Evaluation of the National Literacy and Numeracy Programmes Final Report

Evaluation of the National Literacy and Numeracy Programmes

Final Report

SQW

Christopher Carr, Marian Morris, Katie MacLeod and Farai Chipato

Contents

Glossary

CA	Challenge Adviser
Consortium	Regional Education Consortium
LNF	National Literacy and Numeracy Framework
LA	Local Authority
MEP	Masters in Educational Practice
National Tests	National Reading and Numeracy Tests
NLNP	National Literacy and Numeracy Programmes
NSP	National Support Programme
NPD	National Pupil Database
OTLN	Outstanding Teachers of Literacy and Numeracy Programme
OTL	Outstanding Teacher of Literacy
OTN	Outstanding Teacher of Numeracy
PLC	Professional Learning Community

Executive Summary

What are the National Literacy and Numeracy Programmes?

1. Launched in 2013, the National Literacy and Numeracy Programmes set out to improve pupil achievement and raise educational standards through improved and enhanced teaching practices in literacy and numeracy and changes in the use of assessment data to support teaching and learning.

2. Since 2013, the policy programme has (as might have been expected) been subject to changes/reforms designed to improve complementarity with other Welsh Government initiatives and new programme and policy announcements. Key elements of the National Literacy and Numeracy Programmes include: legislative measures such as the introduction of the National Literacy and Numeracy Framework and the National Reading and Numeracy Tests; support activities such as the National Support Programme (which ran from 2013 to 2015) and those commissioned via Regional Education Consortium (such as support provided by Literacy and Numeracy Advisers).

What can we learn from the NLNP?

3. To learn from the National Literacy and Numeracy Programmes, the Welsh Government commissioned SQW to undertake an independent evaluation. The evaluation was undertaken between July 2013 and January 2017 and was designed to explore and investigate changes in:

   - teaching practice

   - educational standards

   - pupils' knowledge.

4. Through the synthesis of qualitative and quantitative data, it has been possible to identify examples of effective practice, which could help teachers to overcome some barriers to the effective implementation on the National Literacy and Numeracy Programmes (NLNP). These are presented below.

How best to facilitate peer-to-peer collaboration?

5. In response to the introduction of the NLNP, there was evidence to suggest that senior and middle leaders had taken different steps in order to encourage greater collaboration between teachers at their school and with teachers in other schools. In many cases, these steps (outlined and exemplified below)

were felt to have supported an increase in the quality and consistency of teaching of literacy and numeracy, within and between different settings.

Support for whole-school learning

6.   A number of approaches appear to be helpful in encouraging collaboration between teachers:

- identifying literacy and numeracy as a whole-school development priority and setting specific targets for improving the quality of teaching of literacy and/or numeracy across the school

- raising the profile/status of the Literacy and/or Numeracy Coordinator, by providing Coordinators with a link into the Senior Leadership Team, for instance, or by offering Coordinators supply cover to support the development and delivery of a whole-school literacy and/or numeracy strategy

- supporting the internal recruitment of LNF champions to help the Literacy and/or Numeracy Coordinator to deliver the school's literacy and/or numeracy strategy.

Using LNF champions to support joint-working

In recognition of the apparent inconsistencies in the ways in which teachers taught key concepts in both literacy and numeracy the decision was taken, in an English-medium secondary school we visited, to recruit LNF champions to model effective practices to their colleagues. Recruited through an internal application process, the roles were marketed as a means by which aspiring middle leaders could gain additional responsibility in a training role. Following training from the Literacy and Numeracy Coordinators, Champions were asked to share their practice by opening up their classroom to their colleagues and then discussing their approach. The Champions were credited with an acceleration in the incorporation of the LNF into lessons other than English and maths.

Encouraging joint-working with partner schools

7.   In the visited schools, teachers broadly welcomed the opportunity to work with other schools as a way of sharing effective practice. Teachers reported that relationships were often most productive when:

- consortia staff, who had sufficient capacity to organise events and coordinate agreed work streams, facilitated the activities

- relationships were cultivated with schools who shared common objectives/goals

- senior leaders agreed what resources could be set aside to support joint working at the outset and were commensurate with what would be required in order to achieve their stated goal.

> **Working with Consortia towards the implementation of school-led CPD programmes**
>
> Teachers from the Design and Technology Department, in one English-medium secondary school, praised the impact of the CPD programme that they had recently accessed to support them in embedding the LNF. Organised by Consortia staff, the programme comprised a series of development sessions. At each session teachers from different schools had the opportunity to work together to develop new schemes of work. Teachers valued this approach (in which they were all seen as having something to contribute and something to learn) rather more than the sessions following the 'traditional' CPD pattern, where other teachers (or Consortia staff) presented their preferred approach and the scope for collaboration was limited. Programme attendance was credited with promoting them to change their approaches to teaching literacy and numeracy and developing new relationships with other schools, which continued to be a source of challenge and support.

How best to use assessment data to support teaching and learning

8. In most of the schools we visited, teachers felt that it was too early to say whether the introduction of the NLNP had supported an improvement in the use of assessment data to support teaching and learning. Having said this, many teachers were confident that the steps that they had taken would lead to medium to long-term improvements.

Using whole-school tracking systems to support consistent teaching and learning

9. In 2016, all visited schools had taken steps to develop and embed the use of whole-school tracking systems. These were designed in order to provide senior/middle leaders with a way of monitoring the progress of pupils against the age-related expectations of the LNF. Although not a statutory requirement,

staff argued that such a system made it much easier for senior leaders to identify areas of strength/weakness. A number of factors were commonly viewed as central to the success of a tracking system:

- it needed to be seen as a key part of the wider performance management structure for the school

- all teachers in the school were provided with training to help them assess the attainment of pupils against the age-related expectations of the LNF in a consistent way

- middle leaders included the verification of tracking data within performance management activities, such as lesson observations and book scrutiny.

> **Using teacher triads to support whole-school tracking of pupil progress against the age-related expectations of the LNF**
>
> Teachers in one English-medium primary school had been encouraged to open up their classroom to their colleagues. Each programme of lesson observations was followed by a debrief, during which participants had the opportunity to discuss what had gone well/not well. A particular focus of these sessions was in developing a shared understanding of the evidence that was required in order for a pupil to demonstrate progress against the age-related expectation statements in the LNF. Managed by the school's Literacy and Numeracy Coordinator, this process was felt to have led to a rapid adoption of the school's tracking system and an overall improvement in the quality of teaching of literacy and numeracy, as teachers became more confident in embedding literacy and numeracy tasks within their lessons.

Using pupil-level data effectively

10. Since 2013, teachers appear to have become increasingly confident about the ability of data from the National Tests to support teaching and learning. However, there remains considerable variation in the way in which data is being used and many interviewed teachers felt that they could use the data more effectively than they were doing currently. Few of the teachers indicated that they were using data to identify the strengths and weaknesses of individual pupils, for example. Where data was being used in this way, senior leaders indicated that it had a number of benefits, not least increasing their confidence in the accuracy of teacher-assessed judgements and their ability

to identify the support needs of teachers and pupils alike. That said, it was acknowledged that the success of this type of approach relied upon:

- the flexibility of a school's data management system to allow the incorporation of data from the National Tests and allow for the creation of year group and class level reports

- the confidence of middle leaders/classroom teachers to generate/manipulate pupil level reports and utilise data extracts to inform their lesson planning

- a whole-school commitment to pupil-centred planning for teaching and learning.

Using data from the National Tests to support pupil-centred planning

In one English-medium secondary school, middle leaders in core subjects had implemented a regular programme of diagnostic assessment whereby pupils completed a regular personalised reading and numeracy progress check. These were used to monitor their progress in areas of identified weakness. Classroom teachers then modified their lesson plans for the week, depending on the progress made by individual pupils. This approach was credited with an increase in the rate of pupil progress, culminating in these learners achieving higher scores in the National Tests.

How best to improve the quality of teaching of literacy and numeracy across the curriculum?

11.   Since the introduction of the LNF in 2013, schools appear to have made considerable progress in embedding the LNF within their curriculum and assessment cycles. At this stage, there is evidence to suggest that changes made by senior and middle leaders have started to translate into increased use of cross-curricular approaches, particularly in secondary schools where responding to the LNF had been widely perceived to be more challenging. To support improvements in the quality of teaching of literacy and numeracy across the curriculum, schools appear to have adopted different approaches.

Refreshing schemes of work

12.   The majority of visited schools had sought to refresh existing schemes of work in order to ensure coverage of the LNF expectation statements across the curriculum. Teachers reported that this approach had been helpful in

developing a sense of shared accountability for the teaching of literacy and numeracy and a basis from which to drive ongoing improvements. In order to maximise the value of this type of approach, a number of factors appeared important:

- The prioritisation of this work within a school's development plan. This was commonly considered as a key lever in driving the behaviour of teachers.

- A commitment to regularly reviewing the performance of schemes of work in supporting the development of pupil literacy and numeracy skills. Teachers felt that they had benefited from the commitment of senior/middle leaders to ongoing work aimed at embedding the LNF.

- A bottom-up approach whereby classroom teachers were given a key role in identifying opportunities for the inclusion of cross-curricular approaches to teaching literacy and numeracy. Teachers argued that this approach had led to much greater understanding/ownership over the implementation process.

> **Refreshing schemes of work to support improvements in the teaching of literacy and numeracy skills**
>
> Senior leaders in one English-medium primary school decided that the introduction of the LNF should be used as an opportunity to refresh schemes of work across the curriculum. Rather than limiting the scope of this exercise to ensuring that the literacy and numeracy skills were incorporated within lesson plans, teachers noted that the focus had been on the transition to a fully thematic programme of study whereby literacy and numeracy tasks were included only where they supported the achievement of cross-curricular learning objectives. This approach was credited as having improved the quality of teaching across the curriculum, not just of literacy and numeracy.

Changes to lesson planning

13. Perhaps unsurprisingly, in many of the schools we visited teachers recognised the emphasis placed by senior leaders on identifying appropriate opportunities for the inclusion of literacy and numeracy tasks across the curriculum. Over time it was felt that the promotion of this type of activity was leading to an increasingly cross-curricular approach. As teachers adjusted to the challenges inherent in teaching in this way, it was felt that the overall

quality or instruction was beginning to improve. In those schools that made the most progress, a number of the following were in place:

- Recognition of the importance of identifying specific learning objectives for literacy and numeracy tasks. Teachers felt that this ensured that tasks were meaningful and not tokenistic.

- A commitment to embedding literacy and numeracy tasks in a way that supported the main lesson objective (which was not related to literacy or numeracy).

- A shared understanding/approach to teaching key literacy/numeracy skills.

- A commitment to identifying and addressing skills gaps amongst non-English/Welsh and non-Maths specialists (particularly, although not exclusively, in a secondary context).

> **Promoting the incorporation of teaching of communication skills across the curriculum**
>
> The literacy and numeracy coordinator in one special school, had introduced a system to increase the emphasis placed on developing pupils' communication skills. This involved classroom teachers completing a proforma in advance of each lesson. The proforma required a teacher to identify: the primary lesson objective; the activities that would be supported and which pupils would access them (depending on their prior attainment and educational needs); the extent to which the lesson would develop skills promoted within the LNF; and how pupil progress towards achieving these lesson objectives would be assessed. At this school classes commonly contained pupils with widely different abilities and support staff often played a major role in supporting the delivery of key activities. The pro forma was credited with ensuring that there was a clear focus on supporting pupil progression across the curriculum.

What has been the impact of the NLNP?

14. The National Literacy and Numeracy Programmes were designed to support an improvement in the literacy and numeracy skills of pupils in Wales and improve attainment levels. It has been important, therefore, to consider the extent to which levels have changed following its introduction in 2013.

15.   While some improvements were underway prior to the launch; since 2011, it is notable that the proportion of pupils achieving the expected level of attainment in English, Welsh[1] and maths has increased while there have also been reductions in the gaps between pupils with special educational needs and/or from disadvantaged backgrounds and their peers.

16.   There is little evidence at this stage to suggest that these improvements can be attributed directly to the implementation of the NLNP. However, there is some indication that, in recent years, progress has accelerated for some pupils during the transition from Key Stage 2 to Key Stage 3. Pupils in the 2012 Key Stage 2 cohort made more progress to Key Stage 3 (2015) than their peers in previous years. Only further analysis in future years will reveal if this positive finding (of accelerated progress) is repeated.

17.   There is no 'hard' data by which to assess the extent to which the NLNP has supported an improvement in the quality of teaching and learning in literacy and numeracy. However, consideration of teacher feedback indicates widespread acceptance that the introduction of the LNF, in particular, has led to material changes in pedagogical practices that are starting to achieve recognisable improvements in teacher performance (perhaps most importantly those who are not English/Welsh or maths specialists). There is also some evidence to suggest that the NLNP has supported the Welsh Government's wider aim of improving the quality and frequency of teacher collaboration.

What were the sources of evidence?

18.   In order to meet the aims of the evaluation, a mixed-method design was adopted. Key elements included:

- Interviews with **key stakeholders.** From September 2013 to July 2016, 47 interviews were undertaken with key stakeholders such as Project Leads at the Welsh Government, the Literacy and/or Numeracy Lead at Estyn, staff at the National Foundation for Educational Research (who devised the National Tests) and at CfBT Education Trust (who delivered the NSP before handing responsibility to the four Consortia areas).

- An e-survey was sent to all **senior leaders** in primary and secondary schools in Wales (including special schools and pupil referral units) in

---

[1]Both Welsh and Welsh second language.

July to October 2014 and May to July 2015. Responses were secured from 352 schools in 2014 and 431 schools in 2015.

- Two waves of area **based case studies** in September to November 2014 and January to July 2016. Over the course of the fieldwork visits were conducted to 39 schools in four clusters (one in each Consortium area). During the visits feedback was obtained variously from senior leaders, classroom teachers, pupils and parents, and where possible, Challenge Advisers and staff in the Literacy and Numeracy team within each area. In total interviews/discussion groups' elicited feedback from 426 people.

- Analysis of **pupil-level data** from the National Pupil Database to consider changes in the attainment levels of all pupils in Wales at Key Stages 2, 3 and 4 from 2011 to 2015.

19. Written for use by senior and middle leaders, this executive summary provides a summary of the key findings of the research on the effective implementation of the LNF and the National Tests as driver of wider improvements in the quality of teaching of literacy and numeracy. A fuller presentation of the impact of the NLNP can be found in the full report.

