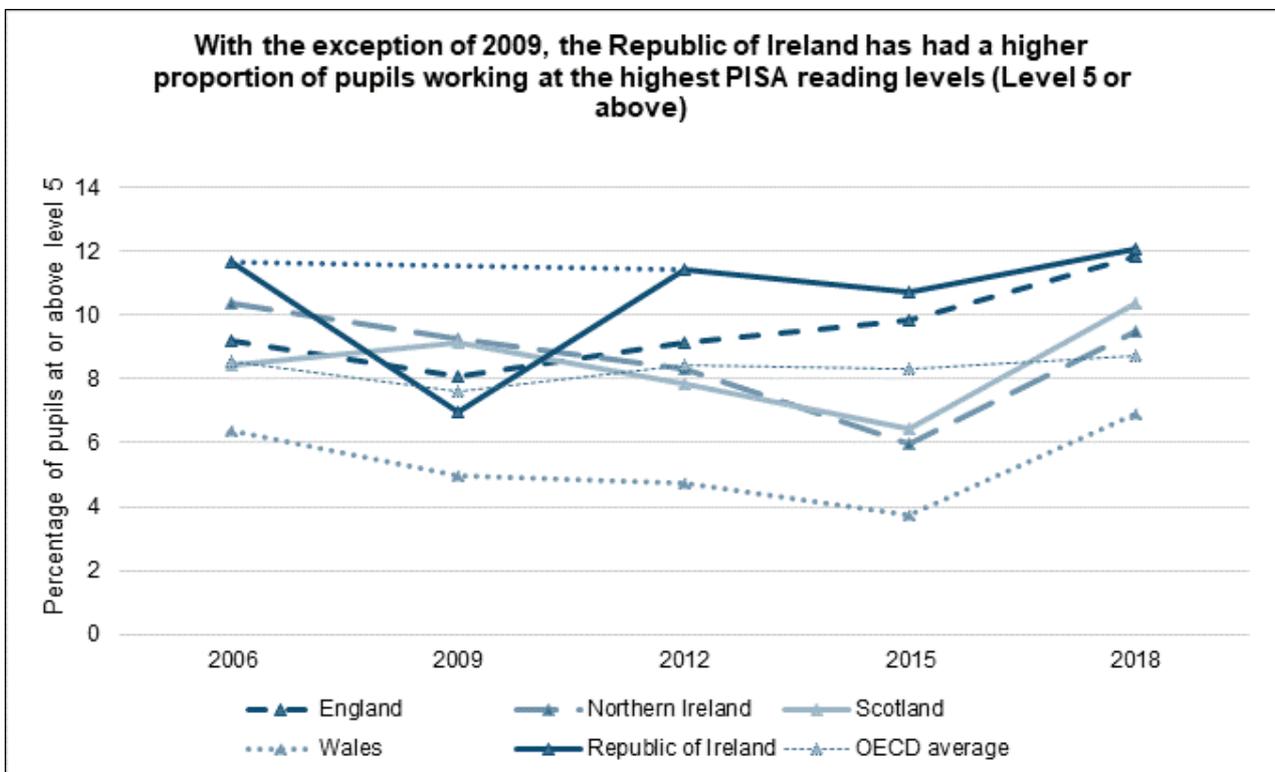
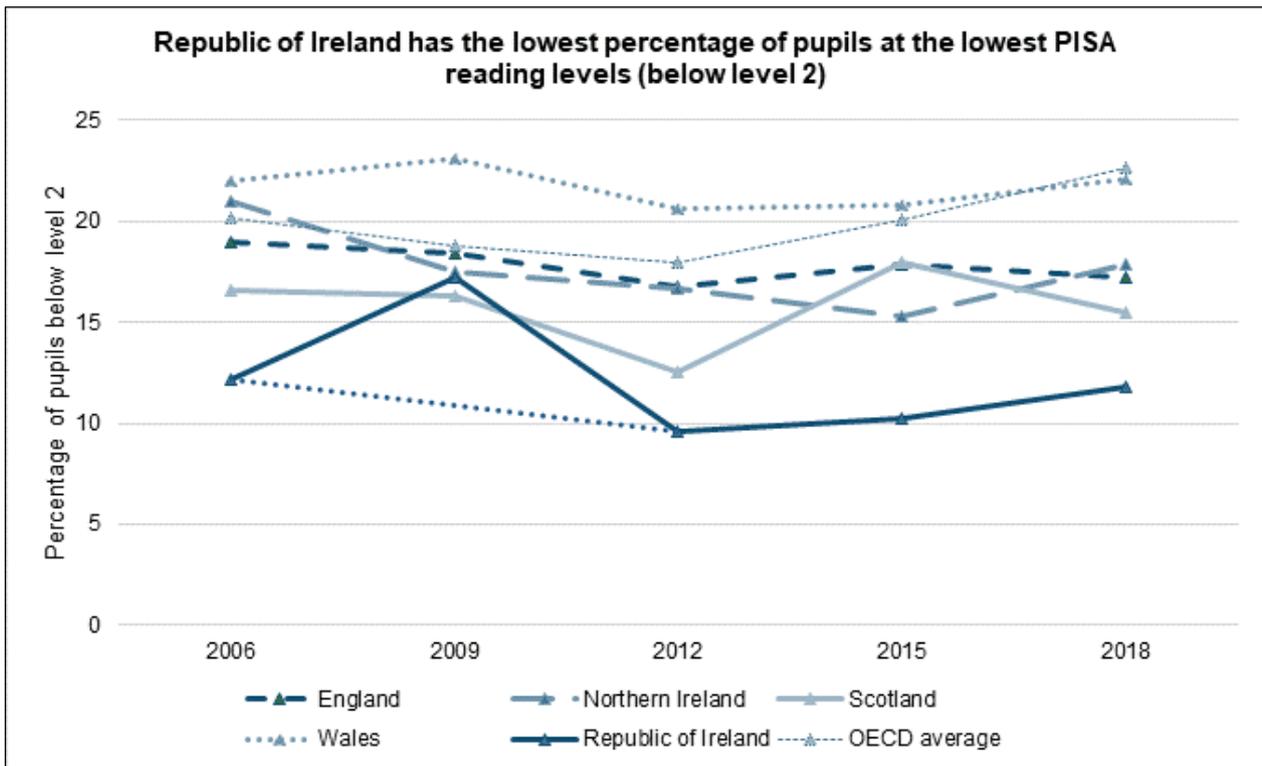
Figure 2: Percentage of pupils at each PISA reading proficiency level in 2018



Source: PISA 2018 database

As Figure 3 shows, trends over time indicate that, apart from the 2009 dip, the Republic of Ireland has consistently had a significantly lower proportion of pupils working below the benchmark of basic literacy (Level 2) than we see in UK nations. It also has high proportions of pupils working at the highest proficiency levels. In PISA 2018, England had a similar proportion of high achieving pupils as the Republic of Ireland but, like all other UK nations, it also had a higher percentage of pupils working at the lowest levels.

Figure 3: Trends in the proportions of pupils working at the lowest and highest proficiency levels in PISA reading



..... traces the ROI line discounting the 2009 dip

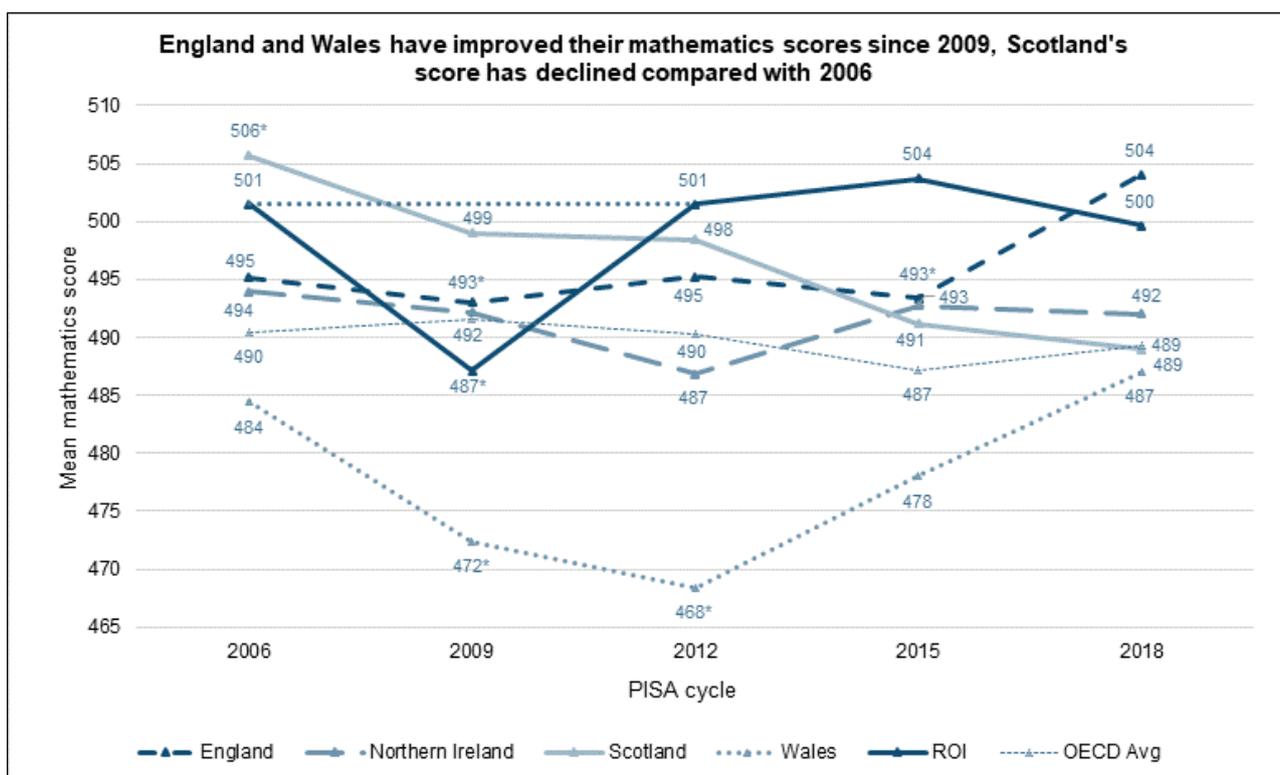
Source: PISA 2018 database

Another way to consider the distribution of scores in each country is to look at the gap between the top (90th) and bottom (10th) percentiles. In each of reading, mathematics and science, the Republic of Ireland has the smallest gap between their lowest and highest achievers, which is consistently reflected in higher scores achieved by the lower attaining pupils compared with those in other countries. The performance of its lower attaining pupils appears to be a key factor in explaining its overall higher reading scores in PISA.

In mathematics, England and Wales have significantly improved their scores since 2009; Scotland’s score has declined compared with 2006

An overview of PISA mathematics and science scores shows that England and Wales have significantly improved their PISA mathematics scores since 2009. This is also seen for the Republic of Ireland, but only as a result of the 2009 dip. Scotland’s mathematics score has declined significantly since 2006. The Republic of Ireland’s mathematics scores were significantly higher than all UK nations in 2015, but in 2018 England and Northern Ireland were performing at a similar level to the Republic of Ireland, while Scotland and Wales were still significantly lower in mathematics.

Figure 4: PISA mathematics scores over time 2006–2018



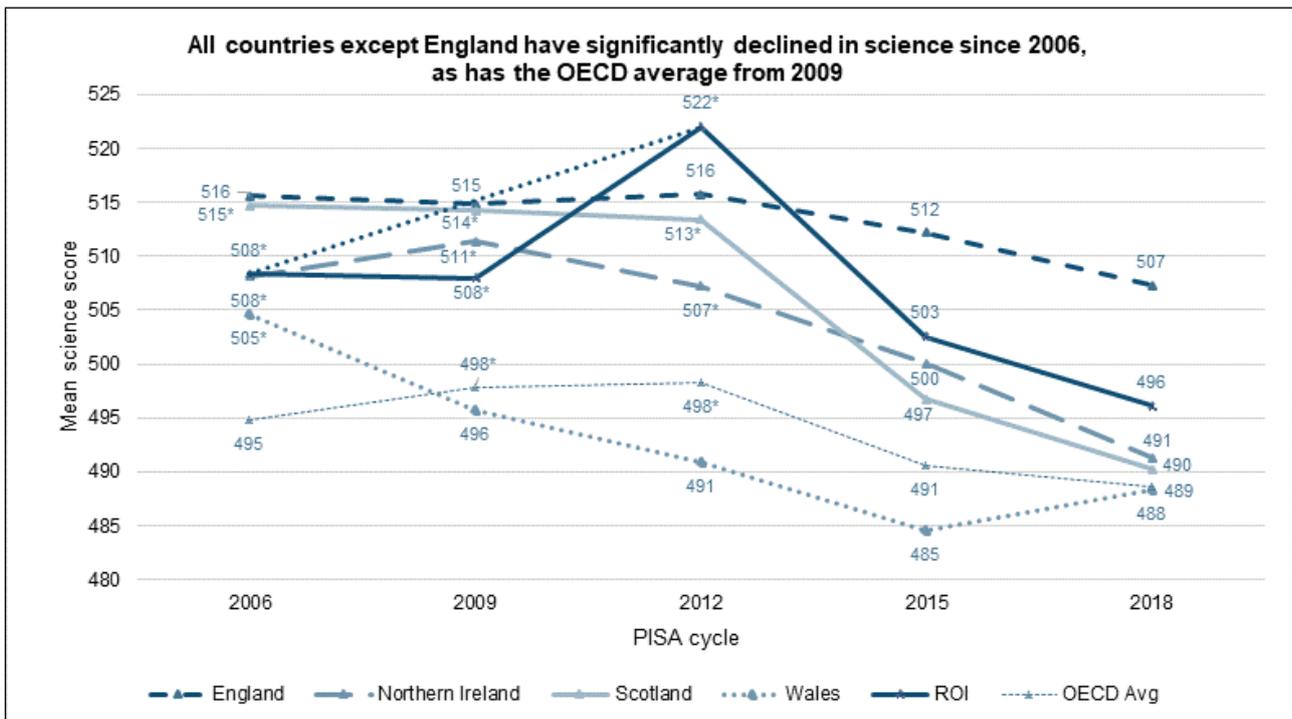
*Score differs significantly from 2018 traces the ROI line discounting the 2009 dip

Source: PISA 2018 database

In science, all countries except England show significant declines since 2006

In science, England is the only nation of the five not to have shown a significant decline since 2006. Since 2015, England has achieved significantly higher science scores than the Republic of Ireland and the other three UK nations.

Figure 5: PISA science scores over time 2006–2018



* Score differs significantly from 2018 traces the ROI line discounting the 2009 dip

Source: PISA 2018 database

In the next chapter we review the policy context and perceptions around the impact of policy in each of England, Scotland, Wales and Northern Ireland, using data from the comparative policy review and survey responses from national representatives and policymakers. In Chapter 3 we provide the in-depth policy context from the comparative policy review and survey in the Republic of Ireland and the findings of interviews with senior officials in the Republic of Ireland Department of Education and education research organisations, in order to explore differences in the educational experiences of pupils in the Republic of Ireland and those in the UK. These findings are then discussed in Chapters 4 and 5.

2. Policy background across the UK nations

Education is an area of devolved governance in the UK and, therefore, pupils in each country have experienced different policies which aim to improve literacy skills and raise the attainment of disadvantaged pupils.

The key policies experienced by the PISA 2018 cohort in each country are identified in Appendix 4. In this chapter, we elaborate on the policy overview table in Appendix 4 to:

- outline policies with a focus on literacy, including significant curriculum reforms
- outline the impact of these policies from formal evaluations
- provide policy experts' perceptions of the most effective policies aimed at improving literacy standards, and the key factors in the successful implementation of reading policy (collected via the survey in Appendix 1).

A table of pupils' ages and corresponding class or year in each country is provided in Appendix 5.

2.1 England

2.1.1 Policy history

Pupils in England benefited from free early education from age 3

In 1998, free entitlement to part-time early education for 3- and 4-year-olds in England began to be introduced. The policy expanded more slowly for 3-year-olds, but became effectively universal across England by 2005, when the PISA 2018 cohort was aged 2–3.

The National Literacy Strategy was implemented to improve standards through a focused programme of changes in the way core subjects were taught

The National Literacy Strategy (NLS), was introduced in 1998 by the Department for Education (DfE) (2011b), followed by the National Numeracy Strategy. The NLS aimed to improve teaching and learning in reading and writing and promoted very specific teaching practices, many of which continue to be deployed. Reading instruction, for example, was organised in three distinct ways:

1. Shared, which is a class activity, supported by the teacher, using a common text such as a 'big book' or text extract.
2. Guided, which involves a greater level of independence. Small groups of children, at similar reading levels and with their own copy of the text, work with a teacher on texts that are matched to their ability.
3. Independent, when children work without the support of the teacher on texts that they are able to read with fluency and confidence.

Subsequent areas of focus extended to all core subjects, to Key Stages 3 and 4, to Early Years, Behaviour and Attendance, the School Improvement Partner programme, and Special Educational Needs (SEN). Since 1998, the National Strategies have taken the form of a professional development programme providing training and targeted support to teachers.

Pupils in England learned to read using systematic, synthetic phonics

Up to 2006, the NLS recommended analytic phonics as one of four ‘searchlights’ for learning to read – the others were knowledge of context, grammatical knowledge, word recognition and graphic knowledge. Research into the effectiveness of systematic, synthetic phonics led to the Rose Report (Rose, 2006) after which government guidelines were updated to require the teaching of systematic, synthetic phonics as the first and main strategy for reading. The PISA 2018 cohort was 3–4 years old in 2006, so would have been taught using systematic, synthetic phonics when starting primary school in 2007, aged 4–5.

In 2008, the Government rolled-out the Every Child a Reader (ECaR) programme (DfE, 2011a). ECaR offers a layered, three-wave approach to supporting children with reading in Key Stage 1.

- Wave 1 is whole-class teaching and focuses on word recognition and language comprehension; and systematic, synthetic phonics, where children are taught to sound out words.
- Wave 2 is a small group intervention for children expected to catch up with their peers with some additional support.
- Wave 3 offers intensive one-to-one reading support for children who have been identified as having specific support needs.