1. Introduction

1.1 This report presents the findings of research undertaken by SQW on behalf of the Welsh Government as part of the evaluation of the National Literacy and Numeracy Programmes (NLNP). The report considers, as far as is possible at this stage, the impact of the NLNP's implementation on the quality of teaching and learning in literacy and numeracy in Wales. The report draws on a range of sources of evidence. Key sources have included; fieldwork undertaken in 2016, the findings of an e-survey of school leaders undertaken in the summer term of 2014 and 2015 and analysis of pupil-level administrative data from 2010/11 to 2014/15. Where appropriate, we also reflect on the findings of work undertaken from June to December 2014 as presented in our Interim Report published in December 2015 (Carr C & Morris M, 2015).

Background

1.2 The NLNP sits at the heart of the Welsh Government's Programme for Government (Welsh Government, 2013) and the Department for Education and Skills (DfES) School Improvement Action Plan (Leighton Andrews, 2011). More recently, the Programmes (Welsh Government, 2016) have been endorsed in Qualified for Life (Welsh Government, 2014) and Successful Futures (Donaldson G, 2015). The rationale behind the NLNP is the desire to address the issue of low literacy and numeracy levels amongst pupils in Wales, and to take steps to ensure that this is addressed. The NLNP seeks to improve achievement and raise educational standards through both improved and enhanced teaching practices in literacy and numeracy and an improvement in the use of data to support teaching and learning (supported by the introduction of a national programme of assessment). The NLNP comprises a number of elements including legislative measures such as the introduction of the National Literacy and Numeracy Framework (henceforth referred to as the 'LNF') and the National Reading and Numeracy Tests (hereafter referred to as the 'National Tests' or the 'Tests') and support activities (such as the National Support Programme and those commissioned via Consortia).

1.3 As might be expected, since 2013, the policy programme has been subject to change/reform designed to improve complementarity with other initiatives. For example, based on the perceived progress of the Regional Education Consortium (hereafter termed Consortia) in improving their capacity to support school improvement in their respective regions, the decision was taken to draw the National Support Programme (NSP) to a close in July 2015 (a year earlier than initially planned). In response to the changing context in which

Consortia are operating, the decision was taken to revise the existing National Model for Regional Working. Published in November 2015, the refreshed model supports the promotion of a 'self-improving system... supported by genuine partnerships and school-to-school support arrangements' (Welsh Government, 2015). To ensure that changes in policy/practice have been captured by the evaluation, it has been necessary to adopt a flexible approach. The implications of this are discussed in the next sub-section. Additional background information on the NLNP can be found in Annex A.

1.4   The evaluation has also had to be conscious of the ongoing changes in the education system and the discussion and planning for future reform. These include, for example, the forthcoming reforms to curriculum and assessment, following the publication of Successful Futures (Donaldson G, 2015). There have also been changes in the qualification system in response to the 'Review of Qualifications for 14-19 year olds in Wales' (Welsh Government 2012). This saw the introduction, in 2015,[2] of two new GCSEs replacing GCSE Mathematics (GCSE Mathematics and GCSE Mathematics – Numeracy) as well as new GCSE's in English Language and Welsh Language. At the time of writing this report, the Welsh Government was also putting plans in place to replace the National Reading and Numeracy Tests with online, adaptive 'personalised assessments'. These will be phased in from the 2018-19 academic year.

Evaluation aims and objectives

1.5   The Welsh Government identified two principal aims for the overall study. These were; the need to evaluate how the NLNP has been interpreted and how the various activities related to the NLNP are being implemented. The government were particularly interested in exploring and investigating any changes in:

- **teaching practice,** including any changes in teachers' behaviour and approach in classrooms, in relation to pedagogy and the way in which literacy and numeracy is taught across the curriculum, and how the data from the National Tests is used to inform teaching and learning.

- **educational standards,** particularly the extent to which pupil attainment has improved as a result of the implementation of the NLNP.

---

[2] The new courses were introduced in September 2015 with students sitting the first exams in November 2016.

- **pupils' skills,** exploring the extent to which a focus on literacy and numeracy had led (or was likely to lead) to improvements in pupil attainment in other subject areas, as a consequence of enhanced reading and numerical skills.

1.6 Given that the primary beneficiaries of the interventions have been teachers (hence schools), there has been a need to identify what the links might be between the NLNP inputs (including all the mechanisms that were being established to improve subject knowledge and pedagogy) and the anticipated outcomes from the NLNP.

Research Design

1.7 Over the course of the study it has also been important to adjust the research design to adapt to changes in policy context in which the NLNP is being delivered (such as the extension of the LNF into Key Stage 4 and down to the youngest children in the Foundation Phase). It has also taken account of the policy inputs supported by the Welsh Government discussed above. We have sought to capture the import of such changes through the updating of the logic model for the Programmes. As set out in Figure 1-1, this model summarises:

- the underlying theories of change for the NLNP (including the evidence-based view that raising achievement is dependent on raising the quality and consistency of teaching)

- the policy and practice assumptions underlying the intervention (underpinning the level of success of the NLNP are a number of factors, not least of which are the awareness and engagement of education practitioners, and the support of stakeholders such as the Consortia)

- the various inputs arising from the introduction of the NLNP, including the LNF, the National Tests, and Outstanding Teachers of Literacy and Numeracy (OTLN) alongside the support provided by the NSP and Consortia

- the expected relationship between the inputs and the anticipated outputs, such as the number/proportion of schools that have accessed support through the NSP and the Consortia

- the anticipated outcomes (both short and long term), which for teachers and schools in Wales, might include more effective use of assessment data to support teaching and learning; improved teaching of literacy and numeracy across the curriculum and a stronger culture of

14

collaboration amongst education practitioners to support improved teaching of literacy and numeracy

- the projected impact of the interventions, which were expected to be an improvement in the literacy and numeracy attainment of pupils in Wales leading to improved educational outcomes at Key Stage 2, Key Stage 3 and Key Stage 4.

Figure 1-1: Summary logic model for the NLNP
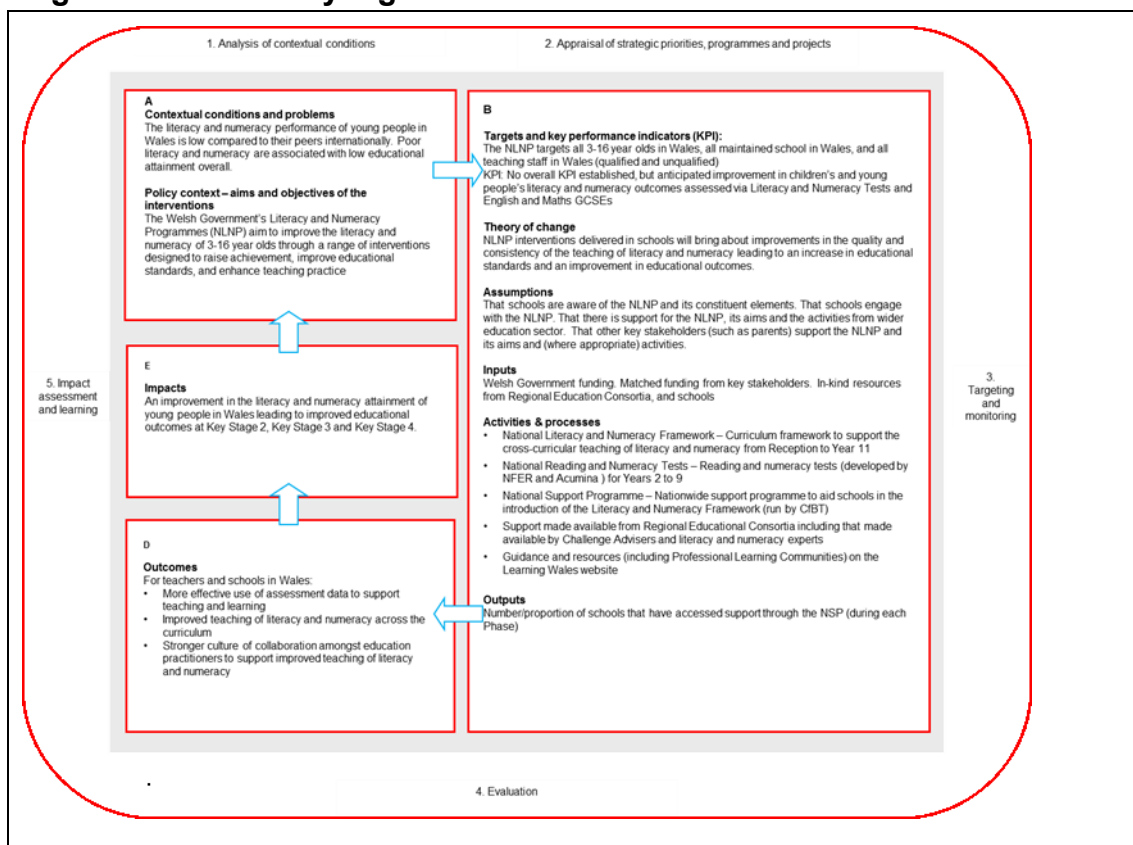
Source: SQW

1.8   While the programme, as a whole, is ultimately designed to improve the literacy and numeracy outcomes for pupils, they are not the primary treatment group for the interventions (as noted in paragraph 1.4). Given that, our evaluation framework was set up to enable us to explore:

- levels of awareness, understanding and engagement of the NLNP (and, more particularly, of the LNF and the National Tests) amongst senior leaders and other education practitioners (e.g. Consortia), and amongst pupils and their parents

- the relative effectiveness of the National Support Programme (NSP) and the range of other support strategies (including Learning Wales

website) in communicating, promoting and assisting the implementation of the NLNP

- the relative impact of enhanced teacher training and CPD on the ability of teachers to promote effective learning strategies in the classroom.

- as far as possible, the impact of changes in professional practice on pupil attainment in literacy and numeracy.

Sources of evidence

1.9   Full details of the evaluation framework and methodologies are set out in Annex B. The principal sources of evidence for this report are:

- Interviews with **key stakeholders** including, Project Leads at the Welsh Government, the Literacy and/or Numeracy Lead at Estyn, staff at the National Foundation for Educational Research (who devised the National Tests) and at CfBT Education Trust (who delivered the NSP before handing responsibility to the Consortia).

- An e-survey sent to all **senior leaders** in primary and secondary schools in Wales (including special schools and pupil referral units).

- **Area based case studies** involving visits to 19 schools in four clusters (one in each Consortium). Visits included interviews with senior leaders, classroom teachers, pupils and parents, and where possible, Challenge Advisers and staff in the Literacy and Numeracy team within each area.

- Analysis of **pupil-level data** from the National Pupil Database (NPD) to consider changes in the attainment levels of pupils following the introduction of the NLNP.

This report

1.10   The rest of the report is structured as follows:

- **Section 2: Views on the National Literacy and Numeracy Framework and the National Tests;** this section considers the views of major stakeholder groups such as the Consortia and school-based practitioners on the LNF and the National Tests. We also examine the extent to which the NLNP has supported changes in the importance attached to improving the quality of teaching and learning of literacy and numeracy.

- **Section 3: Progress in implementing the National Literacy and Numeracy Framework;** in this section we consider the progress made by primary, secondary and special schools in embedding the LNF across the curriculum. We also consider which of the approaches adopted by senior leaders appear to have been more, or less, effective in supporting the implementation of the LNF and consider the effect of the introduction of the LNF on pedagogical practices and administrative processes of schools.

- **Section 4: Progress in implementing the National Tests;** this section considers the progress made by primary and secondary schools in embedding the National Tests and explores how Test data is being used to support teaching and learning. We also consider the effect of the introduction of the Tests on pedagogical practices and administrative processes of schools.

- **Section 5: Understanding of the National Literacy and Numeracy Framework and National Tests amongst pupils and parents;** this section considers the level of understanding amongst pupils and their parents of the LNF and the National Tests and examine the approaches adopted by schools to support awareness raising. We will also consider the extent to which the availability of data on the progress of pupils appears to have supported greater parental involvement/engagement in the teaching of literacy and numeracy.

- **Section 6: Effectiveness of the support made available by the Welsh Government;** we consider the effectiveness of the support made available to practitioners by the Welsh Government to support the introduction of the LNF and the National Tests. In particular we will consider the awareness, usage and perceived utility of the guidance resources and teaching materials produced on behalf of Welsh Government and the perceived effectiveness of the National Support Programme.

- **Section 7: Effectiveness of the support made available by Regional Education Consortia;** in this section we consider the effectiveness of the support made available by Consortia to practitioners to support the introduction of the LNF and the National Tests. Where appropriate we consider what types of support appear to have been most effective in meeting the support needs of practitioners.

- **Section 8: Impact of the NLNP in supporting improvements to professional practice;** we consider the impact of the NLNP on the quality of teaching of literacy and numeracy, on the use of assessment data to support teaching and learning, and on the quality of collaboration between practitioners.

- **Section 9: Impact of the NLNP on pupil learning outcomes;** we explore the evidence as to whether or not the NLNP has supported an improvement in pupil achievement at Key Stage 2, Key Stage 3 and Key Stage 4.

- **Section 10: Findings and Recommendations;** in this section we summarise the findings of the study and identify recommendations for key stakeholders including the Welsh Government, Consortia and schools.

2. Views on the National Literacy and Numeracy Framework and the National Tests

2.1 The LNF and the National Tests will only support changes in the approaches adopted by practitioners in the teaching of literacy and numeracy if they understand why they were introduced and recognise the potential of the NLNP as a means of supporting improvements in teaching and learning. In supporting the implementation of the NLNP it is important to acknowledge the role of key stakeholders such as Regional Educational Consortia (henceforth termed Consortia). Their views on, and subsequent prioritisation of the NLNP have had the potential to influence the extent to which senior leaders (and ultimately classroom practitioners) have responded to the reforms.

Prioritisation of the NLNP by Consortia

2.2 Since their incorporation in 2013, Consortia, in partnership with their constituent Local Authorities, have been responsible for supporting schools in their region to improve education outcomes for pupils. As codified in the National Model for Regional Working (published in February 2014), there is an expectation on the Consortia to provide 'strategic leadership of key strands of work such as… literacy and numeracy'. They are also expected to ensure that the 'delivery of the National Literacy and Numeracy framework is effective across all schools and co-ordinate and quality assure the provision of training and development to achieve this' (Welsh Government, 2014a).

Strategic implications

2.3 In line with the national priorities of the Welsh Government (2013a), documentation produced by the Consortia (such as their annual business plans) highlight improving the outcomes achieved by pupils in literacy and numeracy as a key priority.[3] Interviewees from the Consortia corroborated this emphasis. As noted by Estyn (2015) in their recent review of the performance of the Consortia, there is a 'strong focus on supporting improvement in literacy and numeracy'. However, there appears to be less clarity around the relative importance placed on the LNF and the National Tests as a means of supporting an improvement in standards compared with other activities designed to support an improvement in the quality of teaching of literacy and numeracy.

---

[3]For example please see: South East Wales Education Achievement Service (2015) Business Plan 2016-19 (Newport: Education Achievement Service)

2.4   For example, while Consortia regarded raising standards in literacy and numeracy to be a priority, the prioritisation attached to the introduction of the LNF as a means of supporting this objective was variable. For instance, and as noted by one Challenge Adviser (who was also a literacy specialist)

> 'the focus this year [2015/16] has been on helping secondary schools to prepare for the new GCSEs. To expect that the LNF would be a priority [for schools this year] would be naïve. My job has been to ensure that the LNF is seen as a tool that can be used to prepare young people to achieve the new qualifications' (Challenge Adviser).

2.5   In this context, it is important to consider the extent to which variability in the prioritisation attached to implementing the NLNP has influenced decision-making around the approaches adopted by the Consortia to support improvements in standards in teaching and learning in literacy and numeracy. At a strategic level, the model adopted by Consortia included the following common elements:

- An assertion of the key role played by **Challenge Advisers** in identifying the person responsible for identifying the support needs of partner schools and brokering access to support when and where appropriate (from the relevant LEA, the Consortia or other local schools).

- Provision for a core team of **literacy and numeracy specialists** tasked with supporting improvements in the quality of teaching of literacy and numeracy within their region. Having said this, it was evident that following recent changes (arising from the New Model for Regional Working), the size and remit of these teams differed widely in each Consortia area. As noted by one Literacy specialist:

> 'even following the recent expansion of the team we are only 9.6 FTE. Between us, we cover over 400 schools… To manage this we focus our effort on Red and Amber schools. Those schools can expect to access a bespoke support programme'. (Consortia staff member).

In another consortium, the focus appeared to be on developing tools and resources that could be cascaded throughout the region; *'We don't have the capacity to go into every school, so we have focussed on providing them with the route-map that can see them on their way'* (Consortia staff member).

- As encouraged through the National Model for Regional Working an increased emphasis on **facilitating collaborative activity** between schools and/or practitioners within their region. For instance, in all four Consortia areas it was evident that the Literacy and Numeracy Team had supported the identification of Lead Practitioners in Literacy and/or Numeracy who were available to provide support to practitioners in other schools[4]. Further to this, in two of four Consortia areas high-performing schools have been identified to act as hubs for the provisions of school-to-school support. Some of these schools appeared to have been selected on the basis of their perceived excellence in teaching literacy and numeracy. In the remaining two areas the emphasis appeared to have been placed on fostering links between local schools.

2.6   As we examine the feedback from practitioners on the support provided by the Consortia it will be important to consider which approaches appear to have been more effective in supporting improvements in the quality of literacy and numeracy teaching.

Views of practitioners

2.7   Initial fieldwork in 2014 indicated that practitioners did not necessarily view the LNF and the National Tests in the same light. Reservations amongst some senior leaders on the value of the National Tests had meant that the LNF, at that time, appeared (as might be expected) to have taken a much more prominent role in the thinking of senior leaders. At the same time there was a view (particularly amongst secondary practitioners) that implementing the LNF would require a lot of work. (Carr & Morris, 2015). Two years on, it is important to reflect on the extent to which the views of practitioners have changed as they have become increasingly familiar with the NLNP and in the data available from the National Tests.

Views on the LNF

2.8   Notably, since 2014 there appears to have been a growing consensus amongst senior and middle leaders around the recognition of the potential of the LNF to improve the quality of teaching of literacy and numeracy in Wales. As a result, it was perhaps not surprising that all nineteen schools we visited considered this to be a strategic priority (and, indeed, in many cases, it was an objective within schools' Single School Development Plan).

---

[4]Many of whom appeared to have been initially recruited using SEG funding for OTLN.

2.9   The adoption of the LNF as a school improvement priority appears to have
       had a positive effect on the profile of literacy and numeracy amongst
       education practitioners (see Figure 2-1). As shown below, more than four
       fifths of respondents to the survey of school leaders in 2015 who answered
       this question felt that the profile of literacy and numeracy had been raised
       amongst Welsh/English specialists and/or Maths specialists (up from just over
       two-thirds in 2014). Perhaps more significantly, there was also an increase in
       the proportion of respondents who felt that the profile of literacy and numeracy
       had increased amongst teachers who were not Welsh/English or maths
       specialists (an increase from four fifths of the respondents who answered this
       question in 2014 to just over four-fifths of them in 2015).

**Figure 2-1: Perceived impact of the National Literacy and Numeracy
Framework on the profile of literacy and numeracy**
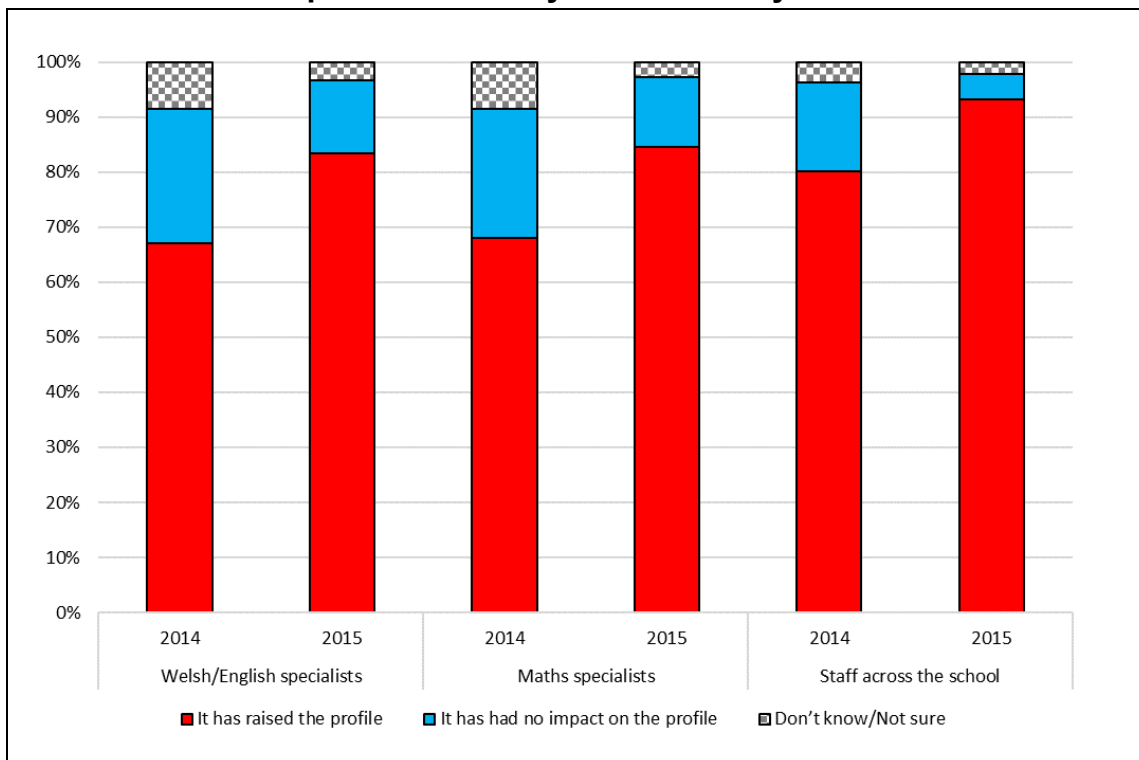
Source: Survey of School Leaders 2014 and 2015
Type of question: A series of single-response items
N=Variable (352 in 2014 and 431 in 2015
          N. Missing = Variable (Welsh/English specialists: 2014 = 139. 2015 = 74,
Maths specialists: 2014 = 139, 2015-76,
Staff across the school: 2014 = 136, 2015 = 65)

2.10   The apparent rise in the profile of literacy and numeracy across the curriculum
       appears even more pronounced when the responses of senior leaders are
       broken down by school type. Just over nine-tenths (92%) of senior leaders
       from secondary schools felt that the profile of literacy and numeracy had been
       raised amongst all staff across the school; this was up from just under one
       half of respondents (45%) in 2014.

2.11   These findings are supported by feedback from classroom practitioners[5] in case study schools. Indeed, all 27 of the classroom practitioners we spoke to had taken steps to embed the LNF within their practice. Having said this, when asked to reflect on the extent to which the LNF had provided a means by which to support an improvement in the quality of teaching and learning at their school, practitioners were rather more cautious and views as to its effectiveness as a tool varied between classroom practitioners in primary, secondary and special schools.

Views of primary practitioners

2.12   Primary practitioners appeared to be the most positive of all interviewees about the LNF's potential to support an improvement in the quality of teaching of literacy and numeracy in Wales. Indeed, in each of the seven primary schools visited in 2016, the majority of the practitioners felt that it was making a positive contribution. Having said this, in practice the changes made by primary practitioners to support the introduction of the LNF appeared to be minimal. For instance, one of the middle leaders argued that 'the approach it promotes is not that different from what we were already doing' (Middle Leader in a primary school). As a result, the principal consequence of the introduction of the LNF appears to have been a greater commitment amongst practitioners to implementing cross-curricular approaches to teaching and learning. As noted by one of the teachers: 'the LNF has given us greater confidence to push ahead with a thematic approach to teaching the primary curriculum' (Classroom teacher in primary school). As a result, it was noted that their school was hoping to move to a purely thematic approach to teaching the curriculum: in most of the schools we visited non-core subjects were taught in a thematic way, but literacy and numeracy were often taught as distinct subjects.

Views of practitioners in special schools

2.13   In the four special schools we visited, classroom practitioners were similarly positive about the introduction of the LNF. However, the introduction of the Framework appeared to have different implications for practitioners in special compared to mainstream settings. As noted by one middle leader:

> 'over recent years the sector has been working hard to improve learning outcomes for young people in our care. That they are happy and well looked after is not enough. The LNF has supported this objective and made us focus on communication skills as a key factor in

---

[5]Including qualified teachers, NQTs and teaching assistants

whether a young person is prepared for independence in later life'
(Middle Leader in a special school).

2.14 Considered in this light it is interesting to note that while many practitioners were positive about the concept of the LNF as a means of promoting improved outcomes for pupils with additional learning needs, some queried whether the Framework itself as developed by the Welsh Government could be implemented effectively in a special school context. For instance, many of staff questioned the decision to develop year-on-year expectation statements; given that the majority of their students were operating considerably behind what might be expected of a child of their age (hence they were not able to attend a mainstream setting). In practice, they noted that practitioners had chosen to assess the progress of individual pupils against the expectation statements irrespective of their age. While this reflects the approach that has been encouraged by the Welsh Government (see Welsh Government, 2013c), awareness of this guidance amongst classroom practitioners was low.

Views of secondary practitioners

2.15 In the secondary schools we visited, practitioners, while committed to improving the quality of teaching of literacy and numeracy, were more sceptical of the LNF's capacity to support this in the short- to medium-term. A number of issues appear to have contributed to this view:

- Amongst the secondary practitioners, there was widespread agreement that it had seemed much harder to embed the LNF as a curriculum planning and assessment tool in a secondary school than in a primary school context. Furthermore, there appeared to be a degree of uncertainty from practitioners about how subject specialists other than English/Welsh or maths staff should be embedding the LNF within their lesson planning and how they should be using it to monitor the progress of pupils in their classes.

- There was a perception amongst some senior/middle leaders that introducing the LNF alone would be insufficient to see an improvement in the quality of teaching of literacy and numeracy unless it was accompanied by the provision of additional resources to support CPD for teachers (particularly those who were not English/Welsh and/or maths specialists). While it was felt that Literacy and Numeracy Coordinators could play an important role in supporting teachers in their schools this did not match the demand from staff. As noted by one of the classroom teachers: 'some of us haven't done English or Maths

since we did our GCSEs. In my case, that was a long time ago'
(Classroom teacher in a secondary school).

Views on the National Tests

2.16   As reported in the interim report the initial reaction amongst practitioners to
the introduction of the National Tests was mixed (see Carr and Morris, 2015).
Most of the case study schools visited in 2014 were using data from the Tests
to support teaching and learning. A few, however, had actively sought to
minimise the effect of the introduction of the National Tests on their practice
as they did not think (at that time) that they provided a useful/helpful source of
data to inform teaching and learning (particularly for younger children). As
practitioners have become more familiar with the National Tests, it is
important to consider the extent to which their views have changed and the
impact this may have had on how far they have used the National Tests to
support changes in the teaching of literacy and numeracy across the
curriculum.

2.17   It is encouraging that confidence in the ability of the National Tests to provide
an accurate assessment of literacy and/or numeracy skills increased between
2014 and 2015. In 2015, just under three-quarters of the senior leaders who
responded to related questions (see Annex B) felt that the Tests had provided
an effective assessment of their pupils' reading or numeracy skills (74% and
71% respectively). In 2014, a smaller proportion felt that this was the case,
66% and 57% of those that responded to this question felt that the procedural
and numerical reasoning respectively had provided for this. On the other
hand, 70% found the National Reading Test provided this.

2.18   This was corroborated by feedback from practitioners in case study schools
and the Consortia. As noted by one literacy specialist: 'although there remain
a few Heads that have sought to fight against the [National] Tests the vast
majority are now actively making use of the data' (Consortia staff member).
Having said this, even though senior leaders in most schools appeared to
have taken steps to use data from the National Tests, there was variability in
the ways it was being used. In eleven of the nineteen schools visited, senior
and middle leaders primarily used data from the National Tests to support an
assessment of individual year groups. In one school, staff noted that last year
the priority had been to embed data from the National Tests in the school's
internal tracking system. This year, data had been used to start analysing the
differential performance of different year groups and identify areas for
improvement. In such schools, little analysis appeared to have been done to
identify the strengths and weaknesses of individual pupils.

2.19 A reluctance amongst practitioners to use National Test data to support pupil-level analysis appeared to be linked to ongoing concerns around the perceived effectiveness of the National Tests to provide sufficiently granular information to help a class teacher to identify appropriate next steps for individuals, particularly in the case of pupils who have historically performed at a level below their age-related expectation. Such concerns were evident in the responses of senior leaders to our survey in 2015. Of those who responded to the questions on differential assessment (around four-fifths of those who responded to the survey as a whole) over 80% said the Tests provided an accurate assessment of the reading or numeracy skills of more able (or gifted and talented pupils) (81% and 80% respectively – see Figure 2-2). Conversely, around one half (49%) of respondents did not feel that the Tests provided an accurate assessment of the skills of underperforming pupils (or those not performing to their age-related expectation)[6].