Two initiatives aimed at raising disadvantaged pupils’ attainment were introduced in 2011: the Pupil Premium and Education Endowment Foundation

In 2011, the DfE introduced Pupil Premium (DfE, 2011c) which similarly aims to raise disadvantaged pupils’ attainment and reduce the gap between them and their more affluent peers. Pupil Premium comprises a payment per pupil eligible for FSM in year groups from Reception to Year 11.

The Education Endowment Foundation (EEF) is an independent grant-making charity, founded in 2011 with DfE funding. It is dedicated to breaking the link between family income and educational achievement and aims to identify, fund, and evaluate educational innovations for disadvantaged pupils. This involves establishing evidence of effective interventions and strategies which work at scale, and encouraging schools, government, charities and others to apply this evidence. EEF includes language and literacy as one of its 14 ‘big picture themes’ and phonics and reading comprehension strategies feature in two of its ‘toolkit strands’.

Schools had access to literacy and numeracy funding for low-attaining pupils in Year 7 from 2012 to 2020

A Year 7 literacy and numeracy catch-up premium was available to secondary schools from 2012 to 2020 to support pupils who were low-attaining in literacy or numeracy at the end of Key Stage 2 (DfE, 2014). Guidance from the DfE was provided in 2018 on literacy and numeracy catch-up strategies to support teachers to make evidence-informed decisions on how to support low-attaining Year 7 pupils.

Pupils in England have experienced a secondary education with an emphasis on traditional subjects

A raft of curriculum and assessment changes took place from 2011 onwards for all Key Stages. One of the key objectives of the national curriculum review in 2014 was to ensure that the national curriculum content was comparable with that of countries which perform strongly in international comparison studies (DfE, 2011d). The main changes which placed a spotlight on improving literacy and numeracy attainment include:

- A revised national curriculum, which prioritised and promoted rigour, was taught from September 2014 for most subjects, with English and mathematics coming into force for all year groups from September 2016, when the PISA cohort was aged 13–14.
- Reforms to GCSEs were introduced for some subjects (English language, English literature and mathematics) for first teaching in 2015, affecting exam outcomes in 2017. Other reformed GCSEs were introduced in the following years. The reforms included the following aspects:
 - more challenging content, with new content to stretch more able pupils, whilst remaining accessible for pupils of all abilities
 - all exams were to be at the end of the course, rather than a more modular approach with exams spread throughout the course
 - a new numbered grading system (9–1).

Area-based policies have targeted disadvantaged pupils

There have also been regional initiatives which aimed to tackle disadvantage and low attainment in large cities, such as City Challenge, which was launched in April 2008, building on the success of the London Challenge 2003–8 (Department for Children, Schools and Families, 2007). This was designed to improve educational outcomes for young people, for example, by reducing the number of underperforming schools, especially in relation to English and mathematics in the Black Country, Greater Manchester and London.

Opportunity Areas (OA), announced in 2016 (DfE, 2016), are a DfE social mobility programme that aims to level-up school standards in education and opportunities for disadvantaged children and young people. Through a place-based approach, OAs are offered a range of tailored, funded local interventions, along with priority access to a range of DfE initiatives. Key examples of the latter include the Strategic School Improvement Fund and the Teaching and Leadership Innovation Fund.

There is a focus on early language and literacy skills development

One of the objectives of the Social Mobility Plan (DfE, 2017) was to close gaps in development, especially early language and literacy skills, including by boosting investment in English Hubs and professional development for early years professionals. The English Hubs Programme, launched in 2018, aims to improve the teaching of reading. It is a school-to-school improvement programme which focuses on systematic, synthetic phonics, early language development and reading for pleasure to improve educational outcomes for the most disadvantaged pupils in Reception and Year 1. These initiatives from 2016 may all impact the literacy outcomes of future PISA cohorts.

2.1.2 Perceptions of impact

The proportion of disadvantaged pupils reaching school readiness has doubled since the introduction of universal early education for 3 and 4 year olds in 2005

There are no specific evaluations of the impact on reading from the policy to provide part-time early education for all 3 and 4 year olds in England in 2005. However, the Social Mobility Commission (2017, p.20) reported:

‘The introduction of the Early Years Foundation Stage Profile in 2002–3 – with data for the poorest children versus others from 2006–7 ... does show a significant improvement, albeit from a very low starting point. In 2007... 72% of disadvantaged children failed to reach a good level of development at five. Since then, attainment scores for both advantaged and disadvantaged children have risen by roughly 25 percentage points, and the proportion of disadvantaged children reaching school readiness levels has doubled. The gap in attainment between the poorest children and their peers has been harder to shift. There is no evidence of any gap reduction before 2006 and in the period since then the 21-percentage-point gap has only fallen by four points.’

Attainment of pupils in Key Stage 2 English assessments increased between 1995 and 2011 following the introduction of the National Literacy Strategy

The DfE (2011b) reported on the effectiveness of the National Literacy Strategy (NLS) from 1997 to 2011 (the PISA 2018 cohort was aged 9–10 in 2011) and found

improvements in primary literacy standards, though not all of this change can be attributed to the policy:

- In the 1995 Key Stage 2 national assessment tests in English, only 49% of pupils nationally attained at level 4 or above. By December 2010, Key Stage 2 English attainment had increased to above 80% at level 4 or above, and writing attainment rose 8 percentage points between 2006 and 2011.
- In 1998, there was a gap of 52% between the level 4 (or above) results for pupils from deprived households and those for all other pupils. By December 2010, ethnic minority groups had closed the performance gap and the proportional poverty gap had narrowed to 29% – a 21 percentage point improvement.
- In 2010, at Key Stage 1, there was a rise in the proportion of pupils achieving level 2 (or above) in reading, by one percentage point to 85%, for the first time since 2006.

The PISA 2018 cohort would have experienced the NLS, however, England has not seen significant improvements in its PISA scores between 2006 and 2018. While the reasons for this are beyond the scope of this analysis, it is worth noting for potential future studies.

The EEF has found the evidence base for phonics teaching to be secure

The EEF's (2018) summary of the evidence base for phonics found that there was consistent support for the teaching of systematic phonics, however, the evidence on which form that systematic phonics teaching should take (analytic or systematic, synthetic) was inconclusive. Some evidence found that systematic, synthetic phonics (where the emphasis is on sounding out letters and blending sounds to form words) may be more beneficial than analytical approaches (where the sound/symbol relationship is inferred from identifying patterns and similarities by comparing several words).

Despite recent increases, the attainment gap between pupils eligible for Pupil Premium and those not eligible has narrowed since 2011 at Key Stage 2 and 4

The National Audit Office (2015) reported that the DfE has not set a specific target for the Pupil Premium and recommended that the DfE should set out the attainment metrics it will use to measure the impact of the Pupil Premium. The DfE reports on differences in attainment at Key Stages 2 and 4 (GCSE) between disadvantaged and non-disadvantaged pupils. At Key Stage 2, in the national curriculum assessments, at the expected standard in reading, writing and mathematics, there was a small increase in the attainment gap between disadvantaged pupils and others⁶ of 0.5% between 2018 and 2019, but an overall narrowing of the gap by 12.8% since 2011 (DfE, 2019a). At GCSE, based on the average grades achieved in English and mathematics, the gap between disadvantaged pupils and others widened by 0.4% between 2018 and 2019. This was the second small annual increase in a row, but is 9.1% lower than in 2011 (DfE, 2019b).

⁶ Disadvantaged pupils are eligible for Pupil premium funding – for information on eligibility and funding, see [Policy paper Pupil Premium](#)

Pupil Premium spending has been called into question, however the funding does allow schools to focus on disadvantaged pupils' outcomes

The Institute for Fiscal Studies (2015) noted that there was a preponderance of spending of Pupil Premium funding on non-teaching staff, at a scale which was not originally intended, however, the Social Mobility Commission (2017, p34) reported that, '...while the funding constitutes a small proportion of schools' total budget, it has played a significant role in encouraging schools to concentrate on improving the outcomes of disadvantaged pupils.'

Policy experts' survey responses highlighted that publicly-funded schools in England get extra funding from the government to help them improve the attainment of their disadvantaged pupils. They commented that there was no expectation, however, that this is targeted at any particular area of the curriculum such as reading outcomes, making a specific impact on literacy less likely.

Approximately two-thirds of school leaders use the EEF evidence-based programmes to inform decisions around pupil premium expenditure

The National Audit Office (2015) reported that around 64% of school leaders use the EEF Teaching and Learning Toolkit to inform expenditure of Pupil Premium funding.

Oral language, writing and reading interventions for low-attaining Year 7 pupils have been found to be effective, but the evidence for phonics support is less secure for older pupils

For the Year 7 catch-up premium, no formal evaluations of the impact were identified, however, the DfE (2018) provides an assessment of the effectiveness of specific strategies:

- Phonics literacy interventions: There is inconsistent evidence on the effectiveness of phonics interventions for helping struggling Year 7 pupils to catch up
- Oral language interventions: This approach can have a low but positive effect upon progress over the year, as concluded by the EEF
- Writing interventions: The EEF found that both writing interventions assessed were effective
- Reading interventions: The EEF found that these generally have a positive effect on pupils' attitudes towards reading and that they appear to have a moderate, positive effect upon general learning.

GCSE reforms, introduced in 2014, have slightly widened the attainment gap between disadvantaged pupils and their more affluent peers

The revised national curriculum was intended to bring rigour to education (DfE, 2011d). In the Policy Exchange's report on the implementation of the curriculum, Blake (2018) suggested there was a dearth of rigorous curriculum materials, which would adversely

impact the breadth and balance of learning pledged in the curriculum. Further, in turn, this would impact on children from disadvantaged backgrounds, since they were less likely to have access to resources (such as extra books) compared to their more affluent peers. Burgess and Thomson (2019), found that reforms to the GCSE had increased the GCSE test score gap between disadvantaged and non-disadvantaged pupils, but that the change was small.

It has been difficult to replicate the area-based policy success of London Challenge

Regional/urban attainment and disadvantage was a key policy focus in the 1990s and 2000s. Macdougall and Lupton (2018, p.16) reviewed educational attainment improvement in London and concluded that

'Policy interventions on their own do not explain London's success. Higher achievements in early years and primary school also go a long way to explain secondary school success. Nevertheless, there appears to be no doubt that the London Challenge was a very positive contributor to the performance of the London secondary education system in the 2000s.'

It is too early to fully measure the impact of Opportunity Areas

The OA programme is currently being evaluated and this will explore progress over time.

The OAs were announced in the 2016–17 academic year. In setting their initial targets, they took either the 2015–16 or 2016–17 data as their baseline. Delivery started from September 2017 and was ramped up considerably from September 2018. Much of the early data, shows a positive trajectory between 2016–17 and 2018–19. Data for 2019–20 was not available due to Covid-19. For example, between 2016–17 and 2018–19:

- Early years outcomes for disadvantaged pupils improved in 9 of the 12 OAs.
- Phonics results for all pupils improved in 10 of the 12 OAs.
- Key Stage 2 combined attainment data for all pupils improved by more than the national rate in 10 of the 12 OAs.

Policy experts highlighted the English Hubs programme and teacher training with a literacy focus as being important for reading outcomes

When responding to our survey, policy stakeholders highlighted a number of initiatives as being important for improving reading outcomes including the English Hubs Programme, launched in 2018, and the role of Initial Teacher Training in embedding an understanding of literacy at the start of a teaching career, alongside ongoing CPD. However, this will not have had an impact on the PISA 2018 cohort.

Policy experts identified collaboration between schools and evidence-based policy as key factors for successful implementation of policy

Policy experts also perceived that the school-school improvement approach, schools' level of engagement with policy change and strong evidence that the policy works were all important for a successful policy implementation.

2.2 Scotland

2.2.1 Policy history

Pupils in Scotland have followed the Curriculum for Excellence for most of their education

The OECD (2007) found that Scotland consistently performed at a high standard in PISA, however, it also identified the achievement gap between disadvantaged and non-disadvantaged pupils that opened up late in primary education and widened through early secondary years as a major challenge. As part of a wider set of reforms, the Curriculum for Excellence (CfE) (Education Scotland, 2010), introduced in 2010, when the PISA cohort was aged 7–8, sought to create a single, coherent curriculum for all children and young people from age 3–18. The framework includes a broad general education from ages 3–15 and then more specialisation in working towards taking National Qualifications in the senior phase (ages 16–18) and places literacy, numeracy, and health and wellbeing at the centre of all learning. It also encourages recognition of young people's personal achievements within and beyond school, through partnerships which support learning with, for example, business, arts and community organisations, in addition to school-based learning.

System-level monitoring of the CfE was provided through the Scottish Survey of Literacy and Numeracy (SSLN), which was first introduced in 2011. It was an annual sample survey which monitored national performance of school children at P4, P7 and S2 in numeracy and literacy in alternate years. A recognised limitation of the SSLN was that it did not provide a breakdown below national level. This was one reason for its replacement by the Achievement of Curriculum for Excellence Levels (ACEL) reporting, which began in the 2015/16 academic year. The ACEL data is based on teachers' professional judgements of the highest CfE level that a pupil has achieved. The Scottish National Standardised Assessments (SNSA) were introduced in the 2017/18 academic year and are one piece of evidence for teachers to consider in reaching these judgements (Education and Skills Committee, 2019). SNSAs are standardised assessments intended to be taken nationally in all state schools in P1, P4, P7 and S3 and may impact on the reading outcomes of future PISA cohorts.

The National Improvement Framework has a particular focus on raising literacy and numeracy attainment; it was introduced when the PISA 2018 cohort was aged 13–14

The National Improvement Framework was introduced in 2016 and set out the vision for a school system which delivers excellence and equity and aligns improvement work across partners in the education sector (Scottish Government, 2016a). The Framework identified improvement in attainment, particularly in literacy and numeracy, as a strategic priority along with methods for gathering more robust data on pupil attainment in these subjects. Alongside this, the Delivering Excellence and Equity plan was also launched in 2016 (Scottish Government, 2016b). It contains a large number of policy commitments, including the use of available data through the National Improvement Framework from October 2016 to identify the attainment gap between the most and least disadvantaged pupils in P1, P4, P7 and S3 at school and local authority level and to agree targets to reduce this gap. Since September 2016, school inspection and self-evaluation have focussed more directly on closing the gap.

The Scottish Attainment Challenge was introduced in 2017 to tackle the persistent attainment gap between the most and least disadvantaged pupils

In an aim to tackle the continued gap in attainment between pupils from the highest and lowest income households, the Scottish government established the Attainment Challenge Fund as an initiative to support pupils and provide targeted improvement activity in numeracy, literacy, and health and wellbeing in the local authority areas with the highest levels of deprivation (Shields and Gunson, 2017). This initiative may impact the performance of future PISA cohorts.

2.2.2 Perceptions of impact

OECD and policy experts have raised concerns about clarity of the Curriculum for Excellence

The OECD (2015) highlighted a lack of evaluation of the CfE, however, in respect of quality and equity, found positive developments, including that Scottish pupils were resilient and that Scottish schools were inclusive.

The same OECD (2015, p.11) policy review found challenges and problems with the CfE, including a lack of clarity in the scope of the programme, in that it was sometimes understood as ‘... a wide-ranging set of reforms whereas it would be better if it were interpreted more strictly as curriculum and related assessment and pedagogy’.

In their survey responses, policy experts similarly perceived that the CfE lacked clarity and commented that it was vague for teachers, which could have a deleterious effect on pupil achievement. They also felt that the advice for implementing the CfE was not evidence- or context-based and was therefore confusing for Local Authorities.

There was a decline in all pupils' literacy performance between 2012 and 2016, but PISA reading performance has significantly improved since 2015

Although the Scottish Survey of Literacy and Numeracy in classes P4, P7, S2 was later discontinued, the OECD (2015, p.15) policy review highlighted that:

'Reading showed a decline between 2012 and 2014 using The Scottish Survey of Literacy and Numeracy data, with smaller relative numbers of top performers among primary and secondary pupils. SSLN shows that performance in numeracy declined between 2011 and 2013. In primary schools, there were fewer scoring at the top, but there were larger numbers of low performers in secondary schools. The achievement gap between the least and most deprived also increased in the SSLN for both numeracy and literacy.'

The Scottish Parliament (2019) report on Scottish National Standardised Assessments (P1, P4, P7, S3) highlighted the continued decline in literacy performance reported in the 2016 SSLN survey results.

During the above-mentioned period of decline, although the PISA mean reading score in 2015 (493) was lower than in 2012 (506), the difference was not significant. The 2018 score (504) was, however, a significant improvement on the 2015 score.

More clarity is required on some aspects of The National Improvement Framework

The National Improvement Framework and Delivering Excellence and Equity Plan were both launched, in part, to address the recommendations of the OECD (2015) policy review. The Royal Society of Edinburgh (2016, p.4) reflected that the attainment gap needed to be better understood and that '... despite the OECD's recognition of the contribution that can be made by the research community in supporting innovative learning environments, especially in deprived areas, this has not been acknowledged in the revised Framework.'

In response to our survey, with regards to the policy interventions such as the National Improvement Framework, policy experts articulated that at the teacher level, there was a lack of clarity in what teachers were expected to focus on.

Policy experts indicated that using multiple ways to teach reading, encouraging reading and early intervention were instrumental for reading outcomes

Initiatives which policy stakeholders perceived as being important for improving reading outcomes included:

- systematic, synthetic phonics, due to the associated evidence for effectiveness, and that a variety of approaches was needed
- wider access to literature, with access to free materials online, encouraging pupils to engage and read
- early intervention programmes in primary schools.

Nationally, a few interventions with wide uptake and some impact were named, for example, The First Minister's Reading Challenge, Read Write Count and Bookbug.

Policy experts highlighted that successful policy implementation involves clarity about success indicators and initiatives that are underpinned by evidence

Policy experts, responding to our survey, cited the following key factors as important in successful policy implementation: the need for clear outcomes, measures of success and implementation timelines; the involvement of school leaders in decision making; and evidenced-based initiatives.