---

[6]That notwithstanding, it is important to note that the Welsh Government permits learners with significant SEN who would not be able to access the tests designed for their national curriculum age group (and as a result have had the tests disapplied) to register some attainment against the tests by taking those which best match their attainment. However, these test results cannot be submitted to the Welsh Government for age-standardisation as part of the school's annual returns. (Welsh Government, 2017)

Figure 2-2: Perceived ability of the National Tests to assess the literacy or numeracy skills of pupils (2015)
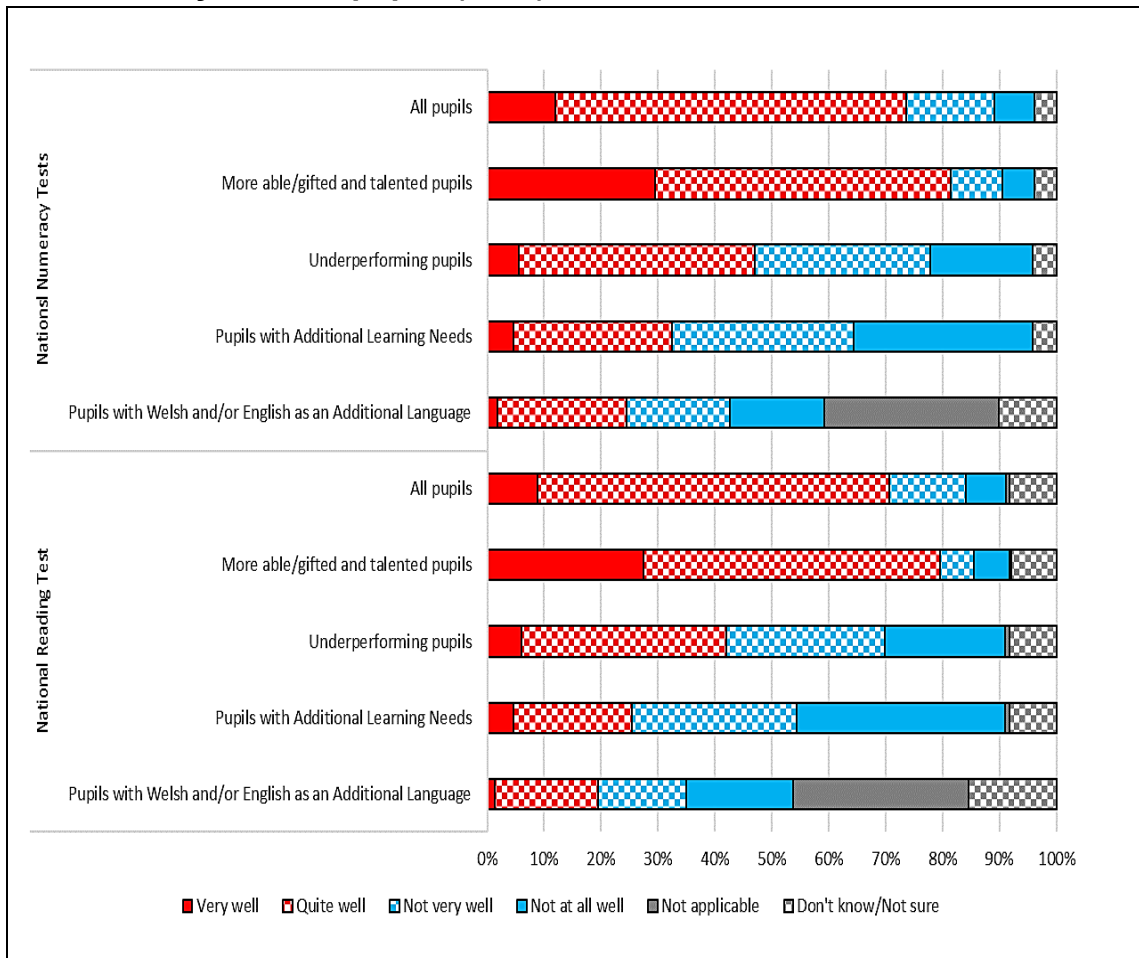
Source: Survey of School Leaders 2015
Type of question: A series of single-response items
N= Variable (426 for the National Numeracy
Tests and 427 for the National Reading Test)
N. Missing = Variable (**Numeracy**

All pupils: 141,
More able/gifted and talented pupils: 141,
Underperforming pupils: 141,
Pupils with Additional Learning Needs: 142,
Pupils with Welsh and/or English as an Additional Language: 149)
N. Missing = Variable (**Reading**

All pupils: 124,
More able/gifted and talented pupils: 124,
Underperforming pupils: 125,
Pupils with Additional Learning Needs: 125,
Pupils with Welsh and/or English as an Additional Language: 129)

2.20   Given these results, the Welsh Government (and the test developers) may
need to reflect on whether more could (and should) be done to address the
concerns of practitioners. This would mean ensuring that the National Tests
more accurately assess the skill levels of less able students, and ensuring
that results from the test provided a sufficient level of granularity to
differentiate the different needs of pupils operating below their age-related

expectation. During the 2018-19 academic year the Welsh Government will be replacing the current National Reading and Numeracy Tests with new online, adaptive 'personalised assessments'. The new assessments will be designed to adjust the difficulty level of questions in accordance with the responses of the test taker. They will also provide more detailed feedback at an individual learner level, in order to support progression. As part of this activity, consideration should be given to monitoring and review to ensure that these new tests are meeting their stated aim.

2.21 Given the apparent variability in the ways in which senior leaders have sought to use data from the National Tests it is notable that the overall proportion of schools using other standardised tests to assess the reading and numeracy skills of their pupils' (in addition to the National Tests) has remained largely consistent:

- In 2014 and 2015, just under four-fifths (78%) of the senior leaders who responded to this question said had used other additional tests to assess the reading skills of their pupils.

- Slightly fewer senior leaders said they used other tests to assess their pupils' numeracy skills. In 2014, two-thirds (66%) indicated that this was the case, and by 2015, just over three-fifths did so (61% - see Figure 2-3).

2.22 Staff in case-study schools used a range of tests (both standardised and non-standardised) to supplement the data provided by the National Tests. Although many of these had been developed by individual practitioners (often based on previous test papers), others were commercially available such as the New Group Reading Test and Progress in Maths tests (produced by GL Assessments and NfER).

2.23 Practitioners also used other tools to assess different aspects of literacy that are not assessed by the National Reading Test such as writing. Most of these tools appeared to have been developed by individual teachers.

Figure 2-3: The use of standardised tests to support the assessment of literacy and numeracy skills
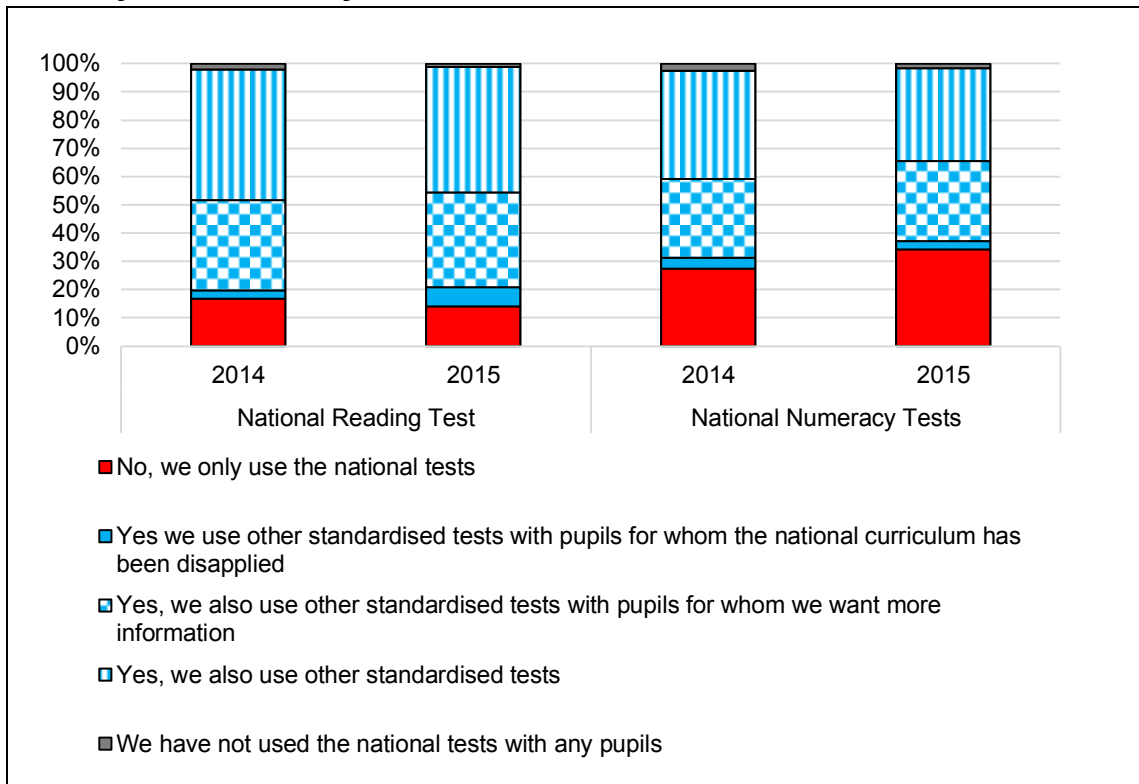
Source: Survey of School Leaders 2014 and 2015
Type of question: Single-response
N=Variable (352 in 2014 and 431 in 2015)
                         N. Missing = Variable
(National Reading Test: 2014 =25, 2015 =108
National Numeracy Tests: 2014 =70, 2015 =125)

2.24   Such findings could be considered somewhat disappointing, given that Welsh Government policy staff indicated that they were aiming to see a reduction in the use of other standardised tests (and the licencing costs borne by schools). It is important to recognise that other schools still use other assessment tools to support a rounded assessment of the skills of pupils (for instance the progress of pupils in writing, speaking and listening, skills not assessed by the National Tests). However, increased confidence in the effectiveness of the National Tests in assessing the performance of individual year groups would suggests that the data is performing a valuable function in supporting school-level self-evaluation and informing school development planning.

Key Findings:

Prioritisation of the NLNP by Consortia

- Improving the outcomes achieved by pupils in Literacy and Numeracy is a strategic priority in all four Consortia areas.

- Despite the commitment shown by Consortia to improving standards in literacy and numeracy, the priority attached by Consortia to support the implementation of the LNF and the National Tests is variable.

- Although the approaches adopted by Consortia to supporting an improvement in the quality of teaching of literacy and numeracy are substantively different they are characterised by common elements:

  ➢ an assertion of the key role played by Challenge Advisers in identifying support needs and brokering access to appropriate support

  ➢ provision for a core team of literacy and numeracy specialists

  ➢ an increased emphasis on facilitating collaborative activity between schools and practitioners to support the development and sharing of effective practice.

Views of practitioners on the LNF

- Since 2014 there appears to be a growing consensus amongst practitioners around the potential of the LNF to support an improvement in teaching quality in literacy and numeracy in Wales. However, there remain differences in the relative satisfaction of primary, secondary and special school practitioners:

  ➢ Primary practitioners appear to be the most positive about the potential of the LNF. The Framework is commonly seen as promoting a thematic approach to the teaching of the curriculum.

  ➢ Practitioners in special schools were similarly positive about the potential of the LNF to support an improvement in the quality of teaching of literacy and numeracy but often raised concerns about the applicability of the LNF in a special school context. For instance, it was noted that the minority of pupils at a special school are operating in-line with their year-on-year expectation.

  ➢ Secondary practitioners while committed to improving the quality of their practice were more sceptical of the capacity of the LNF to help them do this. Concerns commonly included; a belief that the LNF was much harder to embed within a secondary context, a lack of clarity around how non-English and Maths teachers should be embedding the teaching of literacy and numeracy within their practice and a perception that the introduction of the LNF would be insufficient to support an improvement in the quality of teaching of literacy and numeracy without provision for additional CPD.

Views of practitioners on the National Tests

- Usage of data from the National Tests to support teaching and learning appears to have increased since 2014. This reflected an increased confidence in the Tests as an accurate assessment of a young person's level of achievement in reading and numeracy.

- There remains limited evidence that data from the National Tests is regularly being used to support an assessment of the progress of individual pupils, particularly those that have historically performed at a level below their age-related expectation.

3. Progress in delivering the National Literacy and Numeracy Framework

3.1   The LNF was 'designed to help teachers embed literacy and numeracy into all subjects for learners aged 5 to14' (Welsh Government, 2014)[7]. This section considers the progress that has been made in primary, secondary and special schools since 2013. In doing so, we also consider the effectiveness of senior leaders' approaches to embedding the LNF. At classroom level, we identify common pedagogical approaches and their relative effectiveness.

3.2   When considering the progress made towards embedding the LNF, it is important to be clear that the outcome(s) associated with this process are clearly understood. For the LNF to be **embedded,** literacy and numeracy skills need to be incorporated into the curriculum, whether as skills taught **across the curriculum** or through the use of a **cross-curricular** approach. The concept of skills development **across the curriculum** would indicate that literacy and numeracy skills are drawn on in all lessons, as appropriate, irrespective of the subject matter. An example of this might be pupils in an art class using their literacy skills to write an essay about an art movement. A **cross-curricular** approach actively seeks to make links and connections **between** subjects, such as intentionally building on pupils' knowledge of mathematical concepts in science, for example, and may be evident in topic-based approaches (generally more common in primary schools than in the secondary phase) or in **rich tasks***,* as defined in Carr and Morris (2015).

Implementing the LNF at a strategic-level

3.3   As discussed in Chapter 2, from 2014 to 2015 there was an increase of around one fifth in the proportion of senior leaders reporting that the LNF had been implemented strategically, at a whole school level, through the curriculum-planning system and assessment system of their school.

3.4   This finding was corroborated by feedback from interviewees in the schools we visited in 2016. In these schools strategic changes appeared to have been adopted to support the implementation of the LNF:

- **Noting that implementing the LNF was a priority within a school's development plan**: In all of the schools it was felt that doing this ensured that the priority placed on literacy and numeracy was communicated clearly and effectively to all staff. The benefits of doing

---

[7] Welsh Government (2014). *National Literacy and Numeracy Framework*. Available online at http://learning.gov.wales/resources/browse-all/nlnf/?lang=en [accessed 23 August 2016]

so were evident in our conversations with classroom teachers, all of whom had a clear understanding that literacy and numeracy were both national and school level priorities. In addition to this, it was evident that the whole-school prioritisation of the implementation of the LNF was having an impact on the work of middle leaders and indeed classroom teachers. This was demonstrated by the fact that, in the majority of the schools we visited, there was evidence that schools were referencing the need to embed the LNF within departmental plans, schemes of work for individual subjects and the lesson plans of classroom teachers.

- **Raising the profile of the Literacy and/or Numeracy Coordinator**: Prior to the introduction of the LNF in 2013, many schools already had a literacy and/or numeracy coordinator in post. Since that time, the coordinator role appears to have changed and, in many cases, has had more seniority assigned to it. By 2016, the typical coordinator role had a whole-school focus; coordinators worked closely with senior leadership teams and, in secondary schools, departmental heads. The role often carried additional responsibilities, including responsibility for internal LNF training and attending external literacy and numeracy events. In addition, the role provided coordinators with non-teaching time so that they could focus on the development of literacy and numeracy.

- **A diagnostic assessment of the teaching of literacy and numeracy across the curriculum**: Many schools had used an audit in 2013 to establish a baseline for the performance of a school in teaching literacy and numeracy across the curriculum. There was limited evidence to suggest that schools had used the NSP audit tool to inform their approach (only one school explicitly mentioned that they had used it, with a second saying that it had informed their approach). However, the fact that some schools had begun the diagnostic assessment **before** seeing the NSP audit tool, and that the majority of schools visited in 2016 had repeated the audit (generally on an annual basis – see 3.5 below), suggests that the concept of self-evaluation to inform the implementation of the LNF and (literacy and numeracy teaching) had found currency in schools.

Implementing the LNF at an operational level

3.5 As in 2014, to support the implementation of the LNF, the schools we visited in 2016 appeared to have adopted a number of approaches. These commonly included:

- **Refining existing schemes of work to promote the teaching of literacy and numeracy across the curriculum:** In 2016, the majority of the visited secondary schools (six of the seven) and most of the special schools (three of the four) had completed a review of existing schemes of work to ensure coverage of the expectation statements set out in the LNF. This was usually an audit or mapping exercise to assess existing coverage of the LNF strands. Fewer primaries (three of the eight visited) reported that they had completed a similar process, however.

- **Changes to lesson planning:** Teachers appeared to be incorporating different approaches within their lesson planning to embed the LNF and inform their classroom practice:

  ➢ **Primary**: thematic learning and 'rich tasks'

  ➢ **Secondary**: LNF resources (virtual spaces/resource boxes); new schemes of work; new departmental plans/lesson plans

  ➢ **Special**: thematic learning

  As introduced earlier, to embed the LNF, schools used both 'cross-curricular' and 'across the curriculum' approaches to literacy and numeracy. Cross-curricular approaches were more common in primary schools, whereas secondary schools tended to deliver literacy and numeracy across the curriculum, reflecting both school infrastructure and the different ways in which curriculum planning is approached. Special schools (in 2016) were seen to use a mixture of the two approaches, depending on the needs of the cohort.

- **The development and implementation of a whole-school tracking system:** In order to track pupil progress against age-related expectations, schools sought to implement school-wide tracking systems to support the delivery of the LNF[8]. In 2014, schools indicated they were unclear about who should be responsible for recording progress in the system and where the system did need to operate across the school. By 2016, all of the schools we visited had a school-wide tracking system in place and schools had made considerable progress in ensuring that the tracking of pupils' literacy and numeracy was becoming embedded in the school.

---

[8]The LNF placed a duty on schools to assess pupils' progress against the expectation statements set out in the LNF from September 2014 although there is no requirement for a school to develop and implement a whole-school tracking system

Progress in embedding the LNF

3.6   At an operational level, progress in embedding the LNF appears to have been mixed, with schools making much slower progress in embedding the LNF **across** the curriculum than they had done in English/Welsh and Maths. Nonetheless, considerable progress appeared to have been made by 2015, with just under one third of survey respondents (40% of those responding to the question indicating that the LNF was now fully embedded across the curriculum (up from nearly 30% in 2014).

Figure 3-1: Extent to which the National Literacy and Numeracy Framework has become embedded within the assessment cycle and curriculum planning within the school
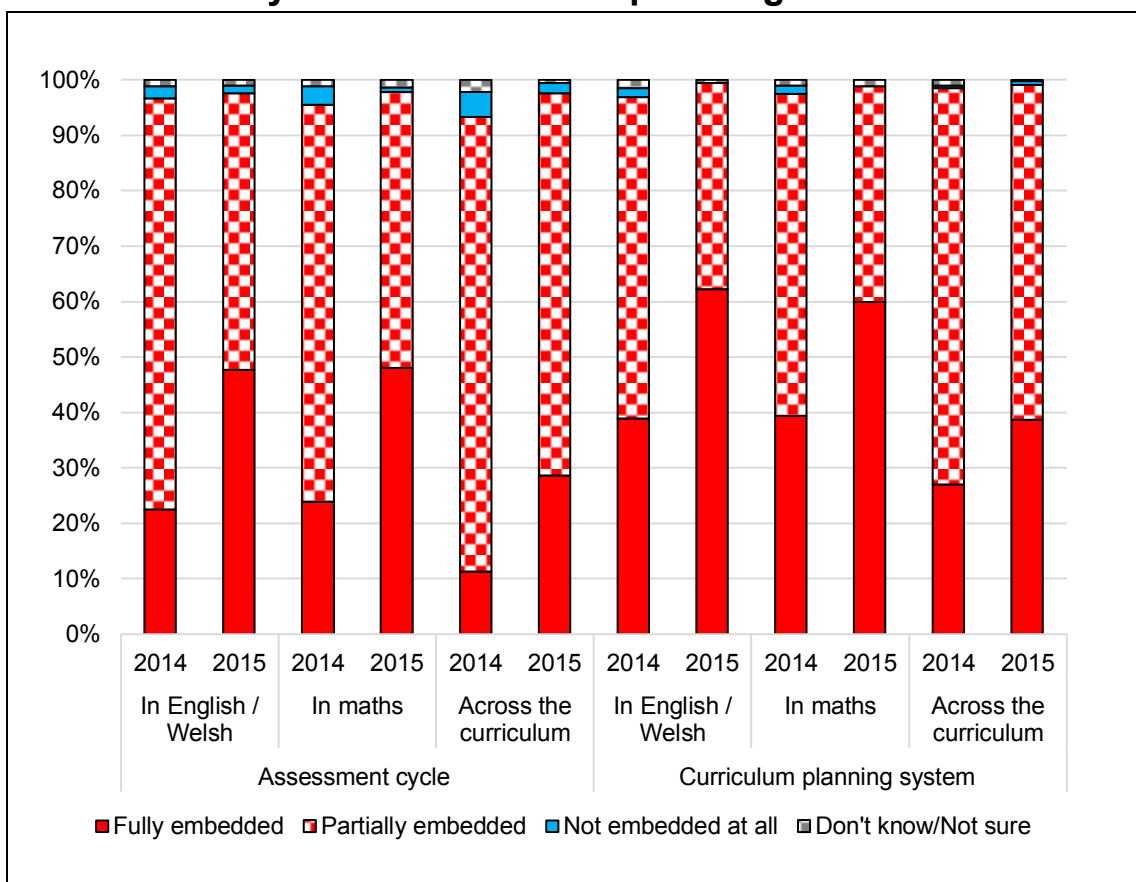
Source: Survey of School Leaders 2014 and 2015
Type of question: A series of single-response items
N=Variable (352 in 2014 and 431 in 2015)

N. Missing = Variable (**Assessment cycle**
        In English / Welsh: 2014 = 263, 2015 = 70,
        In Maths: 2014 = 264, 2015 = 73,
        Across the curriculum: 2014 = 263, 2015 = 71)
N. Missing = Variable (**Curriculum planning system**
        In English / Welsh: 2014 = 159, 2015 = 103,
        In Maths: 2014 = 159, 2015 = 104,
        Across the curriculum: 2014 = 159, 2015 = 100)

3.7   Further analysis of the data shows a contrast between the extent of progress made by primary schools in implementing the LNF compared to secondary

schools. In 2014, just four per cent of primary schools thought that the LNF was fully embedded across the curriculum. By 2015, this had increased by 18 percentage points, meaning that approximately one fifth (22%) of primary schools thought that the LNF was now fully embedded across the curriculum. While a similar picture was observed in secondary schools, the extent to which respondents considered the LNF to be fully embedded was lower (by 2015 this had increased to 14% from 1% in 2014). Between 2014 and 2015 the number of primary and secondary schools that said they had made progress in partially embedding the LNF across the curriculum also showed progress[9].In 2014, 20% of primary schools reported that the LNF was partially embedded across the curriculum. This rose by 42 percentage points to 63% in 2015. Secondary schools made similar progress, 22% had partially embedded the LNF across the curriculum 2014. In 2015, the figure was 70%, an increase of 48 percentage points.

3.8   It is striking to note, however, that, between 2014 and 2015, the proportion of senior leaders who responded to this question who felt that the LNF had become fully embedded in their schools' assessment cycle had increased markedly. Across the two years, the proportion increased from around one-fifth to nearly half in English/Welsh and/or maths (See Figure 3-1). This may be indicative of the focus in 2014 in getting a school-wide tracking system in place.

3.9   Secondary schools appeared to remain slightly behind primary and special schools in terms of embedding the LNF in their curriculum planning and assessment arrangements. Senior/middle leaders interviewed in the four special schools and eight primary schools in 2016 suggested that they thought they had made progress. A smaller proportion of the secondary schools (four of the seven we visited), however, thought that they were now teaching literacy and numeracy across the curriculum in a relatively consistent way. In all schools, interviewees indicated that there was more that they could do to improve the quality of teaching and literacy still further.

3.10   The senior leaders and literacy and/or numeracy coordinators who we spoke with in 2016 suggested that embedding literacy in the curriculum had been achieved with greater ease than had been the case in numeracy. Coordinators reflected that literacy generally underpins all activities and subjects, whereas numeracy has fewer obvious applications and therefore presented fewer opportunities for embedding meaningfully. Even though it

---

[9] In 2014, primary schools reporting the LNF partially embedded across the curriculum was 20%. This rose 42 percentage points to 63% in 2015. Secondary schools made similar progress, 22% had partially embedded the LNF across the curriculum 2014. In 2015, the figure was 70%. An increase of 48 percentage points.

was regarded as challenging, coordinators in 2016 noted that they had made some progress in embedding numeracy in the curriculum, whilst recognising that the journey to this point had been less straightforward than in literacy.

Issues associated with embedding the LNF

3.11   Reflecting on the findings of the 2015 survey and feedback from schools it is evident that schools have faced common challenges in embedding the LNF across the curriculum. These are considered below.

Ensuring that the LNF is embedded in a consistent way across the curriculum

3.12   The senior leaders who responded to the 2015 survey, had found embedding the LNF consistently across the curriculum difficult to achieve (see Annex B). Around one half of who responded to the survey felt that there was still work to do in order to ensure that the LNF was implemented consistently in their curriculum planning (50%) and/or assessment cycle (43%). Given that the LNF was designed explicitly to support existing approaches such as Assessment for Learning, it could be considered somewhat surprising that so many schools perceived this as a challenge. However, in reality, it may be important to distinguish between a lack of awareness and understanding about the types of behaviours the LNF has been designed to support, and the confidence of senior leaders in implementing the LNF in a way that is consistent with these (and which will be favourably reviewed by Estyn and their Challenge Advisor). Consistent with the findings of the Interim Report (Carr and Morris, 2015), the survey finding was suggestive of a continued appetite amongst practitioners for more 'exemplification' materials that show them what 'good looks like'[10].

Implementing a whole-school approach to tracking pupil progress against LNF expectation statements

3.13   Over the course of our case-study visits in 2014, one major barrier to embedding the LNF was felt to be assessing pupil progress against the year-on-year age-related expectations at a whole school level (despite assurances from the Welsh Government that it was not a mandatory requirement). In 2016, this no longer seemed to be as great a barrier for schools, even though some practitioners thought that there was still a lack of clarity about how best to collect and analyse tracking data. However, there were some positive messages, as schools reported that the LNF provided a framework to

---

[10]Exemplification materials developed by the Welsh Government (and other partners) to date can be accessed via: http://learning.gov.wales/resources/browse-all/nlnf/framework?lang=en#/resources/browse-all/nlnf/framework?lang=en

formalise existing data tracking, and/or to develop improved data tracking processes. The outcome of having more robust data tracking were improvements in the quality of teaching and the identification of strong and weak areas of performance at a school, year group, class and pupil level.

The skills and knowledge of non-English/Welsh and maths specialists

3.14   As previously reported (Carr and Morris, 2015), it was expected that, as the attention of many senior leaders' shifted away from developing a strategy to introduce the LNF towards embedding it, they might also shift towards an assessment of the capability of their staff to make the type of changes to their practice that was required. The survey of school leaders in 2013/14 found that an initial challenge in embedding the LNF was the level of knowledge and experience of teachers. By 2014/15, senior leaders reported that the knowledge and experience of teachers at their school had increased markedly[11]. Even in 2016, the level of literacy and numeracy skills amongst teachers remained a central consideration for senior leaders and coordinators, particularly when being asked to teach literacy and numeracy using a thematic approach.

3.15   Thematic learning, as a curriculum planning and delivery approach, was most evident in primary and special schools. The extent to which this approach was in evidence varied; some schools adopted a theme or topic as the core of their curriculum and mapped literacy and numeracy (and other) skills to it. Other schools did the reverse, and identified the skills they wanted to focus on before deciding on a suitable theme. Irrespective of the approach taken, senior leaders and classroom teachers thought the use of thematic learning was an effective means of teaching and could lead to more 'learning through experience'. Primary schools that taught using a thematic or topic approach as the core of their curriculum noted that it required classroom teachers to be both flexible and confident teachers, which suggests that this approach might not be suitable in schools where there was a high proportion of less experienced (or less confident) teachers.

3.16   In secondary schools, the most effective approaches were thought to be strategies that supported classroom teachers practically. The types of support offered included: internal numeracy and/or literacy groups; individual support

---

[11]In 2015, less than half (46%) of the senior leaders who submitted a survey response felt that the knowledge and experience of teachers at their school was a challenge in embedding the LNF within the assessment cycle at their school. Just over two-fifths (41%) indicated that it was a challenge in embedding the LNF within the curriculum planning system. In 2014, under one-fifth (15%) indicated that staff knowledge and expertise was a challenge in embedding the LNF as part of the assessment cycle at their school. Just under one-third (28%) indicated that it was a challenge in embedding the LNF in their curriculum planning system.

through a 'buddy' system; and external CPD opportunities. Irrespective of the approach to support, the intended outcome was the same; to enable teachers to embed literacy and numeracy in their lessons in a meaningful way, Schools also put in place mechanisms to assess whether the support facilitated increased or improved teaching of literacy and numeracy in the classroom. We found that each of the visited secondary schools used self-evaluation approaches and classroom observations to ensure that the learning arising from the support mechanisms was subsequently put into practice.