2.3 Wales

2.3.1 Policy history

Poor performance in PISA provided some of the impetus for educational reform

One of the factors which led to educational reform in Wales was poor PISA performance, particularly in 2009. The current curriculum had a phased introduction from 2008 and was fully implemented in 2011, when the PISA 2018 cohort was aged 8–9. Revised statutory programmes of study for English, Welsh (first language), and mathematics in Key Stage 3 came into effect in 2015. A new curriculum for Wales is to be used from September 2022.

The curriculum changes from 2008 were intended to better integrate the National Literacy and Numeracy Framework (LNF) (Welsh Government, 2013a). The LNF is a curriculum planning tool and describes the skills children and young people are expected to develop through 'expectation statements'. In literacy, it includes expectations across the curriculum for oracy (speaking and listening), reading and writing.

Teachers use the LNF to:

- develop curriculum content to ensure that all learners have opportunities to develop and refine the skills set out in the LNF
- integrate literacy and numeracy into their teaching, whatever the subject
- inform discussions about learner performance
- help learners with their own self-assessment activities and planning for learning
- monitor, assess and report on individual learner performance
- identify learners who may benefit from intervention or who are working beyond age-related expectations.

The LNF became statutory from September 2013, when the PISA 2018 cohort was aged 10. It was extended (on a non-statutory basis) to include 14–16 year olds from September 2015, when the PISA 2018 cohort was aged 12–13.

National curriculum statutory testing was abolished in 2008 and replaced by standardised assessments of reading and numeracy in 2013

With the introduction of the revised school curriculum in 2008, Wales moved away from statutory testing. Since then, teachers have had responsibility for the (low stakes) pupil assessments based on the national curriculum. National standardised tests in reading and numeracy for years 2 to 9 were introduced in May 2013 (Welsh Government, 2013a) based on the LNF, and expectations for pupil performance in statutory teacher assessment have been raised. Most learners at the end of Key Stage 3 are now expected to achieve level 6 in English, Welsh and mathematics. Previously, they were expected to achieve level 5.

An increased focus on literacy and numeracy was introduced in 2015

This rise in expectations was introduced in line with the revised national curriculum programmes of study for English, Welsh and mathematics and the LNF (Welsh Government, 2015a). The qualifications system for learners in secondary education was also changed. It now reflects the increased emphasis on literacy and numeracy in education in Wales. This resulted from the introduction of the LNF; the drive to improve educational standards (following, for example, Wales' performance in international surveys of pupil attainment); and the recommendations of the Review of Qualifications for 14–19 year olds in Wales.

There is a clear focus on fostering the Welsh language

One of the main aims of the Welsh-Medium Education Strategy (Welsh Government, 2010) was to improve the planning of education in Welsh. The School Standards and Organisation (Wales) Act 2013 introduced a requirement for local authorities to prepare Welsh in Education Strategic Plans, setting out how they would improve the planning of education through the medium of Welsh. Currently in place is the Welsh in Education Action Plan 2017–21 (Welsh Government, 2017), which may be of interest in the future when exploring the performance of pupils at Welsh-medium schools in PISA.

Key literacy-related developments in Welsh-medium education between 2010 and 2017 include:

- providing funding to local authorities and regional consortia to raise standards in the teaching and learning of Welsh and through the medium of Welsh
- supporting student teachers to raise their confidence and language skills to teach through the medium of Welsh and to introduce the Welsh Language Skills Certificate
- expanding support to promote and increase children and young people's use of Welsh within school and in social contexts through the Welsh Language Charter.

Schools with a higher proportion of disadvantaged pupils have been entitled to additional funding from the Pupil Deprivation Grant since 2012

The Pupil Deprivation Grant (PDG) was introduced in the 2012-13 financial year, when the PISA 2018 cohort was aged 9–10. It was renamed the Pupil Development Grant in 2017 and it provides extra money to schools based on the number of pupils eligible for free school meals (FSM) on their roll (Welsh Government, 2013b).

2.3.2 Perceptions of impact

Policy experts support the literacy focus in the Literacy and Numeracy Framework despite limited progress in improving standards

The Chief Inspector's annual report 2018-19 found that standards of literacy overall were broadly similar to those three years earlier (Estyn, 2019). Progress in reducing the impact of disadvantage on pupils' educational attainment in literacy was also limited.

In replies to our survey, policy experts, however, perceived the focus on literacy in the LNF to have improved reading outcomes and that government guidance for implementing the framework was key to its success.

Wales' PISA reading performance to date has remained lower than that of the other UK nations and the Republic of Ireland. However, the revised curriculum, introduced in 2015, with an increased focus on literacy and numeracy may impact the PISA performance of future cohorts.

There was some improvement in Welsh language attainment at Key Stages 2 and 3, but this cannot necessarily be attributed to the Welsh-medium Education Strategy

The final report of an independent three-year evaluation of the Welsh Government's (2015b) Welsh-medium Education Strategy found that there had been some indications of success in reaching the targets that were set in 2010. Some increase in attainment in Welsh first language at Key Stages 2 and 3 was reported. However, other data, including from the headteachers' survey, suggested that factors other than the Strategy, such as the focus on the Literacy and Numeracy Framework, had contributed to the increase.

Schools are largely using the Pupil Deprivation Grant as intended; policy experts believed the funding to be important for disadvantaged pupils' reading outcomes

The National Assembly for Wales' Children, Young People and Education Committee (2018) reported that schools are generally using the Pupil Deprivation Grant (PDG) effectively, commonly on literacy and numeracy interventions, but also on pupil engagement. However, schools are making insufficient use of external academic expertise, particularly the EEF Toolkit. Furthermore, there is ambiguity and inconsistency about whether the PDG should be used for all FSM pupils (including more able and talented FSM pupils) or for only low-attaining FSM pupils.

In responses to our survey, policy experts, by contrast, raised the positive impact of the PDG on reading outcomes for disadvantaged pupils and in closing the associated gap. They highlighted that, where the PDG could be used for teachers to develop their pedagogical practice, this could reduce the need for later intervention.

Policy specialists perceived professional development and clarity of objectives as some of the factors which are important for successful policy implementation

Factors cited by policy specialists as being instrumental for effective policy implementation included: the guidance from the government on the LNF; clarity of objectives for schools; and teachers' professional development.

2.4 Northern Ireland

2.4.1 Policy history

Schools are supported in self-evaluation as part of the school inspection process

In 2003, with the aim of raising attainment, the Education and Training Inspectorate (ETI) developed Together Towards Improvement (TTI) as a self-evaluation tool (ETI, 2010). Later versions of this tool focused on the outcomes achieved by the learner and the quality of the leadership and management of the school.

In 2009, a new school improvement policy: Every School a Good School (Department of Education (DE), 2009) was introduced. At this time, the PISA 2018 cohort was aged 6–7. The policy states that 'school self-evaluation and self-improvement (with support) are at the heart of the policy' (DE, 2009 p.9) and aims to raise the quality of children's achievements and standards so that every child will leave compulsory education with appropriate standards of literacy and numeracy. It also aims to support schools and teachers in their work to raise standards and overcome barriers to learning that some pupils may face. This policy includes a requirement to provide focused support for schools which, as a result of inspection by the ETI, are found to be offering less than satisfactory provision for their pupils.

Parents from disadvantaged areas had access to the support offered by Sure Start

The early years programme, Sure Start, was extended to cover education outcomes in 2006 (DE, 2015). The programme is area-based and targeted at parents and children under the age of four living in the most disadvantaged areas. It is designed to support children's learning skills, health and wellbeing, and social and emotional development. One of the six core services which must be provided is support for speech, language and communication. The project includes a specific developmental programme for two- to three-year-olds to prepare them for pre-school, which can help their social and emotional development, improve their communication and language skills and encourage their imagination through play.

Pupils in Northern Ireland have been taught a curriculum which aims to embed literacy as a cross-curricular skill

In 2007, when the PISA cohort was aged 4–5, the revised Northern Ireland Curriculum was introduced. The curriculum provides significant flexibility for schools in the topics they

teach and the resources they use, it also gives an equal emphasis to knowledge and skills. The importance of literacy in the curriculum is emphasised through the cross-curricular skill of Communication. Communication is a cross-curricular skill throughout all Key Stages. The cross-curricular skills are assessed using Levels of Progression (LoP) which focus on skills as well as knowledge, with the statutory assessment data at each Key Stage collated by CCEA/DE. From 2007 to 2017-18, DE provided optional computer-based assessments for primary school pupils in Years 4–7 (ages 7–11). These were diagnostic assessments, designed to support schools in identifying pupils' strengths and areas for improvement. These are no longer provided, as schools in Northern Ireland successfully integrate a range of commercial standardised literacy assessments to aid formative assessment in literacy.

Count, Read: Succeed has a focus on minimising the gap between disadvantaged pupils and their more advantaged peers

Further efforts to improve outcomes in literacy and numeracy across primary and post-primary levels were made via the Count, Read: Succeed strategy, introduced in 2011 when the PISA 2018 cohort was aged 8–9. The aims of this strategy are to support teachers and school leaders in their work to raise overall levels of attainment in literacy and numeracy among young people, and to narrow the gaps in educational outcomes (between the highest and lowest performing pupils, those most and least disadvantaged, girls and boys, and individual schools). The strategy set system-level long-term targets to encourage the raising of standards across all schools and to measure school performance by 2019-20 with milestone targets for 2011-12 and 2014-15 (DE, 2011).

Further policies have provided targeted support for disadvantaged pupils

Understanding Difficulties in Literacy Development was a professional development programme with literacy as the core focus. It ran from 2012 to 2015 and was funded by the DE (2012a) to support the strategic objectives of Every School a Good School and Count Read: Succeed. The core aim of the programme was to enhance the skills of teachers in primary schools for the teaching of reading, writing and spelling through whole-school training, thereby enabling schools to identify and address literacy difficulties. The aim was to reduce the reliance on external support through the development of teachers' capacity to identify and address factors that may cause children to underachieve and fall below appropriate literacy standards. The project also offered specialist training to Special Educational Needs Coordinators and teachers to enable them to identify children with literacy difficulties, assess their individual needs and provide appropriate interventions.

There were two short-term initiatives in 2013–15 to support the raising of attainment in Literacy and Numeracy. Through the Promoting Improvement in English and Mathematics project, the Education and Training Inspectorate (2016) offered development work, support, challenge and capacity building to post-primary schools. The aim was to raise GCSE achievement in English and Mathematics, particularly for pupils entitled to FSM.

The project covered nineteen schools in total, including nine schools where the focus was on English.

The Literacy and Numeracy Signature Programme was launched in 2012 to improve literacy and numeracy as part of a wider government initiative tackling poverty and social exclusion. Recently-qualified teachers who were not in a permanent teaching post were recruited on two-year fixed term contracts to provide additional support for pupils at risk of underachieving. The programme aimed to increase the number of pupils in primary schools achieving the expected level or above at the end of Key Stage 2 in both Literacy and Numeracy and those in post-primary achieving at least a grade C or above in GCSE English and GCSE Mathematics. Both increases were aimed in particular at those entitled to FSM (DE, 2012b).

Launched in May 2006, when the PISA 2018 cohort was 3–4 years old, Extended Schools is a well-established initiative targeted at disadvantaged communities and provides funding to improve levels of education achievement, including in literacy and numeracy. Services or activities, such as homework clubs, are provided outside of the normal school day to help meet the learning and development needs of pupils, their families and local communities (DE, 2006).

In addition, significant additional funding to support children from disadvantaged backgrounds is provided directly to schools through the Common Funding Scheme (DE, 2005).

The Education Authority's (EA) Literacy Service supports schools in providing peripatetic literacy support to pupils who experience a literacy difficulty. The Service employs a team of approximately 100 staff. It provides a broad continuum of support ranging from capacity building and training to online resources and guidance for parents including the use of assistive technology. Advice and guidance are based on the assessed needs of the pupil which may include access to small groups or direct interventions.

2.4.2 Perceptions of impact

School self-evaluation works well when it is data-driven and internal evaluation is aligned to external evaluation; capacity and context is a challenge

An OECD (2013) review of school evaluation and assessment frameworks noted that in many ways, the evaluation and assessment policies in Northern Ireland followed the principles identified by the OECD for the development of a coherent framework for evaluation and assessment. It noted that well-established and tailored support was provided to schools to promote the use of data in self-evaluation activities and alignment between the instruments for external school evaluation (inspection) and school self-evaluation. In reference to the school improvement policy, Every School a Good School, policy experts commented in responses to our survey that smaller-scale initiatives were most successful when policy was clear and well integrated.

The OECD (2013) review found that there were challenges too, including variability in self-evaluation capacity among school leaders and the Boards of Governors, and the need to account for school context when evaluating performance.

Early intervention and an integrated approach is key to giving disadvantaged pupils the best start

Sure Start was positively evaluated by the ETI (2018, p4), which found ‘In all projects there is evidence of general improvement in the children’s speech, language and communication skills as a result of their participation in Sure Start and of early identification of delays in children’s language and communication skills.’

From our survey responses, policy experts gave similarly positive views on the impact of Sure Start on literacy outcomes, particularly for children in areas of disadvantage or at risk of harm. These included reference to Sure Start’s work with the Book Trust and local libraries to promote an interest and engagement with books from the earliest stage and in building the capacity of staff and parents to support the skills that are fundamental for future success in reading. Other comments highlighted a joined-up approach between all departments/partners involved, with Sure Start given as an example.

Pupils’ literacy and numeracy skills have increased since the introduction of Count, Read: Succeed; PISA reading performance has remained stable since 2006

The Northern Ireland Audit Office (NIAO, 2013) evaluated Count, Read: Succeed and found that levels of achievement in literacy and numeracy at Key Stages 2, 3 and 4 had successfully increased in line with the targets set out in the strategy. However, they also noted a wide gap between the highest and lowest achieving children and emphasised that literacy performance in primary and post-primary schools continued to concern the ETI.

The DE (2011) set Count, Read: Succeed targets of 70% or above of Year 12 pupils to achieve five or more GCSEs at grades A*-C (or equivalent) including English and mathematics by 2019-20. The DE (2019) reported that in 2018-19, 72.8% of these pupils achieved this indicator. The same 2019-20 target for FSM entitled pupils was 65% or above, with 54.1% reaching this in 2018-19.

Effective policy implementation requires collaboration with teaching professionals and should be supported by continuing professional development (CPD)

The policy experts’ comments in our survey highlighted the importance of consensus and commitment across system and school levels, and also high-quality CPD to support initiatives as being key to successful policy implementation.

3 Republic of Ireland perspectives

As well as the policy review and survey of policy colleagues in education departments in each of the five nations, we conducted in depth interviews with senior educational professionals in the Republic of Ireland. Our aim was to explore their understanding and experience of policy history, development and implementation that would have affected the 2018 PISA cohort.

3.1 Policy background in the Republic of Ireland

Which policies do policy experts from the Republic of Ireland see as being most important to improving reading attainment?

Policy experts viewed two policies in particular as being most impactful on reading attainment during the schooling of the PISA 2018 cohort:

- Delivering Equality of Opportunity in Schools (DEIS)
- Literacy and Numeracy for Learning and Life: The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011–2020 (NLNS)

The key elements of these two major policy strands, Delivering Equality of Opportunity in Schools (DEIS, pronounced ‘desh’; Irish for ‘opportunity’) (DES, 2005) and the National Literacy and Numeracy Strategy (NLNS) (DES, 2011a) are explored in sections 3.1.1 to 3.1.4.

3.1.1 Delivering Equality of Opportunity in Schools

Delivering Equality of Opportunity in Schools builds on a long history of policies targeting disadvantage

The roll-out of the Delivering Equality of Opportunity in Schools (DEIS) action plan began in 2005, when the PISA 2018 cohort was aged 2–3. The origins of DEIS go back at least two decades prior to this, meaning it may have impacted previous PISA cycles. DEIS sought to synthesise a number of previous measures, such as the Disadvantaged Areas Scheme, Breaking the Cycle, Giving Children an Even Break and the Home School Community Liaison Scheme, into one policy with multiple smaller strands. Schools are offered some flexibility and choice in terms of the supports offered – they may use those which they believe would be most beneficial for their specific school. The full suite of support is described in Appendix 1 of the DEIS Plan (DES, 2017b).

Previous, standalone, initiatives which addressed specific aspects of disadvantage were brought together in DEIS, with the rationale that:

‘... rates of educational underachievement and early school leaving remain much higher for pupils from disadvantaged communities than for other pupils’ (DES, 2005, p.8)

and that there was ‘...strong evidence for the proposition that the disadvantage associated with poverty and social exclusion assumes a multiplier effect when large numbers of pupils in a school are from a similar disadvantaged background.’ (DES, 2005, p.27)

The core elements of DEIS comprised a standardised system for identifying and regularly reviewing levels of disadvantage, and a new integrated School Support Programme (SSP) which brought together and built upon existing interventions for schools and school clusters/communities with a concentrated level of educational disadvantage.

The plan was extended gradually to include a broad range of support in selected primary and post-primary schools, targeted at areas of disadvantage. Examples of programmes under the SSP include access to the School Meals Programme, literacy and numeracy support such as Reading Recovery, First Steps and Maths Recovery, a range of teacher professional development schemes, and additional funding for books. The plan also included a renewed focus on measuring progress systematically.

Family and community engagement is a strong focus

Each school is allocated a Home School Community Liaison (HSCL) coordinator, whose role is to encourage, support and facilitate a partnership between parents from disadvantaged backgrounds and teachers to enhance the overall education of children.

The role includes:

- spending a minimum of one third of their time visiting the homes of pupils in order to build bonds of trust between home and school
- encouraging parents to become involved in their child’s education
- providing information about the school, including literacy support programmes, and about services available in the community
- seeking out potential parent leaders who are willing to participate in the HSCL scheme’s activities and to act as a resource to other parents
- monitoring the effectiveness of interventions in place.