3.17   The 2016 case studies showed that senior leaders thought teachers were improving year-on-year in relation to embedding literacy and numeracy in lessons in a meaningful way, although numeracy continued to lag behind literacy. The coordinators were thought to have played an important role in helping teachers to identify opportunities to meaningfully embed literacy and numeracy. Coordinators were also thought to have an important role in identifying and enabling ways in which support staff and non-teaching staff could contribute to literacy and numeracy. However, coordinators and classroom staff alike thought that, compared to literacy, it was more challenging to embed numeracy into the curriculum. A senior leader reflected that 'literacy blends naturally into most subjects', whereas opportunities to include numeracy were less obvious: 'Teachers can sometime struggle to come up with new examples of how to integrate literacy and numeracy into their lessons, **especially** with numeracy' (Senior leader in a secondary school)

3.18   Overall, schools were positive about the LNF and the progress that had been made to embed it in lessons. There were still pockets of concern that the strong focus on literacy and numeracy might, potentially, detract from subject learning, though the level of concern appeared less in 2016 than in previous years and some interviewed teachers said that, while it was a concern in the past, it no longer was now.

Key Findings:

- The introduction of the LNF has supported greater prioritisation of literacy and numeracy in schools.

- Accounting for the LNF in school development plans has been a consistent and effective approach used by schools, irrespective of their type or location. The plans now put emphasis on the use of 'across the curriculum' and cross-curricular' approaches to ensure the LNF is embedded.

- Schools have made considerable progress in embedding the LNF in their curriculum and assessment cycles since its introduction in 2013. Schools were continuing to take steps to further strengthen their LNF activity.

- School wide tracking systems to monitor pupil progress and achievement are being used widely. Schools have created their own systems, tailored to their individual circumstances and find that the data supports decision making throughout the school.

- Senior leaders and coordinators suggested that they would benefit from greater reassurance (from the Consortia or the Welsh Government) that their approach to embedding the LNF aligned with good practice and what was expected. Reassurance would give them confidence in their approach, or enable them to confidently refocus their LNF activity.

- The seniority of the literacy and/or numeracy coordinator role had increased as a result of the LNF and the priority it placed on literacy and numeracy development. Coordinators had a key role in supporting teaching and non-teaching staff to embed the LNF in their day-to-day activities.

- Considerable progress had been made in boosting classroom teachers' confidence and skills to teach literacy and numeracy, although there were still pockets where teachers' aptitude remained a consideration. This issue is also applicable to pedagogical approaches, whereby teachers' ability to teach using a thematic approach, or teach meaningfully through rich tasks was a barrier to their use.

4. Progress in implementing the National Tests

4.1   This section will consider the progress made by primary and secondary schools in embedding the National Tests and how test data is being used to support teaching and learning. We will also consider the effect of the introduction of the Tests on pedagogical practices and administrative processes of schools.

Approaches adopted by senior leaders to support the introduction of the National Tests

4.2   As discussed in Chapter 2, the views of practitioners on the value of the National Tests in supporting improvements in the attainment of pupils have been mixed. It is important to consider the extent to which their views on the data from the National Tests appear to have influenced the approaches adopted to embed them within their schools.

4.3   Over one half of senior leaders who responded to related questions in the survey felt that the availability of test data had been useful. In supporting teaching across the curriculum at their school: 50% of respondents indicated that data from the National Reading Test had been useful. 63% of respondents indicated that data from the National Numeracy Tests had been useful. This was a marked change from 2014, when just under three-quarters (71%) of respondents did not feel the data from the procedural numeracy tests had been useful. This would seem indicative of a gradual increase in the number of schools using data from the National Tests to support teaching and learning.

4.4   The following sections will address, separately, the approaches taken by primary schools and secondary schools, since the qualitative research highlighted some notable differences between the approaches adopted in each. This section will not consider special schools, since their experience of applying the Tests was limited. The four special schools visited during the fieldwork were significantly different from each other, both in terms of the types of pupils on which they focused, and the operational approaches used. In three of these schools, the curriculum was disapplied for the majority (or all) of the students, and, as a result, they considered it inappropriate to embed the Tests within standard curriculum planning and assessment arrangements. The fourth special school had taken steps to introduce the Tests to the majority of its pupils, but it is clear that this school's experience may not be generally applicable to other special schools across Wales.

Approaches adopted by primary schools

4.5   Primary schools appear to have faced more challenges in adapting to the National Tests, as they are not as used to preparing their younger pupils for more formal types of assessment. Despite Welsh Government guidance that tests should be administered in a 'comfortable' environment[12], some practitioners noted that 'test conditions' such as the need to work 'individually' and without support ran counter to the culture that they had previously fostered. For instance, one practitioner noted that they encouraged learners to work independently. As a result, if they did not know the answer to a question they were used to getting up from their seat and search for an answer. It was felt that placing pupils in test conditions had the potential to stifle this type of independent enquiry.

On the use of data

4.6   Reflecting growing confidence in the ability of the data produced by the National Tests to support teaching and learning, it was notable that all of the primary schools we visited had taken some steps to embed the use of data within their practice. Having said this, the ways in which the data has been used varied markedly; four of the eight primary schools we visited used it primarily or solely for whole year group analysis while the remainder used it to track the progress of individual pupils.

4.7   In these schools it was argued that the data provided a useful way of testing the reliability of teacher assessments. That said, staff indicated that while the Test data was useful, existing teacher assessments were still seen as a more holistic and reliable means of understanding and mapping the next steps for each pupil. Welsh Government guidance states that the test data is one piece of evidence to consider alongside teacher assessment data. In the schools visited, test data was seen more as a confirmation of existing teacher assessment information. As noted by a senior leader at one primary school the '[National] Tests didn't tell us anything we didn't already know about our class' (Senior leader at a primary school)

4.8   In three of the eight primary schools we visited, Test data was primarily being used to support school development planning. In these schools staff felt that National Test data was helpful in identifying the areas in which particular

---

[12]The test administration handbook (as updated in 2016) can be accessed at:
http://learning.gov.wales/resources/browse-all/national-reading-and-numeracy-tests-administration-handbook/?lang=en

cohorts of pupils could make improvements, but was insufficiently granular to identify the next steps for individual learners[13].

For pedagogical practice - Primary

4.9   The perceived impact of the National Tests on classroom practice varied across the primary schools we visited. Developing the right skills to meet the needs of the Tests was seen as important in some of the schools. In three of the eight primary schools, teachers made a concerted effort to make more use, in class, of the skills and tasks found in the Tests, as a way of preparing pupils. Two of these schools specifically focussed on reasoning/problem-solving tasks, as these were viewed as one of the elements that children had found challenging. A senior leader in one of these schools noted that prior to the introduction of the Tests, teachers had emphasised 'procedural fluency' rather than application of skills in numerical reasoning, and that the Tests had required a change in their approach.

4.10   In three of the eight primary schools practitioners indicated that no significant changes had been made to pedagogical practices following the introduction of the Tests. In these schools, staff indicated that results had shown that they were teaching the skills and content knowledge that pupils needed to do well and so had made no changes to their approach.

4.11   Primary schools also faced an additional challenge compared to secondary schools, as their youngest pupils had no experience of sitting formal tests. In three of the visited schools, practitioners stressed the effect of the introduction of the Tests, particularly on the youngest pupils. As a result, it was felt to be important that pupils were given the opportunity to practice, undertaking mock Tests under test conditions at school, or as homework. Indeed, although contrary to Welsh Government guidance, in one school, two weeks before Easter had been set aside for this purpose. Staff at this school recognised that there was a risk in over-preparing pupils for the Tests, and tried to ensure that this did not occur. Although practising for the National Tests is not encouraged by the Welsh Government, in four of the eight schools, teachers had introduced model Test tasks in their lessons.

Approaches adopted by secondary schools

4.12   Approaches to the Tests in secondary schools have been different to those adopted in primary schools, as secondary schools reported that they tended

---

[13]It should be noted that to support practitioners in analysing the results from the National Tests, the Welsh Government has developed a number of diagnostic tools. These can be downloaded at: http://learning.gov.wales/resources/browse-all/national-reading-and-numeracy-tests-diagnostic-support-tools/?lang=en

to be comfortable with the idea of pupils being assessed through Tests (unlike younger pupils in primary schools). All had systems and practices in place to support pupils with their preparation for both GCSEs and in-year tests from Year 7 onwards. As a result, the introduction of the Tests was reported largely as less challenging for secondary schools, and the Tests appeared easier to embed into the existing structures of the schools.

Pedagogical practice - Secondary

4.13 Despite their familiarity with testing, four of the seven secondary schools made changes to their practice to prepare learners for the skills assessed in the National Tests. Teachers at these schools made a concerted effort to use question styles and tasks that mirrored those they expected to see in the Tests. Whilst they did not think that this had required a major adjustment in their teaching approach, it was seen as an important part of familiarising pupils with what was expected of them.

4.14 Two such schools developed a particular focus on numerical reasoning, which (as in the primary schools) students had initially viewed as a challenging element of the Tests, due to their previous lack of familiarity with these skills. Senior leaders at these schools indicated that numerical reasoning skills had been a low priority prior to the Tests, and that their introduction had been a catalyst for improving the teaching of these skills amongst the students.

4.15 The effect of the introduction of the Tests on the classroom practices of teachers outside of the English, Welsh and Maths Departments appeared minimal. Having said this many of practitioners felt that this was to be expected given that the implementation of the LNF was supporting the types of changes that would have a positive impact on pupils' literacy and numeracy, which, in time, was likely to lead to an improvement in Test outcomes. As such teachers felt that their work on the LNF was itself sufficient in preparing pupils to sit the Tests.

4.16 Contrary to guidance produced by the Welsh Government, sustained preparation (of pupils) in the period immediately before the Tests was also viewed as important in several schools, particularly at Key Stage 3. Practitioners acknowledged that (whether or not they had made changes to classroom practice) they had generally set aside a week or two during the term in order to ensure that pupils understood what they were being asked to do when they came to sit the Tests.

Use of data

4.17   The other key area to consider is how secondary schools made use of the data that the Tests provided. As might be expected, each of the secondary schools we visited had taken steps to incorporate the data from the National Tests into their school-level tracking system. However, in these settings this data appeared to have been used to support teaching and learning in different ways.

4.18   In six of the seven secondary schools the principal way in which data from the Tests had been used was to support the identification of pupils who appeared to have fallen behind (or were at risk of falling behind) the expected standard for someone of their age. In some cases, these pupils were signed up to 'catch-up' classes or given other support in order to raise their performance. In two of the seven schools the data was also used specifically to support English/Welsh and maths practitioners to track the progress of their pupils in developing literacy and numeracy skills.

4.19   It is notable, however, that in only one of the seven secondary schools was National Test data being used by staff who were specialists in subjects other than English/Welsh and maths. This is largely consistent with the views of Consortia and suggests that, whilst the LNF may have been becoming more embedded across the schools, the Tests were seen as primarily relevant to the English/Welsh and maths departments.

Progress in embedding the use of data from the National Tests across the curriculum

4.20   Given the level of variability within and between primary and secondary schools (in supporting the introduction of the National Tests), it is difficult to come to one single judgement about the relative progress of schools in embedding the use of data from the Tests to inform teaching and learning.

4.21   There is a lack of a shared understanding of what 'good' should look like. As noted by one member of Consortia staff commenting on the different views evident in the schools in which they worked: 'there continue to be those schools who see the tests as a school performance measure and those that are looking to use it to support day-to-day teaching' (Consortia staff member). Further to this, one teacher remarked that there 'remained a lack of clarity about how data [from the National Tests] could be used in a diagnostic way' (Classroom teacher, Primary School).

4.22   Many of the staff in case study schools indicated that the approaches/strategies adopted by their Senior Leadership Team to support the use of data from the Tests had been fully embedded. However, there was

widespread acknowledgement that this may not have led to the use of the Test data as a diagnostic tool (as intended by the Welsh Government). Staff in six of the seven secondary schools indicated that, although they were using data from the Tests at their school, in only one case was the data being used in a diagnostic way to inform the teaching of individual learners. Furthermore, in only one school was there evidence that specialists in subjects other than English/Welsh and/or Maths were using Test data. Practitioners questioned the extent to which this was expected although the benefits of this type of approach seem reasonably clear.

4.23   In the primary schools, it was also clear that practitioners felt that there was more that they could be doing with the data from the National Tests. It was notable that four of the eight primary schools indicated that although they had gone some way towards embedding the use of data from the Tests across the curriculum, there was still more work to do. Interestingly, three of these had committed to using the Test data to inform teaching and learning of classroom practitioners. In these schools it was argued that there was more that could be done with this data. Where staff felt that the use of data from the Tests were fully embedded across their school, most had used the data to monitor the performance of individual cohorts, which is arguably an easier task.

Key Findings:

- The extent to which practitioners have made changes to their practice as a result of the introduction of the National Tests varied across the primary and secondary schools we visited. Common responses included the introduction of time in the school day for Test preparation in the lead up to sitting the tests, and in a general change in the types of tasks and skills that teachers worked on with their pupils. Encouragingly there were few instances of 'teaching to the Tests', or of preparation overly distracting from other work.

- In terms of the use of National Test data, the survey indicated that it has increased, across primary and secondary schools. However, there was no uniformity in the way it was used, with some targeting individual pupils and others using the data solely to inform school development planning.

- National Test data is commonly being used by English/Welsh and maths practitioners (in secondary schools) to support teaching and learning. However, there is little evidence to suggest that Test data is being used by other staff even though (as discussed in Chapter 3) they are increasingly taking steps to embed the LNF within their practice.

5. Awareness of the NLNP amongst pupils and parents

5.1   As discussed in Carr and Morris (2014) a key staging post in the successful implementation of the LNF and the National Tests is likely to be an increasing awareness and understanding of the importance of developing literacy and numeracy skills amongst pupils and their parents. Fieldwork in 2014 indicated that, although awareness amongst pupils and parents of the National Tests was relatively high, awareness of the LNF was much lower. Furthermore, there was some evidence of misunderstanding around the terminology associated with the Framework and the National Tests and the purpose of both reforms amongst pupils and parents. Reflecting on the findings of fieldwork in 2015 and 2016, we now consider the extent to which awareness of the LNF and the National Tests has changed in the intervening period.

Awareness of pupils

5.2   Over the course of fieldwork undertaken in 2016 we spoke to 117 pupils. Awareness of the LNF in primary school pupils appeared to be broadly consistent with that observed in 2014. However, feedback from teachers and pupils in case-study schools showed that awareness of the LNF appears to have increased in secondary schools, particularly amongst older pupils. Indeed, the majority of Year 10 and Year 11 pupils in four of the seven secondary schools demonstrated an awareness of the Framework and a reasonable understanding of why it had been introduced.