Schools are allocated support in line with the level of local disadvantage

Primary and post-primary schools participating in DEIS receive significant additional support and resources, including additional staffing. The level of additional support and resources allocated to schools participating in DEIS varies according to the level of disadvantage in the school community:

- Where the level of disadvantage is greatest, urban/town primary schools are classified as DEIS Band 1.
- The remaining participating urban/town primary schools are classified as DEIS Band 2.
- Primary schools serving rural communities, including towns with populations below 1,500, are included in the Rural strand of DEIS.
- The urban-rural distinction is present at primary level only.

All DEIS schools receive Inspectorate advice on school self-evaluation. Schools in DEIS Band 1 have greater numbers of pupils from Traveller backgrounds, those who do not speak English and those with special educational needs (Smyth *et al.*, 2015).

3.1.2 Evaluations of DEIS

Assessing the effectiveness of DEIS is a key feature built into the policy

Key findings on the impact of DEIS to 2011 (DES, 2011b) provided evidence to suggest that the programme was effectively tackling educational disadvantage, including:

- statistically significant improvements in both the mathematics and reading levels of pupils in 2nd, 3rd and 6th class (primary school)
- significant improvements in the overall attendance of pupils in almost all DEIS primary schools and nearly half of post-primary schools
- many aspects of the DEIS programme were being implemented as originally planned. The DEIS themes of attendance, literacy, numeracy and partnership with parents were prioritised in the DEIS planning processes of all participating primary schools. The Home School Community Liaison (HSCL) coordinators and School Completion Programme (SCP) personnel were found to be cooperating effectively with schools to improve pupil attendance in the vast majority of the primary schools and in the majority of post-primary schools
- outcomes for schools were better where school planning activities were strong, for example, for literacy achievement, covering target setting and progress monitoring; using assessment data to identify learning needs and to plan appropriate strategies and learning activities; and when literacy and numeracy support was incorporated into these activities.

Further evaluations found variation among DEIS schools in pupil outcomes over the period 2007 to 2013 (Smyth *et al.* 2015, p. viii):

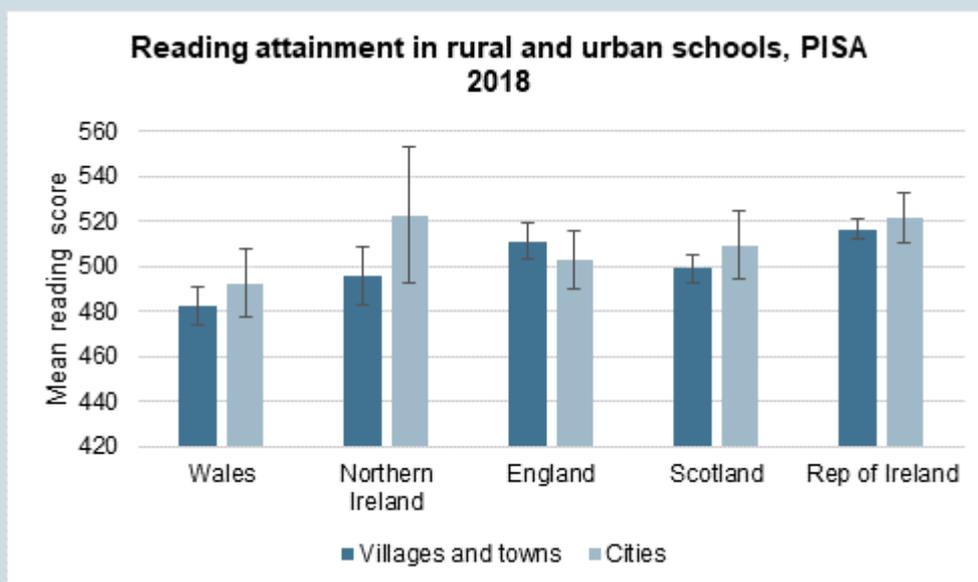
- ‘The most disadvantaged schools (DEIS Band 1 primary schools) were found to have much lower reading and mathematics scores on average as well as a higher concentration of pupils with very low test scores.
- Pupils attending rural DEIS schools had significantly higher achievement test scores than their counterparts in urban DEIS schools.

- At post-primary level, there was a slight, but significant, narrowing of the gap in average Junior Certificate grades, as well as in English grades between DEIS and non-DEIS schools over the period 2003 to 2011.’

A possible explanation offered for the rural/urban variation in test scores is that in rural homes, there was greater parental engagement in children’s education and that rural children appeared to have greater access to educational materials than their urban peers (Weir and McAvinue, 2013).

Box 1: What does PISA 2018 tell us about differences between all urban and rural schools?

Although the greatest difference between urban and rural schools was in Northern Ireland, in PISA 2018, no significant differences in reading performance were found between schools in cities and those in towns and villages in any of the five nations.



Source: PISA 2018 database

Continuous reviews of DEIS have informed the revised DEIS plan

Although progress has been recognised⁷, continuous review and evaluation identified variation among DEIS schools for pupil outcomes and, as a result, a revised DEIS Plan (DES, 2017b) has been implemented from 2017.

The DEIS Plan 2017 (DES, 2017b, p.6) lays out the Department’s aims to further improve education for those ‘at risk of disadvantage and social exclusion.’ The Plan was based on continuous reviews of DEIS and a range of commitments in the Programme for a Partnership Government and the Action Plan for Education (see 3.1.5 for an outline of this

⁷ See also the other key policy strand, the National Literacy and Numeracy Strategy, in section 3.1.3 below.

Plan). It presents objectives to tackle educational disadvantage and introduces the actions required to support children based on the following key goals:

- 'to implement a more robust and responsive Assessment Framework for identification of schools and effective resource allocation
- to improve the learning experience and outcomes in DEIS schools
- to improve the capacity of school leaders and teachers to engage, plan and deploy resources to their best advantage
- to support the work of schools by providing the research, information, evaluation and feedback to achieve the Plan goals.' (DES, 2017b, p9).

The revised DEIS plan sets more challenging targets to address continued underperformance of pupils in disadvantaged schools

New literacy and numeracy targets were set, aiming to increase the proportion of pupils in DEIS schools performing at the higher levels in the National Assessments and in PISA reading and mathematics by 2020, and to reduce the proportion performing at the lower levels in these assessments. Actions to enable the targets included:

- 'Piloting of innovation by adopting new evidence-based approaches to tackling underperformance in DEIS schools in areas such as literacy and numeracy (supported by a School Excellence Fund to encourage the development and implementation of good practice suitable for wider application)
- Targeted development support for teachers in DEIS Band 1 schools to aid schools in devising strategies and making maximum use of resources to meet the specific progress targets for these schools in the NLNS
- Improved interagency working to achieve more effective delivery of the range of supports for DEIS schools. Actions aimed at improving the school readiness of preschool children, increasing the effectiveness of behavioural and therapeutic supports and integrating services that support school attendance, retention and progression are included.' (DES, 2017a, p4)

Pupils in DEIS schools score less well than pupils in non-DEIS schools, but there is evidence from PISA that the gap has narrowed

Gilleece *et al.* (2020) reported on DEIS and non-DEIS pupils' PISA outcomes and found that pupils in non-DEIS schools had significantly higher mean scores in reading, mathematics and science than their peers in DEIS schools. (Of all PISA 2018 participating pupils in the Republic of Ireland, 24% attended a DEIS school.) Other findings which relate to reading include:

- The average reading score of pupils in DEIS schools was 479. This is at the level of the OECD average (487). Pupils in non-DEIS schools achieved a mean reading score of 530, significantly above the OECD average.

- Pupils in DEIS schools had significantly lower achievement on each of the three reading subscales than their counterparts in non-DEIS schools. On each subscale, the gap was approximately 50 points.
- Relating to pupil attitudes and engagement in reading, a higher percentage of pupils in DEIS schools reported that they did not read at all for enjoyment (59%) compared to pupils in non-DEIS schools (44%). Pupils in DEIS schools also reported a less positive self-concept in reading competence compared to pupils in non-DEIS schools.

The Gilleece *et al.* (2020) report will be complemented in the first half of 2021 by a contextual report drawing on PISA 2018. The above findings are consistent with those of a longitudinal analysis published in 2015 (McAvinue and Weir, 2015). It recorded some narrowing of the gap between pupils in DEIS and non-DEIS schools between 2002 and 2016 on Junior Certificate English (taken at age 14–15). This was also the case for PISA reading between 2009 and 2018.

3.1.3 National Literacy and Numeracy Strategy

The second major policy strand our education experts identified as having an impact on the teaching and learning of literacy was the introduction of the National Literacy and Numeracy Strategy (NLNS).

The cross-curricular approach of the NLNS has a focus on professional development, parental involvement and systematic school evaluation

In response to a lack of improvement in National Assessments since the 1980s and a lower than expected PISA performance in 2009 (Shiel *et al.* 2014), the Literacy and Numeracy for Learning and Life: The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011–2020 (NLNS) was developed (DES, 2011a). The PISA 2018 cohort was aged 8–9 in 2011 when the strategy was launched. Although designed to improve literacy and numeracy outcomes for all, there is a particular focus on supporting the needs of children and young people from socially disadvantaged backgrounds. The strategy encompasses the whole school age range, from early childhood (birth to age six) to the end of post-primary education with a focus on:

- improving practitioner skills in literacy and numeracy teaching and assessment including extended teacher training from 2014
- enabling parents and communities to support children's literacy and numeracy
- ensuring a cross-curricular approach to literacy and numeracy and increased literacy time for pupils
- supporting those with learning needs to achieve their potential (including via access to the Professional Development Service for Teachers)
- improving assessment and evaluation (sharing data with parents and settings)

- systematic school evaluation with support from inspection teams (for example, seminars on assessment literacy for teachers).

Targets focus on early literacy and numeracy and reducing the achievement gap from national and international measures

There is a focus on improving the communication and oral-language competence of young children in early childhood care and education settings and their readiness to develop early mathematical language and ideas.

There are national and international targets aimed at reducing the achievement gap. These are to reduce the proportion of pupils at the lowest levels and to increase the proportion at the highest levels in National Assessments at primary and post-primary schools. Targets related to PISA were to increase the percentage of pupils performing at or above Level 4 (at the highest levels) in PISA reading and mathematics by at least 5 percentage points by 2020 and to halve the percentage of pupils performing at or below Level 1 (the lowest levels) in these subjects by 2020 (see 3.1.4 below).

There are also targets related to digital literacy, including assessment of primary pupils' ability to read digital material as part of the national assessments of English reading.

Some additional requirements were implemented for primary schools from 2012, when the PISA 2018 cohort was aged 9–10 and in 4th class. These include increasing the time spent on the development of literacy skills by one hour per week for language, and for English-medium schools to implement standardised testing in English reading and mathematics for all pupils in 2nd, 4th and 6th classes. The PISA 2018 cohort would have been aged 7–8, 9–10 and 11–12 in those years, respectively. Pupils' results are reported to parents, and the schools' aggregated results are reported to the Department of Education and Skills to inform policy and identify ways of improving the performance of the school system. Data is not published as part of any school league table or inspection, nor used to compare performance across schools.

The cross-curricular approach to literacy and numeracy has been embedded with the revised Junior Cycle

The NLNS also highlighted the reform of the Junior Cycle as a key action. From September 2014, when the PISA 2018 cohort was aged 11–12 and in the last year of primary school, a new Junior Cycle was introduced in post-primary schools, replacing the former Junior Certificate examination with the Junior Cycle Profile of Achievement (JCPA). The Junior Cycle covers the first three years of post-primary school (ages 12–15) and the new Cycle features revised subjects and short courses, a focus on literacy, numeracy and key skills, and new approaches to assessment and reporting. A cross-curricular approach is deployed, with the key skills of Being Literate and Being Numerate embedded into the learning outcomes for each subject. Schools have flexibility and autonomy in determining the manner in which they enhance the emphasis on literacy and numeracy, for example, timetabling additional classes for English and mathematics (also for Irish in the case of

Irish-medium schools), as well as the provision of meaningful opportunities for the development of pupils' literacy and numeracy skills across subjects. The NLNS aims to facilitate the transition between primary and post-primary school by, for example, coordinating support for initiatives that enable parents, families and communities to support children's wellbeing and learning, and that strengthen links between home and schools. Services including the Home School Community Liaison (HSCL) and National Education Psychological Service (NEPS), were mentioned by policy experts as important supports for pupils in this transition stage and are discussed in more detail in Section 3.2.3.

Literacy and numeracy form the core of school self-evaluation

Systematic school self-evaluation for both primary and post-primary levels was introduced in 2012-13 (DES, 2016a), when the PISA cohort was aged 9–10. It is intended to be a collaborative, reflective process of internal school review with a focus on schools' implementation of the NLNS. In the first four-year cycle of school self-evaluation (2012–16), schools were required to develop and implement improvement plans for literacy, numeracy, and another curriculum area that they selected themselves. Irish-medium schools were specifically required to focus on literacy in Irish, literacy in English, and numeracy. In this way, school self-evaluation provided schools with a process for implementing a national initiative, and also for identifying and working on a curriculum area or aspect of teaching and learning that would be meaningful for them. It was expected that most post-primary schools would continue to use the school self-evaluation process in the 2016–20 period to maintain a meaningful focus on literacy and numeracy and to assist them in introducing and embedding the Framework for Junior Cycle (2015).

3.1.4 Review of the National Literacy and Numeracy Strategy

The attainment gap between the pupils performing at the higher and the lower levels in the National Assessments has narrowed between 2011 and 2016

The DES (2017a) interim review on progress between 2011 and 2016 reported improvements in literacy, including:

- The National Assessments of Mathematics and English Reading (NAMER) carried out in 2014 showed the first significant improvements in performance by primary pupils in English reading and mathematics in 2nd and 6th classes in over 30 years. The percentage of pupils in these classes at the higher and lower levels in the NAMER has increased and decreased, respectively, in line with targets set in 2011.
- Some progress towards the PISA reading targets was also made, with 37% of pupils performing at or above Level 4 in PISA 2015 (the target for 2020 set in 2011 was 34%). However, 10% of pupils performed at or below Level 1 (the target for 2020 set in 2011 was 8.5%). In PISA 2018, 36% of pupils performed at Level 4 and above, but 12% of pupils were at Level 1 and below.

Challenges were also identified in the 2017 review, with the gap in literacy and numeracy achievement between schools with the highest concentration of disadvantage and other schools remaining significant. In order to tackle this, the DEIS Plan 2017 was implemented as outlined above.

A forthcoming analysis by Karakolidis *et al.* (in preparation) uses data from the National Assessments of Mathematics and English Reading (NAMER) in 2009 and 2014 to evaluate the impact of the National Literacy and Numeracy Strategy. The analysis compares inequalities in reading and mathematics achievement that may be attributed to demographic and socio-economic characteristics, before and after the initial implementation of the National Literacy and Numeracy Strategy. The results indicate that the improvements in overall pupil performance, observed following the initial implementation of the Strategy, were accompanied by reduced inequalities. There was evidence of improvements that particularly favoured groups of pupils who had had lower performance than their counterparts in 2009. Multilevel analysis showed a significant reduction in the variance in pupil performance attributable to between-school differences, as well as to selected demographic and socio-economic factors, after the introduction of the Strategy.

3.1.5 Early Start and the Action Plan for Education

There were other key policies in the lifetime of the PISA 2018 cohort. Early Start, for children from disadvantaged backgrounds, would have been experienced by some of the cohort and the Action Plan for Education (DES, 2016b) aims to bring stakeholders in education and training together to further improve the education system. These policies are briefly outlined below.

Involving parents of disadvantaged children in their early education improves school readiness

The Early Start Programme was established in 1994 in designated areas of urban disadvantage⁸. It is a one-year intervention scheme to meet the needs of disadvantaged children, aged between 3 and 5 years who are at risk of not reaching their potential within the school system. A core element of the programme is to involve children's parents/guardians in their education. The programme, available in 40 schools in 2020, aims to support children in developing their early literacy and numeracy skills, as well as their overall cognitive, language and motor skills. Universal pre-school care and education was introduced in 2010 through the Early Childhood Care and Education scheme (the ECCE scheme or Free Pre-school Year). The PISA 2018 cohort was aged 7–8 in 2010, so did not have access to this universal provision.

⁸ It is likely that this and other interventions targeting disadvantaged pupils may have contributed to the higher level of PISA reading scores as far back as 2006.

A Department of Education and Skills (DES, 2014) policy evaluation of the Early Start programme concluded that while previous research had not identified any statistically significant differences in literacy attainment between Early Start participants and non-participants, benefits relating to school readiness had been identified. School readiness is defined as a multi-dimensional concept which encompasses academic ability, as well as a range of other issues including physical health and wellbeing, motor development, social and emotional development, approaches to learning, language development and emergent literacy and prepares young learners well for their future learning.

There is a continued focus on disadvantage and community engagement

Building on previous policies, the Action Plan for Education was launched in 2016 when the PISA 2018 cohort was aged 13–14. The Plan's aims include making education and training accessible for groups at risk of exclusion and '... to break cycles of disadvantage and ensure that every person has an opportunity to fulfil their potential.' (DES, 2016b, p.1). The 2016–2019 plan contains the following five overarching goals:

1. Improve the learning experience and the success of learners (this includes building on significant improvements in literacy and numeracy achieved since the 2011 NLNS and an emphasis on wellbeing)
2. Improve the progress of learners at risk of educational disadvantage and learners with special educational needs
3. Help organisations that deliver education services to continually improve
4. Build stronger bridges between education and the wider community (for example, to use school buildings for afterschool care)
5. Improve national planning and support services.

While this plan is unlikely to have had much impact on the PISA 2018 cohort, it is likely to be of interest for future policy studies using PISA data.

3.2 Perspectives on policy implementation from educationalists and policy experts from the Republic of Ireland

Key findings

What do experts view as the keys to success for reading policy in the Republic of Ireland?

We interviewed a selection of experts and key stakeholders about their experiences implementing policy and their views on what contributed to the success of the policies. They identified the following key themes:

- Integrated policymaking and autonomy for stakeholders in implementing policy
- Reform of Continued Professional Development and teacher training
- Engagement with families and the local community
- Meaningful collaboration with key stakeholders
- Cultural approach to school and reading
- A long history of policy aimed at tackling disadvantage and low attainment.

3.2.1 Integrated policymaking and autonomy for stakeholders

All policymakers and experts agreed that integrated policymaking and autonomy for stakeholders was a key aspect of the success of reading policy in the Republic of Ireland. When introducing new policies, there was a focus on ensuring that policies from previous governments were built upon in a meaningful way. Under a broader set of guidelines contained within DEIS and the National Literacy and Numeracy Strategy, schools have some freedom to select the most appropriate support for their pupils, creating a sense of not only ownership of the policies implemented, but also allowing them to select the strands of the policy that are most relevant to their schools and classrooms. As one policy expert stated:

‘[It is] hard to disentangle one aspect of policy from another, but DEIS is more comprehensive; all the elements are integrated... schools are allowed a lot of discretion in line with the school context.’

Our interviewees noted that this is of great importance within the context of schooling in the Republic of Ireland where there are many small schools with individual needs, particularly in rural areas. As one respondent stated:

‘The predominance of small schools means there is a huge local community interest, so giving local identities ownership is key.’

One respondent stated that this approach to autonomy was similarly exemplified in the development of a new mechanism, introduced in 2017, for the allocation of special education teacher and special needs assistance interventions, based on a model of need at the school level (DES, 2017c). They stated that this new mechanism allowed schools autonomy in how they prioritise resources to best match schools' and individual pupils' needs, without having to wait for individual psychological assessments, which was a feature of the previous allocation model.

Our interviewees also highlighted a commitment to the continuation of policy, for example, telling us that policies do not 'chop and change' with great frequency, regardless of what political party was in power. One policy expert noted that there was a shared understanding of the importance of sustained continuity in education and that they perceived that this was agreed between all stakeholders. This was felt to mean that once teachers have selected an initiative that is effective for their pupils and their school it is possible to continue with it within the context of larger policy changes and see the long-term gains. Summarising this, one policy expert stated:

'[There is] an understanding that long-term policy is the right one, providing a high degree of autonomy for schools to continue with what works.'

This 'joined up' approach, of providing a wide, centralised set of guidelines from which schools can pick was often described as 'a menu of choices' that also incorporates established policy that in some cases has existed, in some form, for many decades. This was seen as the key feature of DEIS in particular, but also of the NLNS. The policy experts said there has been less high stakes testing than in some UK nations and no publication of school league tables, which was felt could mean that schools were under less external pressure to take up aspects of the policies that do not fit their school or goals.

3.2.2 Reform of continued professional development and teacher training

The importance of the reforms related to continued professional development (CPD) and teacher training in the Republic of Ireland was seen as another key success for policy implementation by all of our respondents. The general theme was that the quality of teaching could be improved by increasing teacher knowledge and encouraging teachers to be 'pedagogue's first and subject specialists second' and, as a result, they were more likely, and able, to implement the policies in effective ways.

There were a number of aspects of DEIS and the NLNS that were highlighted as being particularly successful. The first was the development of the Professional Development Service for Teachers (PDST). Developed in 2010, this Department of Education service provides centralised CPD for schools and teachers on a range of topics, from curriculum (including literacy) to safeguarding. As with the policies referenced in the previous section,

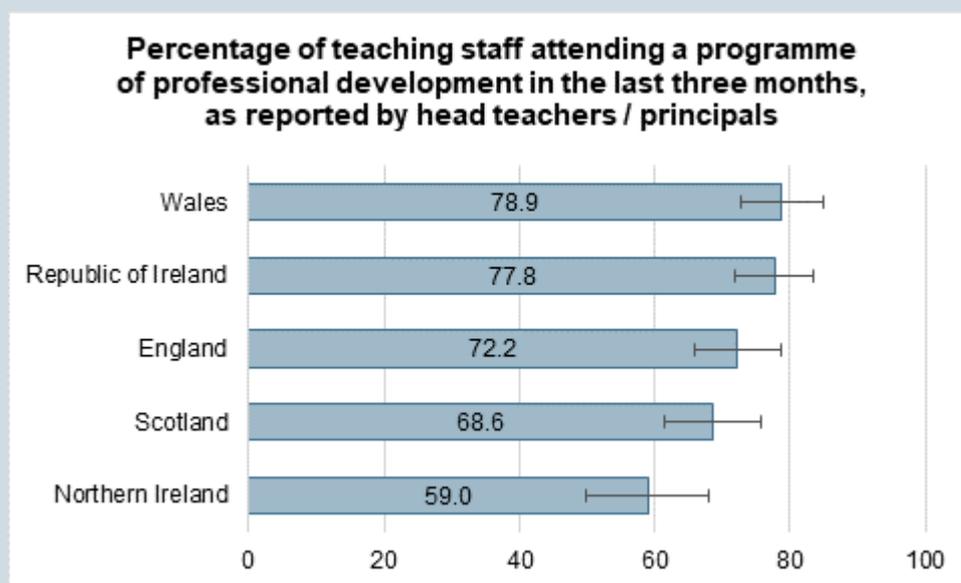
it aims to amalgamate and restructure the many standalone and disparate professional development services that had been available prior to its inception.

Mentioned frequently as being of similar importance was the reform of initial teacher training alongside the introduction of the NLNS. As with reforms to CPD, this encompassed a major restructuring of the teacher training system, amalgamating smaller teacher training schools into larger hubs and centralised networks. Teacher training itself has been overhauled, with primary education teachers undertaking a four-year course (compared to a previous three-year course) and post-primary requiring a two-year course (compared to a previous single-year course) in addition to a three- or four-year specialist degree. This extra time is used not only for classroom experience but to ensure that all teachers have a grounding in the profession outside of the subject matter they would be teaching. A focus on teaching being a skilled profession and on 'making teaching an attractive career' was something that all respondents thought was key to improving the quality of teaching in the Republic of Ireland, and which they felt ultimately had a significant impact upon the quality of literacy teaching.

The Republic of Ireland is continuing to build upon this work with the creation of a framework for evaluating teachers' professional learning, due at the end of 2022 (Educational Research Centre, 2021). The framework will be designed to cover all stages of professional learning from design through to evaluation of outputs and outcomes, and will operate at system, school and teacher level with an emphasis on collaboration for and ownership of CPD. Importantly, and in keeping with a further key theme of stakeholder engagement, the framework includes feedback from all CPD providers in Ireland and also includes surveys and case studies of principals and teachers, thus aiming to be, as summarised by one of our policy experts, 'both top-down and bottom-up in its creation.'

Box 2: What does PISA 2018 tell us about professional development in schools?

A key aim of the NLNS in the Republic of Ireland is to improve teacher quality and assessment literacy through enhanced professional development. In PISA 2018, headteachers and principals in Wales and the Republic of Ireland reported the most professional development among their staff, while Northern Ireland reported the least, but differences between the five nations in terms of CPD provision were not significant. Some further research into the nature and focus of professional development in the Republic of Ireland, in particular developing literacy and numeracy across the curriculum in post-primary schools, may shed some light into their successes in reading attainment in PISA.



Source: PISA 2018 database

3.2.3 Engagement with families and the local community

All of our policy experts and stakeholders regarded the focus on engagement with families and local communities as being of particular importance to the success of DEIS and the NLNS, and highlighted a number of key areas that demonstrate its success.

Firstly, the existence of schemes such as the Home School Community Liaison (HSCL) and National Education Psychological Service (NEPS) were seen as being particular successes of the policy. They provide a crucial bridge between the learning that takes place in school and continued learning at home, particularly with regards to helping to identify and target pupils who may be falling behind in a specific area of the curriculum. NEPS is a regionalised scheme, allowing for the development of relationships between psychologists and their local schools in a partnership approach. It was noted by many of our interviewees that these services were not to be seen as an enforcement tool, for example, they are not intended for checking in on school attendance. The services were

recognised as a means of supporting specific pupils who needed further help, and as instrumental in building trust between a school and the families it serves. NEPS also continues to evolve, focusing further on literacy with the creation of the Post-Primary Assessment and Diagnosis – English [PPAD-E], diagnostic assessment in 2020. This assessment is designed to be used by NEPS to standardise diagnosis of struggling readers and provide targeted interventions for those who require further support from the first year of post-primary schooling.

Similarly, many aspects of the initiatives highlighted were designed with reporting to the community in mind. For example, the school self-evaluation aspect of DEIS is reported primarily to the school community and to stakeholders. It was always intended to be used not as an inspection tool, but rather for schools to identify places where they could make meaningful changes and then report on those changes to the people most invested in the success of the school.

Policy experts frequently mentioned the real value and importance of community involvement in schools, particularly in the context of rural areas where there are numerous schools with small class sizes. This is of particular interest when considering the similarly large number of small schools in the UK nations, such as Scotland, Wales and Northern Ireland. The policy experts frequently drew links between the importance of engagement in the community and the first theme highlighted in this section: autonomy. They strongly believed that by providing schools with autonomy over the policies they choose to implement and then allowing schools and their wider communities to review those measures for themselves, they were able to take a greater sense of ownership, which was a another particular success of the overarching policy approach.

3.2.4 Meaningful collaboration with key stakeholders

Elaborating further on the prior theme, many policy experts regarded Government collaboration with the stakeholders involved as crucial to the successful implementation of policy. The policy experts observed that teacher engagement with new policies has been reasonably high, even when policy change has been contentious. They attribute this, in part to the previous theme of autonomy, but also with genuine attempts to implement a consultation process where the stakeholders in a policy have meaningful input into policy creation:

‘If they can see their work reflected in the policy then buy-in and implementation is likely to be higher, and helps stops the policy seem as if it is coming down from on high.’

New policies were put through a period of consultation that policy colleagues believed was ‘truly meaningful’. A desire to ‘co-create the policy’ was combined with opportunities for dialogue between teachers and those in government which developed and promoted a mutual awareness of where and how best to focus new policy:

‘There really is no way to introduce a policy ‘to’ teachers, it has to be done with them.’

Finally on this theme, respondents felt that there was a shared understanding around not scrapping prior policies that were already working as part of new policy reform. They felt that there is a strong shared commitment to ‘staying the course’ and that this was reflected in the absorption of prior policies into larger new ones such as DEIS and NLNS. They felt that not only did this have the benefit of creating greater continuity and ownership over the policies, it ensured that teachers and parents who had already ‘bought into’ the prior policies could continue to see the benefits as part of new, wider policies such as DEIS.

3.2.5 Cultural approach to school and reading

Another key theme, mentioned by all participants, was the shared cultural focus on reading and literacy within the Republic of Ireland and the general esteem in which schooling and education are held:

‘We see, consistently, a very strong trust in the education system within our communities.’

Respondents felt that Ireland’s rich literary history, in tandem with the strong role of schools within communities, and a focus on building relationships between families and the community, has allowed literacy to ‘embed itself within the school culture in ways other subjects have not’. It was felt that this, along with the relatively late formation of post-primary schooling in international terms (post-primary school has been state-funded in the Republic of Ireland since 1967), has led to an understanding of and appreciation for schooling, and a strong focus on literacy from an early age:

‘Schooling is recognised as not just economically powerful, but socially powerful as well.’

3.2.6 A long history of policy aimed at tackling disadvantage

A review of the policy history in the Republic of Ireland shows that there had been various limited initiatives to tackle educational disadvantage as far back as the 1960s. While the rapid expansion of free post-primary schooling in the 1970s and free school transport schemes in rural areas benefited all categories of pupil, it was especially valuable for those for whom post-primary education would have previously been unavailable, and it certainly helped to raise overall educational levels generally. At primary level, from the 1970s, it became possible to appoint remedial education teachers in schools with high incidence of literacy difficulties.

Most markedly, there was an intensification of work on educational disadvantage in the 1980s and 1990s. The origins of the DEIS scheme go back several decades, and include.

- 1980s – various initiatives to support children from travelling communities
- 1990s – Disadvantaged Areas Scheme
- 1990 – Home School Community Liaison teacher scheme was given official recognition
- 1993 – remedial teacher scheme was expanded to cover all schools
- 1996 – Breaking the Cycle
- 1997 – Back to school initiative aimed specifically at retaining pupils at post-primary schools
- 1999 – Early school leavers initiative designed to reduce early school leaving
- 2000 – Giving Children an Even Break: funding for extra teachers in schools, as well as extra funding over three years for learning to support those children from disadvantaged backgrounds.

While many of the initiatives mentioned above were standalone schemes which addressed specific aspects of educational disadvantage, successful elements were retained and developed and are recognisable as strands of the DEIS programme today.

These policies date back much further than many similar initiatives in the UK nations and, although Scotland's Social Justice Strategy and England's Excellence in Cities initiative were established in 1999, it can take many years for policy to become fully embedded and for impact to be seen at a national level. This historically early focus on disadvantage in the Republic of Ireland may go some way to explaining the markedly lower proportions of pupils working at the lowest PISA proficiency levels, in 2018 and in earlier cycles.

4 Discussion

What are the factors that support high levels of reading attainment?

PISA allows participating countries to explore strengths and weaknesses in their education systems and evaluate policy by comparing their results with those of other countries and by comparing their own results over time. In this section, we reflect on the qualitative information gathered from policy colleagues and educational experts, and intersperse selected findings from further analyses of PISA 2018 reading data across the UK and the Republic of Ireland.

Why do these broad educational policies seemingly affect reading more than mathematics or science?

As previously covered in section 1.2, the PISA 2018 results show the Republic of Ireland to be significantly above the UK nations in reading. The difference between the Republic of Ireland and UK nations was less marked in mathematics, where they scored significantly higher than Scotland and Wales, but similarly to England and Northern Ireland. In science they scored significantly lower than England, and were not significantly different from the other UK nations. DEIS does not have a specific literacy focus outside of a few strands, and the NLNS targets both mathematics and reading. From the PISA 2018 findings, it could appear that these policies had had a greater impact on reading than mathematics, or that there are other unidentified factors driving reading performance.

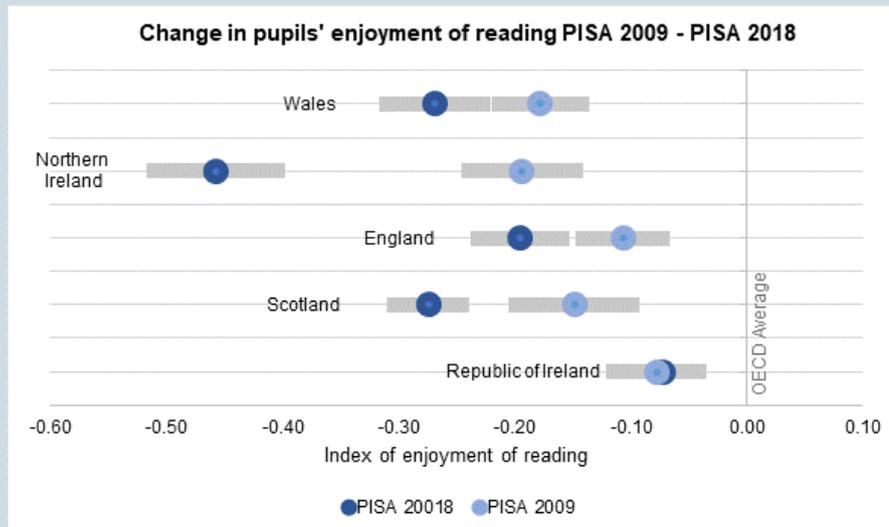
The review of the NLNS (DES, 2017a, p.20) suggested that there was greater focus on literacy than numeracy in the initial years and that ‘this has undoubtedly contributed to the very good progress in literacy.’ As a result, the next phase of the Strategy has the improvement of mathematics attainment as a key priority. This was echoed by our interviewees, who produced similar responses when asked about the discrepancy between subjects:

‘Regarding the literacy/numeracy balance in the Strategy, we envisaged that it would tackle both literacy and numeracy, but in schools, in the early years of the strategy, the emphasis was certainly on literacy. It has proven harder to improve maths outcomes, despite major revisions to maths education at the second [post-primary] level.’

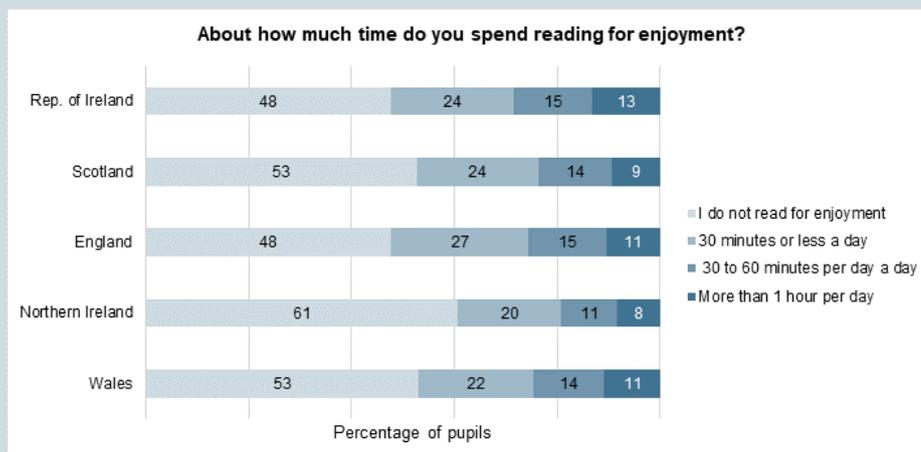
This, alongside the other successes of policy implementation outlined in Chapter 3, including the long-embedded cultural value of literacy, may go some way to explaining the particular success in reading.

Box 3: What does PISA 2018 tell us about pupils' enjoyment of reading?

- Pupil enjoyment of reading is one of the variables that correlates most strongly with higher reading scores.
- Pupils in the Republic of Ireland reported a significantly greater enjoyment of reading than those in the UK nations.
- Since 2009, pupils' reading enjoyment has declined in all UK nations, most particularly in Northern Ireland.



- Although pupils in the Republic of Ireland reported greater enjoyment of reading, the time they spent reading for enjoyment was only slightly higher than pupils in UK nations.
- Northern Ireland had the highest percentage of pupils who said they do not read for enjoyment, but around half the pupils chose that option in all five nations.



Source: PISA 2018 database

Box 4: What pupil factors are associated with better reading skills in PISA 2018?