5.3   Given that the LNF was only extended into Key Stage 4 in September 2015, this could be considered somewhat surprising. However, in those schools in which pupils were familiar with the concept of the LNF, staff indicated that the decision about whether to use the 'LNF brand' (Classroom teacher in a secondary school) hinged on the relative maturity of pupils. For older pupils, it was felt that talking about the LNF as a national priority could be helpful in motivating students. It was also felt that highlighting the importance of the LNF had led to a positive effect in terms of encouraging pupils to use the branded materials developed to help them. For instance, some had developed literacy and/or numeracy workbooks to help pupils to deploy their literacy and numeracy skills outside of English/Welsh and/or maths lessons.

5.4   In the twelve primary and special schools we visited, awareness of the LNF amongst pupils appeared to be much lower, with few pupils in the discussion groups able to identify what the LNF was or what it aimed to do. In reflecting on the relative maturity of the pupils that they taught, some practitioners queried whether this awareness was important as long as pupils were aware of the importance of developing their literacy and numeracy skills.

5.5 Between 2014 and 2015 it was noticeable that the proportion of senior leaders who responded to this question who felt that the LNF had contributed to an improvement in the perceived importance of literacy and numeracy increased by 18 percentage points(see Figure 5-1).

Figure 5-1: Perceived impact of the National Literacy and Numeracy Framework on the profile of literacy and numeracy amongst pupils
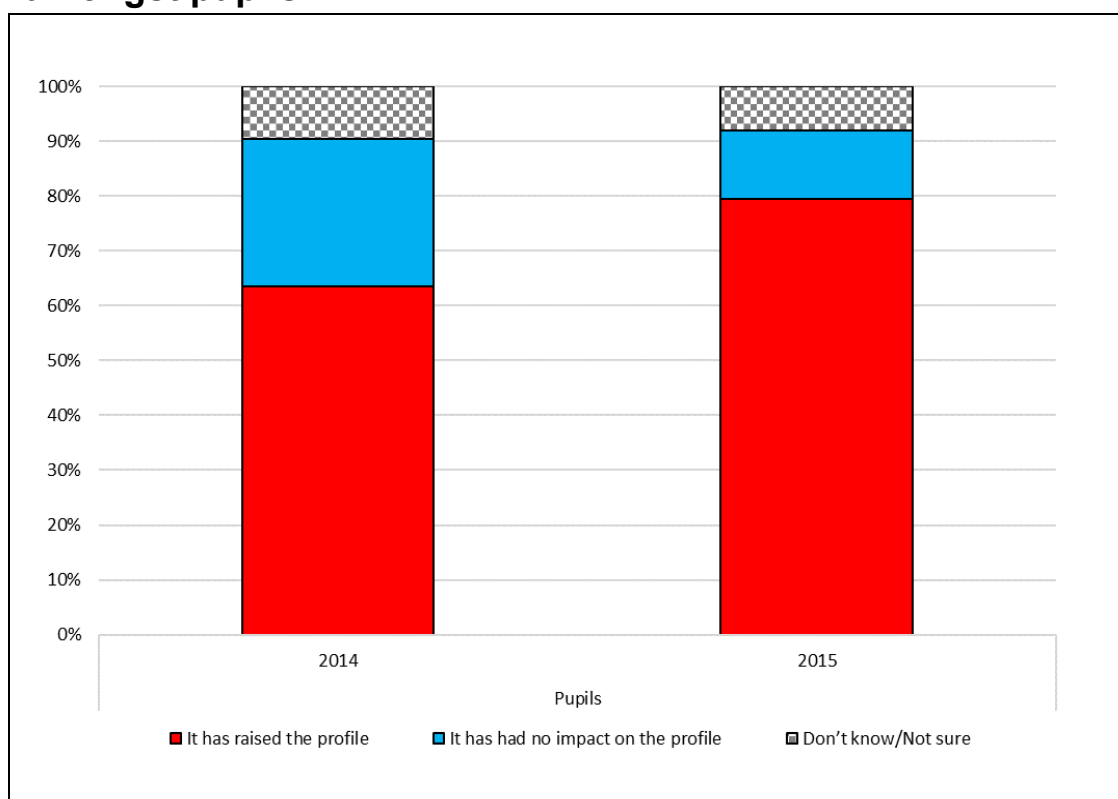
Source: Survey of School Leaders 2014 and 2015
Type of question: A series of single-response items
N=Variable (352 in 2014 and 431 in 2015)
N. Missing = Variable (2014 = 141, 2015 = 69)

5.6 This trend appears to have continued into 2016. Given the relatively limited number of pupils who completed a proforma (on their views on different subjects) at the time of the group discussions (113 in 2014 and 75 in 2016) one should be cautious in interpreting the findings. Nonetheless, the proportion of pupils who felt that learning English and Maths was useful to them increased by eight percentage points and three percentage points respectively from 85% to 93% and 88% to 91% respectively. This is indicative of an improvement in the importance attached by pupils to developing their literacy and numeracy skills.

5.7 In 2015, the proportion of pupils stating that they thought that learning Welsh was useful, was 77%, which was nearly two-thirds higher than it had been in 2014 (a greater increase than was seen in either English or Maths and a

finding that may be worthy of further investigation). While the difference might be accounted for by differences in the nature of the schools/communities visited in 2016 compared to 2014, this might suggest that greater prioritisation of literacy and numeracy following the implementation of the NLNP could be contributing to greater interest amongst pupils in the Welsh language.[14]

5.8 It is also interesting to note that, despite the fact that respondents felt that the overall difficulty they experienced in learning English, Welsh and/or maths was similar in 2014 and 2016[15], the proportion indicating that they enjoyed Welsh and maths lessons, and indeed found studying them to be fun, increased.[16] While the majority of pupils completing the proforma indicated that they found English lessons fun and/or enjoyable, this was not true for all and could indicate that some pupils find the approaches used less engaging.

Feedback on the National Tests

5.9 Interestingly despite widespread acceptance of the importance of developing their literacy and numeracy skills, when asked about the National Tests most of pupils were relatively neutral. In most cases it appeared that pupils appeared to value knowing how they were getting on in class even though sitting tests was less stimulating than 'writing a story or solving a puzzle' (Secondary school pupil).

5.10 Having said this, and in line with feedback from practitioners, some pupils (particularly those at primary school) indicated that even though their teachers had been helping them to prepare for the Tests they were anxious about sitting them again. For instance, one Year 6 pupil was concerned that if they did not perform well they 'would end up in all of the bottom sets at secondary school' (Year 6 pupil). Another noted that 'not being able to answer the questions can get you down, but we have been told to see it as a challenge. I hope that I will be able to get them right next time' (Year 4 pupil). Although feedback like this could be expected from younger pupils, schools and

---

[14]Completed pro forma were obtained from 27 and 28 pupils respectively in four Welsh medium schools in 2014 and 2016. Such responses accounted for just over one-fifth of the total number received in 2014. They accounted for over one-third of all responses in 2016. The number of respondents means that any sub-group analysis would not be meaningful. As such, it would be inappropriate to consider the responses obtained by pupils in Welsh-medium compared to English-medium settings. Having said this, it is important to acknowledge that differences in the composition of the sample in 2014 and 2016 have the potential to have affected the results. We also note that the LNF was not designed for use in teaching Welsh as a second language.

[15]In 2014 around two-fifths of respondents found English and maths neither hard nor easy. Around one quarter found Welsh of the same difficulty. Similar results were observed in 2016.

[16]In 2016 over three-quarters of respondents felt Maths was fun up from around one third in 2014. Just under two-thirds felt that Welsh was fun in 2016 up from around half in 2014. In 2016, just over felt half this about English down from around two-thirds in 2014.

regional consortia (and indeed the Welsh Government) might consider what more could be done to reduce perceptions of pressure on pupils and the potential for any attendant reduction in young people's emotional well-being[17]. The new adaptive testing system being introduced in 2018-19 may address these issues, but this will need to be monitored.

Awareness of parents

5.11   As reported by Carr and Morris (2015) fieldwork undertaken in 2014 found that awareness of the LNF amongst parents appeared to be relatively low and few schools appeared to have taken steps to publicise the LNF as part of their broader community engagement strategy. In 2016, it was interesting to note that 14 of the 19 schools we visited had supported activities aimed at improving parental awareness of the LNF. Of those that had not supported such activities (three of whom were Special Schools), the main reason appeared to be a perception that this was not something that parents would be interested in. As noted by one classroom teacher: 'for most of our parents their primary concern is that their child is happy. Although they are interested in knowing that their child is being prepared for independent living, such concerns are secondary' (Classroom teacher in a special school). It was felt that parents welcomed the opportunity to see a regular report on their child's progress but derived the most benefit from the opportunity to visit the school and talk to their child's teachers.

5.12   In the schools we visited that had supported activities to improve parental awareness of the LNF, there were some major differences between the primary and secondary schools. In the secondary schools (six of which supported awareness-raising activities) the focus of activities appeared to be on explaining to parents how to interpret the pupil-level reports that the schools were now producing at the end of the summer term. Common activities included a dedicated presentation as part of a parents' evening or a drop-in event towards the end of the summer term. In the schools we visited, staff argued that such events had been reasonably well attended, but most were uncertain as to whether parents had valued the opportunity to discuss the report - or indeed valued the data. This was summed up by one practitioner who noted 'you might get the odd parent who is put out that their child has been put up for a catch-up intervention but nobody has looked to

---

[17]At the time of writing this report, the Welsh Government was putting plans in place to replace the National Reading and Numeracy Tests with online 'personalised assessments'. These will be phased in from the 2018-19 academic year. The new assessments will be designed in order to adjust the difficultly level of questions in accordance with the responses of the test taker. They will also provide more detailed feedback at an individual learner level to support progression.

speak to me directly about their progress report [on their child's progress against the age-related expectations set out in the LNF]'. (Classroom teacher in a secondary school).

5.13   In practice, in primary schools the scope of awareness-raising activities appeared to be much broader, with an emphasis on both helping parents to understand the reports produced for them but also on helping them to use this information to support their child to further develop their literacy and numeracy skills. For instance, in one of the schools, senior leaders had invested in a social media platform through which parents could monitor the progress of their child on a regular basis. Where a child found something difficult, classroom teachers had been encouraged to make this known to their parent, at which time they could arrange to meet and discuss what the parent could do to help. Such an approach appeared to have been effective, one parent arguing;

> 'K… has never been top of her class so it is nice to see her making progress…Things are taught differently now [compared] to when I was at school… so it is good to be able to contact Mrs H… and discuss how I can help move her along' (Parent of a primary school pupil)

5.14   Despite differences in the types of activities supported by primary and secondary schools to raise parental awareness of the LNF, it is positive to note that these appear to have been at least somewhat successful. From 2014 to 2015 the proportion of senior leaders who responded to this question who felt that the LNF had had a positive effect on parental awareness increased by six percentage points (from 48% to 55% - see Figure 5-2).

5.15   Interestingly, when these results are broken down by school type, just over three-fifths of secondary school respondents (63%) said they had taken steps to raise the awareness of parents, compared to just under one half of all primary school respondents (48%). Given the feedback from secondary practitioners in case-study schools (that parents had been fairly disinterested in the LNF) this could be considered contradictory. However, in trying to interpret these results it is important to recognise that this question required a binary response (either; yes it has raised the profile of literacy and numeracy or no it has had not impact on the profile of the literacy and numeracy). As a result, although senior leaders in secondary schools may have felt that the LNF had raised the profile of literacy and numeracy, their response gives us little sense of how much more it had been raised. Where it appears that primary schools have been seeking to use the LNF to increase overall parental engagement in their child's education, it may be that primary practitioners have been more cautious in their response. As noted by one middle leader; 'the parents that slip through the net are always those that we

most want to engage with. We will not consider our approach successful until we bring them on board… however unrealistic this is' (Middle leader in a primary school).

Figure 5-2: Perceived impact of the National Literacy and Numeracy Framework on the profile of literacy and numeracy amongst parents
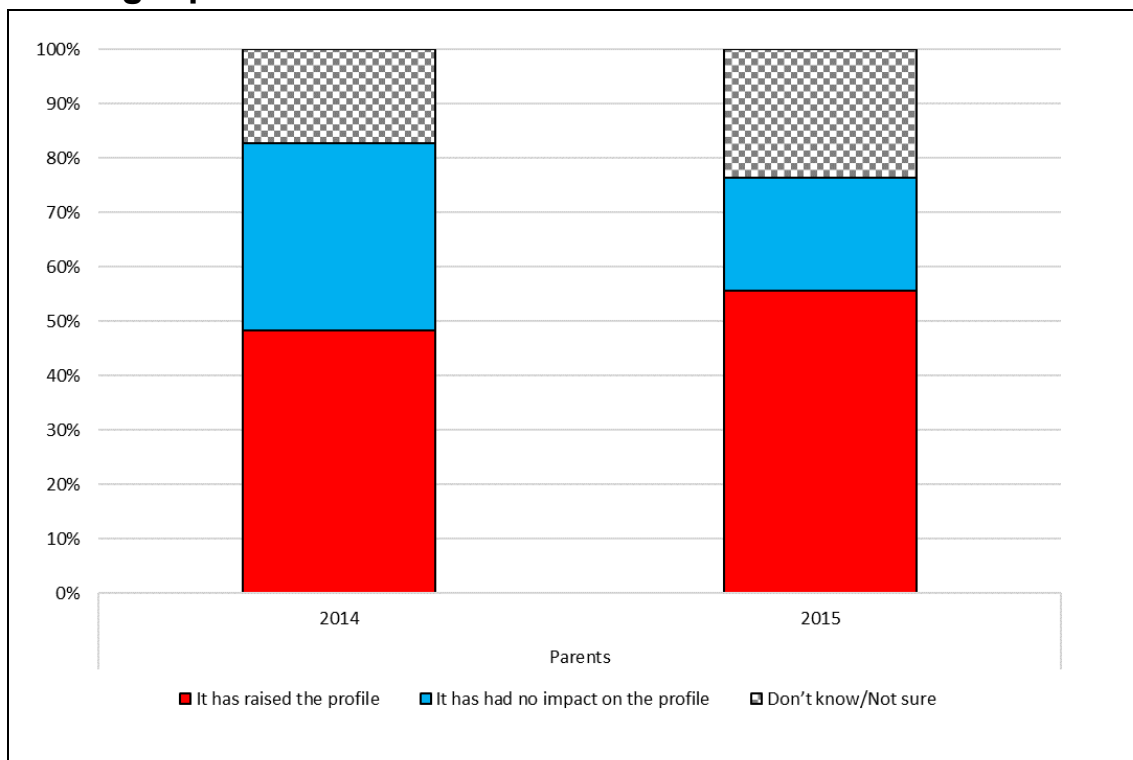
Source: Survey of School Leaders 2014 and 2015
Type of question: A series of single-response items
N=Variable (352 in 2014 and 431 in 2015)
N. Missing = Variable (2014 = 139, 2015 = 71)

Feedback on the National Tests

5.16   Given the reservations expressed by practitioners (particularly those from primary schools) about the National Tests, it was perhaps unsurprising that there was little evidence that schools (either primary or secondary) had sought to use the Tests to highlight the importance of literacy and numeracy skills. In most cases, it appeared that activities had sought to promote greater understanding of the contents of the pupil-level reports produced at the end of the summer term. It was also evident, in many of the schools we visited, that practitioners had sought to ensure that parents recognised the National Tests as one source of performance data that should be considered alongside the fuller report produced by the school on the progress of each child against the expectation statements set out in the LNF.