We analysed the common variables from the pupil questionnaire data in 2018 and 2009, where reading was the major focus of the PISA studies, and linked it to pupil attainment in each of the five nations*.

**It is worth remembering here that correlation is not causation and that the direction of the association/impact cannot be inferred from these analyses.*

We found that:

Pupils who gain higher PISA reading scores report:

- having a high number of books at home⁹
- talking about books with other people
- reading as a favourite hobby
- reading fiction more often
- more time spent reading for pleasure
- when summarising texts, using strategies such as identifying the most important facts and checking whether they are represented in the summary.

These top six factors were consistent across all UK nations and the Republic of Ireland and across both PISA 2018 and 2009, when reading literacy was the main focus. However, there were a number of ways in which the UK nations and the Republic of Ireland differ, these are explored in Box 5.

Other factors found to correlate with reading scores were:

- having classic literature available at home
- when summarising texts, reading through, underlining the most important sentences and re-writing them in one's own words
- reading non-fiction more often
- level of schooling of mother and father
- having to wait a long time for pupils to settle down in class (negative correlation)

2018 factors not identified in 2009:

- having a teacher who encourages pupils to express their opinion about a text
- taking part in online discussions more often.

It seems likely that both of these factors would be more prevalent in the classroom in 2018, than they would have been in 2009.

Informed by the stakeholder interviews, we also analysed the correlation of relevant 2018 PISA derived variables (scales)¹⁰ with achievement, and found that the **pupil attributes more strongly associated with higher scores were:**

- stronger perception of their own competence in reading

- greater enjoyment of reading
- less perceived difficulty with reading
- higher expectations of future occupational status
- more home possessions.

Centralised and integrated approaches throughout policies

Throughout the policy reviews and surveys it became clear that a key goal of policy changes in the Republic of Ireland was to follow an integrated approach, pulling previous specific policies into broader policies such as DEIS or consolidating smaller teacher training schools into larger networks. This was further illustrated when the majority of interview respondents named this 'joined up' approach as being the key aspect driving policy changes in the Republic of Ireland. Similarly, strands within these policies were themselves designed to address similar themes and to complement one another. Several interview respondents emphasised that aspects of policy designed to provide schools with more autonomy, such as the School Self Evaluation, were also beneficial for building engagement with the wider community. These policies had been designed in partnership with teachers before their implementation, ensuring that teachers felt more empowered.

The centralisation and amalgamation of previous smaller initiatives may seem at odds with the idea of autonomy, however, it is worth noting that this approach to partnership 'has prevailed since the early 90s, not just in education circles, but also more widely across the system.' (Kennedy, 2013, p. 511).

PISA data indicates the possible impact of culture in the Republic of Ireland

Cultural issues were frequently mentioned by our respondents and have some representation in the PISA data. Pupils in the Republic of Ireland reported lower levels of family wealth, fewer home educational resources (factors such as access to a desk or the internet) and fewer ICT resources than in the four UK nations. However, when compared to the UK nations, pupils in the Republic of Ireland reported more cultural possessions. While this is a relatively vague category which can encompass multiple things such as owning a musical instrument or having art in the home, this does nonetheless point to another differing factor, related to culture, that correlates with high achievement in reading. Research from rural households has shown that family attitude towards reading can make up for differences in performance that are associated with lower income or disadvantage (Weir and McAvinue, 2013). Rural DEIS primary schools in the Republic of Ireland score more highly in reading than urban DEIS primary schools. There is likely to be a complex set of reasons for this with one possible factor being the impact of culture in these areas.

⁹ This broad measure has been shown to provide a reasonable proxy for a pupil's socio-economic status, which is always the most significant factor associated with attainment.

¹⁰ PISA combines some questionnaire items into new variables (scales) to measure latent constructs that cannot be observed directly.

Box 5: How did pupils in the Republic of Ireland differ from pupils in UK schools in PISA 2018?

We analysed the pupil questionnaire data from PISA 2018 to see if any pupil level variables could be identified that might distinguish the behaviours and attitudes of pupils in the Republic of Ireland from those in the UK.

* indicates a high correlation with reading attainment

Compared to pupils in all UK nations, pupils in the Republic of Ireland reported significantly:

- greater enjoyment of reading*
- more cultural possessions*
- fewer hours of English instruction per week
- greater self-efficacy/resilience
- less tendency to relate schooling to a good job/life
- less time in pre-school than pupils in England, Scotland and Wales, but more than pupils in Northern Ireland¹¹.
- lower levels of family wealth
- lower levels of home educational resources
- fewer ICT resources at home
- less teacher-directed instruction (for example, *The teacher sets clear goals for our learning*)
- less adaptive teaching (for example, *The teacher adapts the lesson to my class's needs and knowledge*)

They also reported:

- higher expectations of their future occupational status (similar to England)*
- less teacher feedback than all UK nations except Scotland.

Other differences and similarities between the Republic of Ireland and UK nations

Pupils in ROI reported significantly:

- lower levels of bullying and lower levels of perceived teacher support than pupils in UK nations except Northern Ireland
- less perceived difficulty with reading than pupils in UK nations except Wales
- lower sense of belonging than pupils in UK nations except England
- higher levels of parental emotional support, and lower levels of confidence (perceived competence) in reading than pupils in UK nations except Scotland.

¹¹ It is possible this reflects the fact that pupils begin formal schooling earlier in the Republic of Ireland and Northern Ireland.

The summary in Box 5 shows the scales on which pupils in the Republic of Ireland differed significantly from those in the UK. Each of the bullets relates to the PISA pupil-level scale outlined in the PISA 2018 international report (OECD 2020).

Reading enjoyment, cultural possessions and high expectations/aspirations each correlate highly with reading achievement in all five nations. It is important to note, however, that correlation does not mean causality and the direction of the relationship cannot be inferred from these analyses.

The reading enjoyment scale has been described in Box 3. Cultural possessions include classic literature, poetry books, works of art, musical instruments, and books on art, music or design. Wealth indicators include a room of your own, an internet connection and other country-specific indicators, such as having a dishwasher. Home resources for learning include a desk, a quiet place to study, books and software to support home study. ICT resources includes computers, tablets, mobile phones, educational software and an internet connection.

While wealth, ICT resources and home resources for learning were not individually found to correlate strongly with PISA reading score, when combined with other factors (including cultural possessions) to form the wider index of 'home possessions' there was a correlation with overall score. ESCS (the PISA index of economic, social and cultural status) also correlated with overall score, as might be expected.

Pupils in the Republic of Ireland spend less time in English lessons

Pupils in the Republic of Ireland report significantly fewer hours of English instruction per week (or Welsh/Irish instruction for pupils in Welsh- or Irish-medium schools) than pupils in UK nations, as shown in Table 1.

Table 1: Time spent in ‘English’¹² lessons

Nation	Total learning time in regular lessons (hours)	Regular language-of-instruction in lessons (hours)	Proportion of the school week spent in English lessons (percentage)
England	26.8	4.4	16.3
Northern Ireland	27.6	3.8	13.8
Wales	26.7	4.0	15.1
Scotland	27.6	4.2	15.3
Republic of Ireland	28.8	3.1	10.7

As discussed in Section 3.2, education experts in the Republic of Ireland stressed that there had been a deliberate drive in their post-primary schools to ensure that all subject teachers took responsibility for literacy and numeracy across the curriculum. This means that, as well as being taught in ‘English’ lessons, reading literacy is also taught to serve specific purposes – for example, to describe a science experiment, to research and summarise historical information, to write reports or to read and apply task instructions. Arguably, this aligns well with PISA literacy, as a functional skill applied to real-life situations, and the need for pupils to be able to find, select, interpret, integrate and evaluate information from the full range of texts associated with situations both in and beyond the classroom. It would be interesting, therefore, to investigate further the Republic of Ireland’s approach to cross-curricular planning in post-primary schools and the extent to which it differs from those in UK nations where, in some cases, literacy across the curriculum may also be in place.

Classroom practice may be another area worth investigating further, but information from the PISA questionnaires is limited and perhaps a qualitative study would offer more useful evidence.

Within countries, pupil confidence is also known to correlate with performance, however this does not seem to apply across countries. Sometimes in high performing countries lower proportions of pupils report high levels of confidence and vice versa. However, at pupil level, confidence ratings generally relate to performance/attainment. On the PISA

¹² Here, this refers to the ‘language of instruction’. For simplicity it is referred to as time spent in ‘English’ lessons but for some pupils in Wales and the Republic of Ireland it refers to time spent in Welsh or Irish lessons.

scale of 'self-concept of reading: perception of competence'¹³ pupils in the Republic of Ireland reported lower levels than pupils in England, and Wales, higher than those in Northern Ireland, and similar to pupils in Scotland. On 'self-concept of reading: perception of difficulty'¹⁴, pupils in the Republic of Ireland (alongside pupils in Wales) reported least difficulty with reading.

Lower-attaining pupils in the Republic of Ireland have higher aspirations and more positive perception of their reading competence

As discussed in Chapter 1, pupils in the Republic of Ireland at the lower end of the attainment distribution generally perform better than those in the UK. In order to explore reasons for this, we repeated the analyses in Box 5 above, but focusing on pupils in the lowest third of reading attainment.

Table 2 shows, as we would expect, the lower attaining pupils in the Republic of Ireland scored significantly higher than those in the UK. The gap between the lower-attaining pupils and the remaining pupils was also smaller in the Republic of Ireland, while the mean scores of both groups remained higher.

Table 2: Mean reading scores of lower-achieving pupils (bottom 33%)

Mean reading score for	England	Northern Ireland	Scotland	Wales	Republic of Ireland
Bottom 33%	398	396	407	381	422
Top 67%	558	552	552	534	565
Overall mean score for all pupils	505	501	504	483	518

Source: PISA 2018 database

In terms of the factors associated with higher reading achievement, the two key attributes which correlated most strongly with attainment for lower-achieving pupils in all five nations were¹⁵:

- their aspirations for future employment*
- their perceived competence in reading*.

Two other PISA scales were also correlated with reading attainment among low-achieving pupils in each nation, but to a lesser extent. These were the scales relating to their

¹³ Self-concept of reading: Perception of competence: *I am a good reader; I am able to understand difficult texts; I read fluently.*

¹⁴ Self-concept of reading: Perception of difficulty: *I have always had difficulty with reading; I have to read a text several times before completely understanding it; I find it difficult to answer questions about a text.*

¹⁵ *indicates correlation with PISA reading score

perceptions that working hard at school would help them get a better job/ get into a better college in the future, and the number of home resources for learning.

Lower-attaining pupils in the Republic of Ireland have more cultural possessions than UK pupils and high expectations for the future

Compared to their UK counterparts, lower-attaining pupils in the Republic of Ireland reported:

- more cultural possessions*
- less wealth
- fewer ICT resources at home
- less time spent in English lessons
- high expectations for the future* (lower than pupils in England, higher than Wales and Northern Ireland but not significantly different from Scotland)
- less time in pre-school (except in Northern Ireland)
- fewer extra-curricular activities (such as band, choir, school play, art club).

These broadly reflect the differences seen across the populations as a whole, but were not correlated with attainment in the same way.

5 Conclusions and key findings

5.1 Conclusions

PISA outcomes can lead to major policy reforms that can change schooling for a generation. When a country demonstrates particular success in certain subjects, as the Republic of Ireland does in reading, it is important for other nations to evaluate what can be learned from those successes, including aspects that might be tailored effectively to suit to their own specific contexts.

Pupils in the Republic of Ireland achieve significantly higher reading scores in PISA than the UK nations. This has been the case for every year since 2006 except for 2009. However, research suggests that this dip in the Republic of Ireland's PISA 2009 reading score may have appeared exaggerated and is considered anomalous by researchers and policymakers in the Republic of Ireland. Over time, the Republic of Ireland has also maintained a smaller proportion of pupils working at the lowest reading proficiency levels and high proportions of pupils working at highest reading proficiency levels (England also had a high proportion of high performers in PISA 2018). This continued success in reading, and the sustained difference between the Republic of Ireland and the UK nations, points to the importance of policies that have been in force for longer, and/or to other factors, such as cultural differences, potentially playing a relevant role.

The factors that are associated with high reading attainment are largely consistent across the UK nations and the Republic of Ireland, with the most notable differences being pupils in the Republic of Ireland report a greater enjoyment of reading and a greater number of cultural possessions in their home.

During the lifetime of the PISA 2018 cohort, the Republic of Ireland saw two major policies introduced that were perceived to impact upon reading – DEIS and the Literacy and Numeracy Strategy. These policies consolidated and elaborated upon previous policies addressing disadvantage and the curriculum, which has been reflected in strong levels of basic literacy over decades. These integrated and complementary policies provide a wide range of interventions and support for schools to address learning for disadvantaged pupils and impact generally on reading and literacy. These include extra time given to reading instruction and school librarian and library support as well as smaller class sizes. The policies also include or work alongside a wider set of structural changes to the way that teachers are trained and supported, through reforms to teacher training schools and their programmes, the centralisation of CPD for teachers, and community-based measures such as the extension of the Home School Community Liaison and National Education Psychological Service schemes.

Policy experts in the Republic of Ireland see a number of these factors as being significant for the successful implementation of current policy. They state that the policies themselves were designed to integrate, build upon and widen access to many of the programmes

provided in DEIS, while DEIS itself was collaboratively co-created to build upon a long history of previous policies targeting disadvantaged pupils. By 'staying the course' with policies that work, they enable gains among pupils to be consolidated and policies to become embedded in communities.

They stressed that policies were carefully developed through meaningful dialogue with stakeholders and focused on placing trust in schools to select the appropriate supports and interventions that make the most sense for their pupils, rather than undifferentiated prescription. Policies also focused on outreach to the local community and engaging with families with the goal of sharing, supporting and embedding good learning practices at home. Finally, by engaging with families and the local community, policy experts believe that this further strengthens an already strong culture that values reading and education more widely, resulting in 'a really strong thread of shared understanding' that runs from policymaking, through schools and stakeholders, and into families and the local community.

5.2 Key findings that could be applied more widely

An approach to integrated policy making which is co-created with teachers encourages greater commitment and engagement

Although this is a highly complex area, and one that the policy experts in the Republic of Ireland admitted is difficult to unpick, the most significant theme that was evident in our review was the commitment to policy that complements and builds upon existing policy. Similarly important was policy reform that recognises interventions and policies that schools have already been using successfully and commits to their continuation. This consistency of policy, and further development or elaboration on prior policy, was seen as the key success in implementing reading policy in the Republic of Ireland, and for keeping teachers on board and maintaining enthusiasm.

Evaluation, performance measures and timescales for review built into policy from the outset

Adding to the 'joined up' approach is a commitment to building evaluation into the creation of policies and a focus on updating them as targets are met. For example, this is clearly set out in the next phase of the National Literacy and Numeracy Strategy, as discussed in Chapter 3. Similarly, 'ongoing evaluation was built into the design of the DEIS programme from the outset' (Smyth *et al.* 2015, p. 24) with numerous reviews of the various strands taking place to inform further updates to the policy.

Work towards building a collaborative culture between schools, families and local communities

Integrating strategies between school and the home was also regarded as a critical success, particularly for reading among low attaining pupils. Schemes such as the Home School Community Liaison and the National Educational Psychological Service were frequently mentioned as being key pillars of success in developing reading literacy in the Republic of Ireland. This work continues to be evaluated and built upon through more recently introduced schemes, such as PPAD-E, a diagnostic test of reading literacy administered via the National Educational Psychological Service. Fostering this type of collaborative and supportive culture, alongside a wider culture of valuing reading in particular and schooling more widely, could help to overcome barriers to successful policy implementation.

Continue to identify and support pupils working at the lower end of the attainment distribution

The Republic of Ireland has had particular success in supporting lower attaining pupils, as evidenced by its lower percentage of pupils working below Level 2 compared with the UK nations in PISA 2018. Targeted support through DEIS and the NLNS was judged to have played a role in this success by evaluations and the experts in this study. How schools are targeted to receive these interventions is constantly re-evaluated. Working to identify and support pupils who would most benefit from these interventions should continue to be a key focus of reading policy in the future.

Explore the key elements of teacher training and CPD in the Republic of Ireland

Improving teacher quality has been a key priority in the Republic of Ireland and that has been reflected in policy reforms. While our experts commented on a focus on pedagogy, 'research-oriented teaching' and assessment literacy, further research focused on the details of the approach to teacher training could prove beneficial to understanding how reading policy is implemented in the classroom.

Continue to monitor trends in future rounds of PISA

This work provides a wider review of policy in the UK nations and the Republic of Ireland with a specific focus on reading. Future rounds of PISA will focus on different subjects where the differences between the nations are not as wide. It may be beneficial to continue to monitor these trends to see any significant changes in score and attempt to link these changes to policy reforms in the preceding years. Similarly, there are a number of reading policies in the Republic of Ireland, and in UK nations, that may benefit the next PISA cohorts. Further exploration of this topic would allow for firmer conclusions about policy to be drawn and support evidence-based policy decisions in the future.

References

- Blake, J., 2018. *Completing the Revolution. Delivering on the promise of the 2014 National Curriculum*. [pdf] Available at: <[Completing the Revolution Delivering on the promise of the 2014 National Curriculum](#)> [Accessed 10 February 2021].
- Burgess, S. and Thomson, D., 2019. *Making the grade: The impact of GCSE reforms on the attainment gap between disadvantaged pupils and their peers*. [pdf] Available at: <[Making the grade: The impact of GCSE reforms on the attainment gap between disadvantaged pupils and their peers](#)> [Accessed 10 February 2021].
- Cosgrove, J., Cartwright, F., 2014b. Changes in achievement on PISA: the case of Ireland and implications for international assessment practice. *Large-scale Assess Education*, [e-journal] 2(2). <https://doi.org/10.1186/2196-0739-2-2>
- Council for the Curriculum, Examinations, and Assessment, 2007. *Northern Ireland Curriculum*. [online] Available at: <[Northern Ireland Curriculum](#)> [Accessed 10 March 2021].
- Department for Education, 2011a. *Evaluation of every child a reader*. [pdf] Available at: <[Evaluation of every child a reader](#)> [Accessed 10 March 2021].
- Department for Education, 2011b. *National Strategies 1997-2011 A brief summary of the impact and effectiveness of the National Strategies*. [pdf] Available at: <[National Strategies 1997-2011 A brief summary of the impact and effectiveness of the National Strategies](#)> [Accessed 10 February 2021].
- Department for Education, 2011c. *2010 to 2015 Government policy education of disadvantaged children*. [online] Available at: <[2010 to 2015 Government policy education of disadvantaged children](#)> [Accessed 10 March 2021].
- Department for Education, 2011d. *National curriculum review launched*. [press release], 20 January 2011. Available at: <[National curriculum review launched](#)> [Accessed 10 February 2021].
- Department for Education, 2014. *Year 7 literacy and numeracy catch-up premium: guide for schools*. [online] Available at: <[Year 7 literacy and numeracy catch-up premium: guide for schools](#)> [Accessed 25 March 2021].
- Department for Education, 2016. Policy paper. *Social mobility and opportunity areas*. [online] Available at: <[Social mobility and opportunity areas](#)> [Accessed 10 March 2021].
- Department for Education, 2017. *Unlocking talent, fulfilling potential: a plan for improving social mobility through education*. [pdf] Available at: <[Unlocking talent, fulfilling potential: a plan for improving social mobility through education](#)> [Accessed 5 January 2021].
- Department for Education, 2018. *Literacy and numeracy catch-up strategies*. [pdf] Available at: <[Literacy and numeracy catch-up strategies](#)> [Accessed 10 February 2021].

Department for Education, 2019a. *National curriculum assessments at key stage 2 in England, 2019 (revised)*. [pdf] Available at: <[National curriculum assessments at key stage 2 in England, 2019 \(revised\)](#)> [Accessed 11 March 2021].

Department for Education, 2019b. *Key stage 4 performance, 2019 (revised)*. [pdf] Available at <[Key stage 4 performance, 2019 \(revised\)](#)> [Accessed 12 March 2021].

Department for Children, Schools and Families, 2007. *City challenge: for world class education*. [pdf] Available at: <[For World Class Education](#)> [Accessed 10 March 2021].

Department of Education, 2005. *Common Funding Scheme*. [online] Available at: <[Common Funding Scheme](#)> [Accessed 29 March 2021].

Department of Education, 2006. *Extended schools: schools, families, communities - working together*. [pdf] Available at: <[Extended Schools, schools, families, communities - working together](#)> [Accessed 10 March 2021].

Department of Education, 2009. *Every school a good school: a policy for school improvement*. [pdf] Available at: <[Every School A Good School](#)> [Accessed 10 March 2021].

Department of Education, 2011. *Count read: succeed. A strategy to improve outcomes in literacy and numeracy*. [pdf] Available at: <[Count Read: Succeed](#)> [Accessed 10 March 2021].

Department of Education, 2012a. *Understanding difficulties in Literacy Development a whole school approach*. [pdf] Available at: <[Understanding difficulties in Literacy Development a whole school approach](#)> [Accessed 10 March 2021].

Department of Education, 2012b. *Literacy and numeracy signature programme*. [online] Available at: <[Literacy and Numeracy Signature Programme](#)> [Accessed 10 March 2021].

Department of Education, 2015. *Independent review of the Sure Start programme*. [pdf] Available at: <[Independent Review of the Sure Start Programme](#)> [Accessed 10 March 2021].

Department of Education, 2019. *Year 12 and Year 14 examination performance at post-primary schools in Northern Ireland 2018-19*. [pdf] Available at: <[Year 12 and Year 14 Examination Performance at Post-Primary Schools in Northern Ireland 2018-19](#)> [Accessed 10 March 2021].

Department of Education and Skills, 2005. *Delivering equality of opportunity in schools: an action plan for educational inclusion*. [pdf] Available at: <[An Action Plan for Educational Inclusion](#)> [Accessed 10 March 2021].

Department of Education and Skills, 2011a. *Literacy and numeracy for learning and life: the National Strategy to improve literacy and numeracy among children and young people 2011 – 2020*. [pdf] Available at: <[Literacy and Numeracy for Learning and Life: The](#)>

[National Strategy to Improve Literacy and Numeracy among Children and Young People 2011 – 2020](#)> [Accessed 10 March 2021].

Department of Education and Skills, 2011b. *Lessons from research on the impact of DEIS (Delivering Equality of Opportunity in Schools)*. [pdf] Available at: <[Lessons from research on the impact of DEIS \(Delivering Equality of Opportunity in Schools\)](#)> [Accessed 10 March 2021].

Department of Education and Skills, 2014. *Focussed policy assessment early start programme*. [pdf] Available at: <[Focussed Policy Assessment Early Start Programme](#)> [Accessed 10 March 2021].

Department of Education and Skills, 2016a. *School self-evaluation guidelines 2016-2020*. [pdf] Available at: <[School self-evaluation guideline 2016-2020](#)> [Accessed 18 March 2021].

Department of Education and Skills, 2016b. *Action plan for education 2016-2019*. [pdf] Available at: <[Action plan for education 2016-2019](#)> [Accessed 10 March 2021].

Department of Education and Skills 2017a. *National strategy: literacy and numeracy for learning and life 2011-2020: Interim Review: 2011 – 2016 New Targets: 2017 – 2020*. [pdf] Available at: <[National strategy: literacy and numeracy for learning and life - 2011-2020 Interim Review: 2011 – 2016 New Targets: 2017 – 2020](#)> [Accessed 10 March 2021].

Department of Education and Skills, 2017b. *DEIS Plan 2017. Delivering Equality of Opportunity in Schools*. [pdf] Available at: <[Delivering Equality of Opportunity in Schools](#)> [Accessed 10 March 2021].

Department of Education and Skills, 2017c. *Circular to the management authorities of all mainstream primary schools special education teaching allocation*. [pdf] Available at: <[Circular to the Management Authorities of all Mainstream Primary Schools Special Education Teaching Allocation](#)> [Accessed 17 March 2021].

Education Endowment Foundation, 2018. *Phonics Teaching and Learning Toolkit*. [online] Available at: <[Phonics Teaching and Learning Toolkit](#)> [Accessed 11 March 2021].

Education Scotland, 2010. *What is Curriculum for Excellence?* [online] Available at: <[What is Curriculum for Excellence?](#)> [Accessed 10 March 2021].

Education and Skills Committee, 2019. *Report on Scottish National Standardised Assessments*. [pdf] Available at: <[Report on Scottish National Standardised Assessments](#)> [Accessed 10 March 2021].

Education and Training Inspectorate, 2010. *Together Towards Improvement*. [pdf] Available at: <[Together Towards Improvement](#)> [Accessed 10 March 2021].

Education and Training Inspectorate, 2016. *An evaluation of the promoting improvement in English and Mathematics*. [pdf] Available at: <[An evaluation of the Promoting Improvement in English and Mathematics](#)> [Accessed 10 March 2021].

- Education and Training Inspectorate, 2018. *SureStart evaluation report*. [pdf] Available at: <[SureStart evaluation report](#)> [Accessed 10 February 2021].
- Educational Research Centre, 2021. *Development of a Framework for the Evaluation of Teachers' Professional Learning (TPL)*. [online] Available at: <[Development of a framework for the evaluation of teachers' professional learning](#)> [Accessed 17 March 2021].
- Estyn, 2019. *The Annual report of Her Majesty's Chief Inspector of education and Training 2018-2019*. [pdf] Available at: <[The Annual report of Her Majesty's Chief Inspector of education and Training 2018-2019](#)> [Accessed 10 February 2021].
- Gilleece, L., Nelis, S., Fitzgerald, C. and Cosgrove, J., 2020. *Reading, mathematics and science achievement in DEIS schools: Evidence from PISA 2018*. [pdf] Available at <[Reading, mathematics and science achievement in DEIS schools: Evidence from PISA 2018](#)> [Accessed 10 March 2021].
- Institute for Fiscal Studies, 2015. *School funding increases in England targeted at most deprived and led to particularly large increases in non-teaching staff*. [online] Available at: <[School funding increases in England targeted at most deprived and led to particularly large increases in non-teaching staff](#)> [Accessed 10 February 2021].
- Karakolidis, A., Duggan, A., Shiel, G., and Kiniry, J., (in press). Educational Inequality in Primary Schools in Ireland in the Early Years of the National Literacy and Numeracy Strategy: An Analysis of National Assessment Data. *Irish Journal of Education*, 44.
- Kennedy, E., 2013. Literacy policy in Ireland. *European Journal of Education*, [e-journal] 48(4). <https://doi.org/10.1111/ejed.12053>.
- Macdougall, A. and Lupton, R. 2018. *The 'London effect': literature review*. [pdf] Available at: <[The 'London effect': literature review](#)> [Accessed 10 February 2021].
- McAvinue, L. and Weir, S., 2015. *The evaluation of DEIS at post-primary level: An update on trends over time in achievement and retention levels*. [pdf] Available at: <[The evaluation of DEIS at post-primary level: An update on trends over time in achievement and retention levels](#)> [Accessed 11 March 2021].
- McKeown, C., Denner, S., McAteer, S., Shiel, G., and 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*. [pdf] Available at: <<https://www.erc.ie/wp-content/uploads/2020/07/B23321-PISA-2018-National-Report-for-Ireland-Full-Report-Web-4.pdf>> [Accessed 10 March 2021].
- National Audit Office, 2015. *Funding for disadvantaged pupils*. [pdf] Available at: <[Funding for disadvantaged pupils](#)> [Accessed 5 January 2021].

Northern Ireland Audit Office, 2013. *Improving literacy and numeracy achievement in schools*. [pdf] Available at: <[Improving Literacy and Numeracy Achievement in Schools](#)> [Accessed 10 March 2021].

Organisation for Economic Co-operation and Development, 2007. *Reviews of national policies for education – quality and equity of schooling in Scotland*. [pdf] Available at: <[Reviews of national policies for education](#)> [Accessed 10 March 2021].

Organisation for Economic Co-operation and Development, 2013. *Educational evaluation and assessment in Northern Ireland. Strengths, challenges and policy pointers*. [pdf] Available at: <[Educational Evaluation and Assessment in Northern Ireland Strengths, Challenges and Policy Pointers](#)> [Accessed 10 February 2021].

Organisation for Economic Co-operation and Development, 2015. *Improving schools in Scotland: An OECD perspective*. [pdf] Available at: <[Improving Schools in Scotland: An OECD perspective](#)> [Accessed 10 March 2021].

Organisation for Economic Co-operation and Development, 2017. *Welsh education reform journey*. [pdf] Available at: <[Welsh Education Reform Journey](#)> [Accessed 10 March 2021].

Organisation for Economic Co-operation and Development, 2018. *PISA 2018 Technical report*. [online] Available at: <[PISA 2018 Technical report](#)> [Accessed 12 March 2021].

Organisation for Economic Co-operation and Development, 2020. *PISA 2018 Results (Volume V): Effective Policies, Successful Schools*. [online] Available at: [PISA 2018 Results \(Volume V\): Effective Policies, Successful Schools](#) [Accessed 10 March 2021].

Rose, J. 2006. *Independent review of the teaching of early reading*. [pdf] Available at: <[Independent review of the teaching of early reading](#)> [Accessed 10 March 2021].

Royal Society of Edinburgh, 2016. *RSE reflections on the OECD report, Improving Schools in Scotland, and on the Scottish Government's National Improvement Framework for Scottish Education*. [pdf] Available at: <[RSE reflections on the OECD report, Improving Schools in Scotland, and on the Scottish Government's National Improvement Framework for Scottish Education](#)> [Accessed 10 February 2021].

Sachse, K.A., Mahler, N., and Pohl, S., (2019). When nonresponse mechanisms change: Effects on trends and group comparisons in international large-scale assessments. *Educational and Psychological Measurement*, [e-journal] 79(4), pp. 699-726. <https://doi.org/10.1177/0013164419829196>

Scottish Government, 2016a. *National improvement framework for Scottish education 2016 evidence-report*. [online] Available at: <[National improvement framework Scottish-education 2016 evidence-report](#)> [Accessed 10 March 2021].

Scottish Government, 2016b. *Delivering excellence equity Scottish education delivery plan Scotland*. [online] Available at: <[Delivering excellence equity Scottish education delivery plan Scotland](#)> [Accessed 10 March 2021].

Shiel, G., Kavanagh, L. and Millar, D., 2014. *The 2014 National Assessments of English Reading and Mathematics, Volume 1: Performance Report*. [pdf] Available at <[National Assessments of English Reading and Mathematics, Volume 1: Performance Report](#)> [Accessed 10 March 2021].

Shields, J. and Gunson, R., 2017. *Autonomy in the right place. School governance reform in Scotland*. [pdf] Available at: <[Autonomy in the right place. School governance reform in Scotland](#)> [Accessed 11 March 2021].

Smyth, E., McCoy, S. and Kingston, G., 2015. *Learning from the evaluation of DEIS*. [pdf] Available at: <[Learning from the evaluation of DEIS](#)> [Accessed at 10 March 2021].

Social Mobility Commission, 2017. *Time for change: an assessment of government policies on social mobility 1997-2017*. [pdf] Available at: <[Time for change: an assessment of government policies on social mobility 1997-2017](#)> [Accessed 10 February 2021].

The National Assembly for Wales Children, Young People and Education Committee, 2018. *On the money? Targeting funding to improve educational outcomes*. [pdf] Available at: <[On the money? Targeting funding to improve educational outcomes](#)> [Accessed 10 February 2021].

Weir, S. and McAvinue, L., 2013. *The achievements and characteristics of pupils attending rural schools participating in DEIS*. [pdf] Available at: <[The Achievements and Characteristics of Pupils attending Rural Schools Participating in DEIS](#)> [Accessed 10 March 2021].

Welsh Government, 2010. *Welsh-medium Education Strategy*. [pdf] Available at: <[Welsh-medium Education Strategy](#)> [Accessed 10 March 2021].

Welsh Government, 2013a. *National literacy and numeracy framework*. [pdf] Available at: <[National Literacy and Numeracy Framework](#)> [Accessed 10 March 2021].

Welsh Government, 2013b. *Pupil deprivation grant short guidance for practitioners*. [pdf] Available at: <[Pupil Deprivation Grant Short guidance for practitioners](#)> [Accessed 10 March 2021].

Welsh Government, 2015a. *Curriculum for Wales: revised areas of learning and programmes of study*. [pdf] Available at: <[Curriculum for Wales: revised areas of learning and programmes of study](#)> [Accessed 10 March 2021].

Welsh Government, 2015b. *Evaluation of the Welsh-medium education strategy*. [pdf] Available at: <[Evaluation of the Welsh-medium education strategy](#)> [Accessed 10 February 2021].

Welsh Government, 2017. *Welsh in education: Action plan 2017–21*. [pdf] Available at: [<Welsh in education Action plan 2017–21>](#) [Accessed 10 March 2021].

Further reading

Scottish Government, 2019. *Programme for International Student Assessment (PISA) 2018: highlights from Scotland's results*. [online] Available at: <[Programme for International Student Assessment \(PISA\) 2018: highlights from Scotland's results](#)> [Accessed 10 March 2021].

Sizmur, J., Ager, R., Bradshaw, J., Classick, R., Galvis, M., Packer, J., Thomas D. and Wheeler R., 2019a. *Achievement of 15-year-old pupils in Northern Ireland: PISA 2018 national report*. [online] Available at: <[Achievement of 15-year-old pupils in Northern Ireland: PISA 2018 national report](#)> [Accessed 5 January 2021].

Sizmur, J., Ager, R., Bradshaw, J., Classick, R., Galvis, M., Packer, J., Thomas D. and Wheeler R., 2019b. *Achievement of 15-year-olds in England: PISA 2018 results*. [online] Available at: <[Achievement of 15 year olds in England: PISA 2018 results](#)> [Accessed 5 January 2021].

Sizmur, J., Ager, R., Bradshaw, J., Classick, R., Galvis, M., Packer, J., Thomas D. and Wheeler R., 2019c. *Achievement of 15-year-olds in Wales: PISA 2018 national report*. [online] Available at: <[Achievement of 15 year olds in Wales: PISA 2018 national report](#)> [Accessed 5 January 2021].

Appendix 1 - The 2009 PISA ‘dip’ in the Republic of Ireland

The following summary of the current thinking around the dip in PISA results in 2009 in the Republic of Ireland was provided by Dr Jude Cosgrove of the Educational Research Centre, Drumcondra, Dublin.

The results of PISA 2009 resulted in a lot of media commentary and a major policy response in the form of the Literacy and Numeracy strategy (the National Strategy to Improve Literacy and Numeracy among Young People 2011–2020; Department of Education and Skills, 2011). The strategy response was very welcome, but it appears that a range of factors underlie the observed change in the PISA scores in Ireland in 2009, making its interpretation quite complex.

Research and technical reviews (Cosgrove and Cartwright, 2014) confirmed that the Republic of Ireland met the OECD’s PISA technical standards and confirmed the quality of the administration procedures. However, two (approved) features of the test administration were implemented in 2009, and not in any other cycle of PISA in the Republic of Ireland: the first was a prize draw in each school for three €15 vouchers and the second was to have teachers in the school administer the assessment, rather than external staff.

These changes may have affected how pupils engaged with the test, and evidence from performance patterns in the test booklets supports this.

Analyses of the response patterns of pupils as they progressed through the test booklets revealed a substantial increase in the percentage of skipped or missing responses towards the end of test booklets, while the performance during the first part of the test booklets (percentage correct) was similar in 2009 to that in 2000. This could suggest a greater level of test fatigue or disengagement on the part of the pupils in 2009. Moreover, this pattern was more marked in ‘link’ items (those used to measure trends in achievement) than for ‘new’ items (Cosgrove and Cartwright, 2014). Cosgrove and Cartwright have also reported on an international analysis of the response patterns which reveals national idiosyncrasies, and this implies limitations in the scaling model for the achievement scores in PISA 2009.

Indeed, a more recent paper (Sachse, Mahler and Pohl, 2019) illustrates that a more sophisticated scaling model which allows for a more flexible treatment of missing data patterns would result in a smaller decline in the Republic of Ireland’s PISA 2009 reading score than that which was reported at the time.

Appendix 2 – What the proficiency levels and PISA scale scores mean

PISA uses proficiency levels to describe the types of skills that pupils are likely to demonstrate and the tasks that they are able to complete. Assessment questions that focus on simple tasks are categorised at lower levels whereas those that are more demanding are categorised at higher levels. The question categorisations are based on both quantitative and qualitative analysis, taking into account question difficulty as well as expert views on the specific cognitive demands of each individual question. All PISA questions have been categorised in this manner.

Pupils described as being at a particular level not only demonstrate the knowledge and skills associated with that level but also the proficiencies required at lower levels. For example, all pupils proficient at Level 3 are also considered to be proficient at Levels 1 and 2. The proficiency level of a pupil is the highest level at which they answer more than half of the questions correctly. Table A2.1 shows the range of score points for each level in each subject.

Table A2.1 PISA proficiency level scale scores

Level	Reading	Science	Mathematics
Below Level 1c	Below 189		
Level 1c	189-262	Below 260	
Level 1b	262-335	260-335	Below 358
Level 1a	335-407	335-410	358-420
Level 2	407-480	410-484	420-482
Level 3	480-553	484-559	482-545
Level 4	553-626	559-633	545-607
Level 5	626-698	633-708	607-669
Level 6	Above 698	Above 708	Above 669

Source: PISA 2018 database

The mean score for OECD countries for each subject scale was set to 500 in the PISA cycle when the subject was the major domain for the first time. Thus, the reading scale was set to a mean of 500 in its first year in 2000. Similarly, the mathematics scale was set to a mean of 500 in 2003 and the science scale was set to a mean of 500 in 2006. The method by which these scales are derived is explained further in Appendix E and in the PISA Technical Report (OECD, 2018).

As with any repeated measurement that uses samples, the mean may vary slightly from cycle to cycle without necessarily indicating any real change in the global level of skills.

Tables A2.2 below describe what pupils can typically do at each proficiency level for reading.

Table A2.2 Reading proficiency levels

Level	What pupils can typically do at each level
6	<p>Readers at Level 6 can comprehend lengthy and abstract texts in which the information of interest is deeply embedded and only indirectly related to the task. They can compare, contrast and integrate information representing multiple and potentially conflicting perspectives, using multiple criteria and generating inferences across distant pieces of information to determine how the information may be used.</p> <p>Readers at Level 6 can reflect deeply on the text’s source in relation to its content, using criteria external to the text. They can compare and contrast information across texts, identifying and resolving inter-textual discrepancies and conflicts through inferences about the sources of information, their explicit or vested interests, and other cues as to the validity of the information.</p> <p>Tasks at Level 6 typically require the reader to set up elaborate plans, combining multiple criteria and generating inferences to relate the task and the text(s). Materials at this level include one or several complex and abstract text(s), involving multiple and possibly discrepant perspectives. Target information may take the form of details that are deeply embedded within or across texts and potentially obscured by competing information.</p>
5	<p>Readers at Level 5 can comprehend lengthy texts, inferring which information in the text is relevant even though the information of interest may be easily overlooked. They can perform causal or other forms of reasoning based on a deep understanding of extended pieces of text. They can also answer indirect questions by inferring the relationship between the question and one or several pieces of information distributed within or across multiple texts and sources.</p> <p>Reflective tasks require the production or critical evaluation of hypotheses, drawing on specific information. Readers can establish distinctions between content and purpose, and between fact and opinion as applied to complex or abstract statements. They can assess neutrality and bias based on explicit or implicit cues pertaining to both the content and/or source of the information. They can also draw conclusions regarding the reliability of the claims or conclusions offered in a piece of text.</p> <p>For all aspects of reading, tasks at Level 5 typically involve dealing with concepts that are abstract or counterintuitive, and going through several steps until the goal is reached. In addition, tasks at this level may require the reader to handle several</p>

Level	What pupils can typically do at each level
	long texts, switching back and forth across texts in order to compare and contrast information.
4	<p>At Level 4, readers can comprehend extended passages in single or multiple-text settings. They interpret the meaning of nuances of language in a section of text by taking into account the text as a whole. In other interpretative tasks, pupils demonstrate understanding and application of ad hoc categories. They can compare perspectives and draw inferences based on multiple sources.</p> <p>Readers can search, locate and integrate several pieces of embedded information in the presence of plausible distractors. They can generate inferences based on the task statement in order to assess the relevance of target information. They can handle tasks that require them to memorise prior task context.</p> <p>In addition, pupils at this level can evaluate the relationship between specific statements and a person's overall stance or conclusion about a topic. They can reflect on the strategies that authors use to convey their points, based on salient features of texts (eg titles and illustrations). They can compare and contrast claims explicitly made in several texts and assess the reliability of a source based on salient criteria.</p> <p>Texts at Level 4 are often long or complex, and their content or form may not be standard. Many of the tasks are situated in multiple-text settings. The texts and the tasks contain indirect or implicit cues.</p>
3	<p>Readers at Level 3 can represent the literal meaning of single or multiple texts in the absence of explicit content or organisational clues. Readers can integrate content and generate both basic and more advanced inferences. They can also integrate several parts of a piece of text in order to identify the main idea, understand a relationship or construe the meaning of a word or phrase when the required information is featured on a single page.</p> <p>They can search for information based on indirect prompts, and locate target information that is not in a prominent position and/or is in the presence of distractors. In some cases, readers at this level recognise the relationship between several pieces of information based on multiple criteria.</p> <p>Level 3 readers can reflect on a piece of text or a small set of texts, and compare and contrast several authors' viewpoints based on explicit information. Reflective tasks at this level may require the reader to perform comparisons, generate explanations or evaluate a feature of the text. Some reflective tasks require readers to demonstrate a detailed understanding of a piece of text dealing with a</p>

Level	What pupils can typically do at each level
	<p>familiar topic, whereas others require a basic understanding of less familiar content.</p> <p>Tasks at Level 3 require the reader to take many features into account when comparing, contrasting or categorising information. The required information is often not prominent or there may be a considerable amount of competing information. Texts typical of this level may include other obstacles, such as ideas that are contrary to expectation or negatively worded.</p>
2	<p>Readers at Level 2 can identify the main idea in a piece of text of moderate length. They can understand relationships or construe meaning within a limited part of the text when the information is not prominent by producing basic inferences, and/or when the text(s) include some distracting information.</p> <p>They can select and access a page in a set based on explicit though sometimes complex prompts, and locate one or more pieces of information based on multiple, partly implicit criteria.</p> <p>Readers at Level 2 can, when explicitly cued, reflect on the overall purpose, or on the purpose of specific details, in texts of moderate length. They can reflect on simple visual or typographical features. They can compare claims and evaluate the reasons supporting them based on short, explicit statements.</p> <p>Tasks at Level 2 may involve comparisons or contrasts based on a single feature in the text. Typical reflective tasks at this level require readers to make a comparison or several connections between the text and outside knowledge by drawing on personal experience and attitudes.</p>
1a	<p>Readers at Level 1a can understand the literal meaning of sentences or short passages. Readers at this level can also recognise the main theme or the author's purpose in a piece of text about a familiar topic, and make a simple connection between several adjacent pieces of information, or between the given information and their own prior knowledge.</p> <p>They can select a relevant page from a small set based on simple prompts, and locate one or more independent pieces of information within short texts.</p> <p>Level 1a readers can reflect on the overall purpose and on the relative importance of information (eg the main idea vs. non-essential detail) in simple texts containing explicit cues.</p> <p>Most tasks at this level contain explicit cues regarding what needs to be done, how to do it, and where in the text(s) readers should focus their attention.</p>

Level	What pupils can typically do at each level
1b	<p>Readers at Level 1b can evaluate the literal meaning of simple sentences. They can also interpret the literal meaning of texts by making simple connections between adjacent pieces of information in the question and/or the text.</p> <p>Readers at this level can scan for and locate a single piece of prominently placed, explicitly stated information in a single sentence, a short text or a simple list. They can access a relevant page from a small set based on simple prompts when explicit cues are present.</p> <p>Tasks at Level 1b explicitly direct readers to consider relevant factors in the task and in the text. Texts at this level are short and typically provide support to the reader, such as through repetition of information, pictures or familiar symbols. There is minimal competing information.</p>
1c	<p>Readers at Level 1c can understand and affirm the meaning of short, syntactically simple sentences on a literal level, and read for a clear and simple purpose within a limited amount of time.</p> <p>Tasks at this level involve simple vocabulary and syntactic structures.</p>

Appendix 3 – Survey

This appendix contains the survey sent to policy experts in the four UK nations and the Republic of Ireland. Colleagues in the five education departments were invited to comment on the questions below to collect their thoughts on successful reading policies implemented in their nation while the PISA 2018 cohort were in school. They were also asked to comment upon particular reasons for the successful implementation of these policies.

PISA 2018 additional analysis: policy review consultation

Colleagues in [education department] have indicated that you are willing to contribute your views in this short verification survey. Please also feel free to consult with colleagues, if you wish.

Thank you for agreeing to take part, your views on this matter are highly valued.

We have conducted a series of policy reviews to identify the main policies designed to improve student reading outcomes from **2002** to **2018**, that is, during the lifetime of the PISA 2018 cohort (from birth, through pre-school, primary and into secondary/post-primary.)

A summary document outlining policy initiatives undertaken in your jurisdiction aimed at improving reading outcomes at pre-school, primary and secondary/post-primary levels is attached at Annex 1. We would be grateful if you could review the attached document and consider the questions that follow. The questions are all open-ended, so please feel free to write as much as you wish based on your experience and understanding of reading/literacy/language policy and implementation.

For your information, below is some background to PISA and the policy analysis we are undertaking.

Background to OECD Programme for International Student Assessment (PISA)

Republic of Ireland participates in international comparison studies such as PISA to benchmark education policy and student performance against other countries, review system strengths and weaknesses in an international context, and monitor trends over time according to independent measures. The information collected is a vital part of the evidence base for providing our young people with a world-class education, and enabling us to learn from the policies and practices in other countries.

The PISA study collects a wealth of background information from the school and student questionnaires which can be analysed with student attainment data and compared

internationally. These analyses can, in turn, be used to inform policy decisions in the future.

Background to this survey

Following the publication of the PISA 2018 results in December 2019, [education department] has commissioned NFER to conduct further analyses of the PISA data to explore whether there are lessons that might be shared across countries, particularly in terms of education policies intended to improve the reading skills of students in the 2018 PISA cohorts.

We will be examining PISA reading results in England, Wales, Northern Ireland, Scotland and the Republic of Ireland to explore links between student attainment and policy implementation. As a first step in this process, we have conducted a series of policy reviews to identify the main policies designed to improve student reading outcomes from 2002 to 2018, when the PISA 2018 cohort of students would have been in formal education (from pre-school through primary and into secondary/post-primary).

Thank you.

Policy review

The questions below refer to policies implemented during the lifetime of students in the PISA 2018 cohort, from birth to age 16.

We are interested in your perception of how policies intended to improve literacy outcomes for impact on student attainment, but also on their reading behaviours and attitudes.

Question:

1. Are you aware of any significant policies or interventions that are missing from the policy summary? If so, please add them here.

Question:

2. Are you aware of any government funded large scale/national programmes or interventions set up to underlie and support literacy policy? (For example, book gifting programmes or national early years reading programmes etc.) If so, please add them here and comment on their effectiveness.

Your views

Question:

3. Which policies or interventions do you believe have been most important in improving reading outcomes? Please explain why, giving evidence where possible.

Question:

4. Which policies or interventions do you believe have been least important in improving reading outcomes? Please explain why, giving evidence where possible.

Question:

5. Are you aware of any evaluations or impact assessments that have been conducted on these policies or interventions? Please add them here.

Policy implementation

We are particularly interested in how policies are most successfully implemented. Please can you describe the following?

Question:

6. What, in your experience, are the key factors in the successful implementation of reading policy? Please give examples.

Question:

7. What, in your experience, do you see as the main barriers to successful implementation of reading policy? Please give examples.

Question:

8. Do you have any further comments on the impact or implementation of reading policy in your jurisdiction over the past 10 years?

Question:

9. Are there any key areas that you feel policies should address to improve student reading in the future?

Question:

10. Are you aware of any policies or interventions from other countries that might be beneficial in your jurisdiction? If yes, please describe why you think these might be beneficial.

Appendix 4 – Policy overview: UK and the Republic of Ireland

To note: when looking at the pre-2003 policies, it should be taken into account that this runs into pre-devolution era:

- Welsh Assembly from 1999, however, there were more powers with subsequent legislation
- Northern Ireland Assembly from 1998
- Scottish Parliament from 1999, however, this is a historically distinct system.

For all devolved parts of UK, before there was legislative devolution, there was administrative devolution.

Abbreviations for each policy:

L&N: key national literacy and numeracy strategies

LA/D: key national initiatives to support low attainment and/or disadvantage

PS: pre-school provision

School year	PISA cohort age autumn	England	Wales	Northern Ireland	Republic of Ireland	Scotland
Pre 2003		Grants for Education Support and Training (GEST) – to 1998, then The Standards Fund - some disadvantage focus – to 2004 1999–2003: Excellence in Cities	Grants for Education Support and Training (GEST) - some disadvantage focus – to 2004	1998–2006: Strategy for the Promotion of Literacy and Numeracy in Primary and Secondary Schools (L&N) School Improvement Programme, 1998–2006	1980s and 90s: Disadvantaged Areas Scheme (primary and secondary) 2001–2005: Giving Children an Even Break (primary level; incorporating the Disadvantaged Areas Scheme) (LA/D) 2001–2005 - Breaking the Cycle	Mid-1980s: Assessment of Achievement Programme (AAP) (L&N) Social Justice Strategy 1999–2004

School year	PISA cohort age autumn	England	Wales	Northern Ireland	Republic of Ireland	Scotland
2003	0-1	National Strategies – Literacy and Numeracy (1997–2011) (L&N) London Challenge launched May 2003	-	School self-evaluation: Together Towards Improvement	Early Start in areas of disadvantage (from 1994) (PS)	-
2004	1-2	-	Key Stage tests discontinued	-	-	-
2005	2-3	Free early education for all 3-year-olds (PS)	-	-	Delivering Equality of Opportunity in Schools (DEIS) 2005–2017 (LA/D)	-
2006	3-4	Rose Report recommends systematic synthetic phonics	-	Sure Start widened to cover education outcomes (PS) Extended Schools launched	-	-
2007	4-5	City Challenge launched April 2008	-	Northern Ireland curriculum (L&N)	-	-
2008	5-6	National roll-out ECaR KS3 tests discontinued	-	Every School a Good School April 2009	-	-

School year	PISA cohort age autumn	England	Wales	Northern Ireland	Republic of Ireland	Scotland
2009	6-7	-	-	-	-	-
2010	7-8	Academy acceleration Commitment to expand Teach First & school-led Initial Teacher Training	-	-	Universal early education for 3 and 4 year olds (PS)	Curriculum for Excellence (L&N)
2011	8-9	Pupil Premium (LA/D) Education Endowment Foundation established (LA/D) English Baccalaureate performance measure introduced	Welsh-Medium Education Strategy April 2010	Count, Read: Succeed (L&N)	Literacy & Numeracy for Learning & Life 2011 (L&N)	Scottish Survey of Literacy and Numeracy introduced (P4, P7, S2)
2012	9-10	Pupil Premium extended to 'ever-6' (LA/D) Year 7 catch-up premium introduced (LA/D)	Regional consortia working from September 2012 Standardised tests in reading and numeracy from May 2013	Assessment of Communication using Levels of Progression introduced Understanding Difficulties in Literacy Development CPD programme 2012-15	Systematic school self-evaluation introduced Increased literacy time and standardised testing introduced	-

School year	PISA cohort age autumn	England	Wales	Northern Ireland	Republic of Ireland	Scotland
			Pupil Deprivation Grant (LA/D)			
2013	10-11	-	National Literacy and Numeracy Framework statutory September 2013 (L&N)	Literacy & Numeracy Signature Programme 2013–15 Promoting Improvement in English and Mathematics 2013–15	-	-
2014	11-12	Revised national curriculum for most subjects (L&N)	-	-	New Junior Cycle introduced	-
2015	12-13	Reformed GCSEs first teaching DfE Single Departmental plan 2015 (withdrawn 2017)	Revised programmes of study for English, Welsh and mathematics (L&N)	-	-	-
2016	13-14	Revised national curriculum for English (L&N) Opportunity areas launched	-	-	Action Plan for Education 2016–2019	National Improvement Framework Delivering Excellence and Equity plan (LA/D) Scottish Survey of Literacy and

School year	PISA cohort age autumn	England	Wales	Northern Ireland	Republic of Ireland	Scotland
						Numeracy discontinued
2017	14-15	Progress 8 performance measure Unlocking Talent, Fulfilling Potential (LA/D) Strategic School Improvement Fund (to 2018) Teaching and Leadership Innovation Fund (to 2020)	Welsh in Education Action Plan December 2017	-	DEIS Plan 2017 (revised) (LA/D)	Scottish National Standardised Assessments introduced (P1, P4, P7, S3) not used beyond 2018
2018	15-16	-	-	-	-	-

Appendix 5 – Equivalence of pupils’ age and school year in the UK nations and the Republic of Ireland

Age in years	England and Wales	Scotland and Northern Ireland	Republic of Ireland
4-5	Reception	Primary 1	Infants
5-6	Year 1	Primary 2	Senior Infants
6-7	Year 2	Primary 3	1st Class
7-8	Year 3	Primary 4	2nd Class
8-9	Year 4	Primary 5	3rd Class
9-10	Year 5	Primary 6	4th Class
10-11	Year 6	Primary 7	5th Class
11-12	Year 7	Secondary 1	6th Class
12-13	Year 8	Secondary 2	1st Year
13-14	Year 9	Secondary 3	2nd Year
14-15	Year 10	Secondary 4	3rd Year
15-16	Year 11	Secondary 5	4th Year

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