5.17   In many of the schools we visited feedback from parents was limited. Although most appeared interested in the contents of the progress reports produced on their child, few were able to disaggregate the report produced for them on the National Tests in their thinking from the other data made available to them by their child's school. When asked whether they thought it was right that their children were tested in this way, most felt that it was important that they knew where their children were in relation to their peers. Having said this, few felt that sitting a 'national' test was any more/less useful than sitting one set by their child's teacher. Given this feedback, the Welsh Government may wish to consider what more can be done to improve parents' understanding of and engagement with, the National Tests.

Key findings:

Awareness of pupils

- The implementation of the LNF is widely considered by senior leaders to have supported an increase in the profile of literacy and numeracy amongst pupils.

- Awareness of the LNF amongst pupils is much higher in secondary compared to primary and special schools. In some secondary schools promoting the concept of the LNF as a 'brand' had been helpful in raising the profile of literacy and numeracy. In primary schools staff questioned whether awareness of the LNF was important as long as pupils were aware of the importance of developing their literacy and numeracy skills.

- Feedback on the National Tests from pupils was limited with most pupils regarding them as part and parcel of their experience at school. A small number of pupils (mostly at primary school) expressed some anxiety about the Tests.

Awareness of parents

- Since 2014 the implementation of the LNF has supported an increase in the profile of literacy and numeracy amongst parents of school-age children.

- In special schools promoting awareness of the LNF has not been a priority. Interviewees indicated that the LNF was not something that parents would be interested in.

- The approaches used by primary and secondary schools to promote the LNF differed markedly:
  - In primary schools awareness-raising activities were commonly integrated into the school's broader community engagement strategy. Raising awareness of the LNF was a tool through which to promote greater parental engagement in the development of their child's literacy and numeracy skills.
  - In secondary schools awareness-raising activities focussed on supporting parents to interpret their child's progress report.

- Awareness of the National Tests is limited. However, where parents make use of reports produced using data from the Tests, they tend to consider this alongside other sources of evidence including the report card written by their child's teachers, as advised in Welsh Government guidance.

---

6. Effectiveness of the support made available by the Welsh Government to support the implementation of the NLNP

6.1   As discussed in Section 1, in order to support the implementation of the NLNP the Welsh Government commissioned a range of support activities. This was designed to complement other sources of support available to schools, principally though Consortia. In this section we reflect on the overall effectiveness of the support made available to practitioners, in particular the effectiveness of the guidance and resources made available by the Welsh Government and the National Support Programme.

Effectiveness of guidance and resources developed by the Welsh Government

6.2   To support the introduction of the LNF and the National Tests, the Welsh Government authored a range of guidance materials and resources. Reporting in 2014, Carr and Morris (2015) found that satisfaction with these materials was variable. At this stage, it is important to reflect on the extent to which usage and satisfaction with the resources has changed and whether the support needs of the sector appear to be being met.

Supporting the implementation of the LNF

6.3   Over time, a variety of different guidance documents and teaching resources has been produced by the Welsh Government to help practitioners embed the LNF within their practice. These documents have been updated in line with policy/curriculum developments and the extension of the LNF into the Foundation Phase and Key Stage 4. Key materials have included:

- guidance to support embedding the LNF in curriculum planning

- guidance in assessing the progress of pupils against the age-related expectations set out in the LNF

- exemplification materials to support the teaching of literacy and numeracy across the curriculum.

6.4   Consistent with fieldwork undertaken in 2014, awareness amongst practitioners of the Welsh Government materials was still low in 2016, with few of the classroom practitioners to whom we spoke indicating that they had accessed any of the materials on Learning Wales. Having said this (and as discussed in Section 2) awareness and understanding of the LNF was high, indicating that the messages contained in these materials were commonly

accessed via other routes, such as training events delivered by literacy and numeracy experts employed by the Consortia.

6.5 Where practitioners had accessed Welsh Government resources, satisfaction was mixed. Some case-study schools had found the materials useful in helping them to incorporate the LNF into their classroom practice. Others questioned whether there was sufficient clarity around the pedagogical changes the Welsh Government wanted to see. This view was summed up by one classroom teacher who argued that while; 'the guidance is fine, it just doesn't provide enough detail for us to know how we are meant to be teaching' (Classroom teacher in a primary school).

6.6 Despite varying levels of satisfaction with the resources produced to-date, practitioners in only three of the nineteen schools visited in 2016 said they would welcome additional materials at this stage. In practice, where materials were felt to be lacking in detail, schools appear to have sought opportunities to work with other local schools to identify a common direction of travel. As one senior leader argued; 'It feels like we have just been left to get on with it - so we have. Although we already had a history of working with the other schools in our [Local] Authority the introduction of the Framework has increased the emphasis we've placed on it' (Senior leader in a secondary school). Given the Welsh Government's desire to support an improvement in the quality and, indeed, frequency of collaboration between practitioners, this should be considered a positive outcome.

6.7 Having said this, although the practitioners in case study schools were broadly of the view that they were heading in the right direction, Consortia staff were more cautious. As noted by one Challenge Adviser 'while some schools are starting to do some really good things, in some places less effective approaches appear to be gaining currency' (Challenge Adviser). This view was echoed by a small number of school practitioners who wondered at this stage whether the Welsh Government could do more to highlight examples of effective practice and provide senior leaders with a clearer insight into the type of teacher behaviours/practices that would be regarded as effective practice. It was argued that providing greater clarity on what 'good should look like' (Senior Leader in a secondary school) would allow practitioners in other schools to adapt their course if they did not feel that their chosen approach was consistent with this.

Supporting the implementation of the National Tests

6.8 To support practitioners in administering the National Tests and promote the use of that data to support teaching and learning, the Welsh Government have made available a range of guidance materials including a test

administration handbook[18], sample materials[19], and diagnostic tools[20]. Initially made available in 2013, these resources have been updated regularly to take account of feedback from practitioners and changes to the National Tests. Guidance materials have been developed for different purposes including helping practitioners: to prepare their pupils to sit the tests; to administer them (including marking the scripts and sending the results to the Welsh Government); and use test data to inform their practice. The materials have primarily been made available on the Learning Wales website[21] and marketed through the Dysg e-newsletter[22].

6.9 Building on work undertaken by BMG Research in 2013 (Roberts D, 2014), in both waves of our school leader survey (in 2014 and 2015), we asked senior leaders to reflect on the usefulness of this support in helping practitioners at their school's to administer the National Tests and to use the resultant data.

The usefulness of guidance materials in helping practitioners to prepare their pupils to sit the National Tests

6.10 The Welsh Government developed a range of sample Test materials to support pupil familiarisation. Given the number of respondents to the survey who choose not to answer questions about these resources (around one-third of those who responded to the survey[23]) we may need to be cautious in interpreting the results. In 2015, nine-tenths of those who answered related questions felt that the updated sample test materials had been useful (very or quite useful) in helping practitioners to prepare their pupils to sit the test (of a total of 387 and 426 respondents for the National Reading Test and the National Numeracy Tests respectively). In 2014, separate questions were asked about the relative utility of sample materials to help prepare pupils to sit the procedural numeracy and the numerical reasoning tests. As a result the

---

[18]The administrative handbook (as updated in 2015) can be accessed at: http://learning.gov.wales/resources/browse-all/national-reading-and-numeracy-tests-administration-handbook/?lang=en

[19]Sample materials can be accessed via: http://learning.gov.wales/resources/collections/national-reading-and-numeracy-tests?lang=en

[20]Diagnostic tools (as updated in 2015) can be accessed at: http://learning.gov.wales/resources/browse-all/national-reading-and-numeracy-tests-diagnostic-support-tools/?lang=en

[21]Although not specifically designed solely to solely support the NLNP when it was launched in September 2013, Learning Wales was developed to provide a one stop shop for practitioners to access the latest statutory guidance and contemporary research. Learning Wales can be accessed at: http://learning.gov.wales/?lang=en

[22]The Dysg e-newsletter is the Welsh Government's official newsletter for post-11 practitioners. Practitioners are invited to sign-up for the newsletter at: http://learning.gov.wales/about/newsletters/?lang=en

[23]In 2015, 37% of the respondents to the survey did not specify how useful sample materials had been in preparing pupils for the National Numeracy Tests. Slightly fewer choose not to answer the related question pertaining to the use of sample materials to help pupils' to prepare for the National Reading Test (28%)

results of the 2014 and 2015 survey are not directly comparable. Nonetheless, it is interesting to note that, in 2014, a similar proportion (89%) had felt that the sample materials were useful in helping them to prepare their pupils to sit the procedural numeracy tests. Equally, just over two-fifths (41%) had found the sample materials useful in helping them to prepare their pupils to sit the numerical reasoning test. This may indicate that practitioners have welcomed changes to the sample materials to help pupils to prepare for the numerical reasoning test.

The usefulness of guidance materials in helping practitioners to administer the National Tests

6.11   The materials produced by the Welsh Government to help practitioners administer the National Tests, included a test administration handbook and technical completion notes for schools and LAs on data collection and reporting. Levels of satisfaction were high for these materials; in 2015 around nine-tenths of those senior leaders who responded to related survey questions felt that the test administration handbook had been useful in helping staff at their school to administer the National Tests.[24] Only a relatively small proportion (between one fifth and one quarter) of the responding senior leaders said they would welcome additional support in administering the tests, marking scripts, or submitting test data to the Welsh Government[25].

The usefulness of guidance materials in helping practitioners to use National Test data to inform their practice

6.12   The diagnostic tools developed by the Welsh Government were designed to help practitioners use test scores to identify the strengths and weaknesses of individual pupils against components of the LNF. Although overall levels of satisfaction amongst senior leaders was not as high as for the sample materials, around three quarters of those who responded to related questions felt that the diagnostic tools were either quite or very useful in helping practitioners to use the test data[26]. Overall, such results seem indicative of a continued appetite amongst practitioners to see continued investment from the Welsh Government in these types of resources.

---

[24]Around nine-tenths (90%) had found the handbook useful in administering the National Numeracy Tests. Over nine-tenths (95%) said that it had been useful in administering the National Reading Test.

[25]Around one quarter (27%) indicated that they would welcome additional support in using the marking scheme for the National Numeracy Tests, Just under one quarter (23%) felt they needed more support in interpreting the marking scheme for the National Reading Test. Just under one-fifth said they would welcome more support in submitting test data to the Welsh Government (16% and 19% respectively).

[26] Just under three-quarters of respondents (71%) felt that the diagnostic tool developed for use with the National Numeracy Tests were useful, a similar proportion (72%) felt that the tool was useful in helping practitioners to use data collected through the National Reading Test

Effectiveness of the National Support Programme

6.13   Commissioned by the Welsh Government in January 2013 and delivered by CfBT (now called the Education Development Trust), the National Support Programme (NSP) followed a phased model of delivery[27]. Initially scoped to run between February 2013 and July 2016, the progress made by the Consortia led the Welsh Government to decide to bring the externally-run programme to a close in July 2015 and full responsibility for supporting schools in implementing the LNF was passed to the Consortia. As the NSP drew to a close our survey of school leaders provided an opportunity to reflect on the effectiveness of the support provided.

Awareness and engagement with the NSP

6.14   Open to all primary and secondary schools in Wales[28] it was intended that all those schools that wished to access support from the NSP could do so. The primary access point for this support was a named NSP Partner. As might be expected, given the high-profile nature of the NLNP, awareness and up-take of support through the NSP appears to have been high. In 2014, of those senior leaders who answered this question, over nine-tenths (91%) had accessed some support. In 2015, the proportion who indicated that they had accessed support remained broadly consistent (88%).

6.15   Such results tell us little about the **nature of the support** accessed by schools. However, in both waves of the survey (2014 and 2015) there appears to have been considerable confusion amongst respondents about what support they could expect to receive from their NSP partner (and in what overall phase of the programme they had accessed it). For instance, in 2015, 83 school leaders had accessed support to embed and sustain joint-working in their local area (Phase 4 of the programme). Of those, only 63 had accessed previous phases of the support programme, despite the fact that undertaking an audit of existing practice (Phase 1) and developing an action plan (Phase 2) were a pre-condition of accessing additional support.

6.16   Nonetheless despite this uncertainty, it should be regarded as encouraging that, from 2014 to 2015, there appears to have been an increase in the proportion of schools a) accessing tailored support in order to deliver their school's action plan (Phase 3) and b) encouraging joint working with other local schools (Phase 4). In 2014, just under one third of those senior leaders who were invited to respond to these questions (30% - see Annex B),

---

[27]See Annex A for more information.
[28]After a short period at the outset Special schools and Pupil Referral Units also became eligible for support),

indicated that their school had accessed tailored support. By 2015, that proportion had increased to just under two-fifths (37%). Between 2014 and 2015, those saying that they had received support to sustain joint working in their local area had increased, from 13% in 2014 to 21% in 2015.

6.17   The experience of those schools looking to access face to-face support from their NSP Partner, appears, in most cases to have been a positive one. In 2015, few of the senior leaders who responded to this question indicated that their school had faced challenges in either communicating with their NSP Partner or coordinating visits with them (see Figure 6-1). Practitioners in case-study schools echoed this during fieldwork undertaken in 2016. One senior leader argued that;

> 'it is a shame that the NSP has ended. [National Support] Partners had just started to demonstrate their value…Luckily we managed to get a bit more support from our Partner after the end of the funding, but they have now found a job in a school' (Senior Leader in a primary school).

6.18   Interestingly, given such positive feedback, confidence in using the resources developed by NSP Partners (and made available through Learning Wales) to support schools in implementing the LNF was lower. For instance, over one third of those who answered this question in the 2015 survey had found using the resources to be either very challenging or quite challenging. Teachers indicated such responses may reflect difficulties experienced in modifying or interpreting the resources in a way that suited differing local contexts. As Consortia continue to reflect on how best to meet the needs of the schools in their area, they may wish to reflect on the apparent preference amongst practitioners for face-to-face support.

Figure 6-1: Challenges in accessing support from the National Support Programme
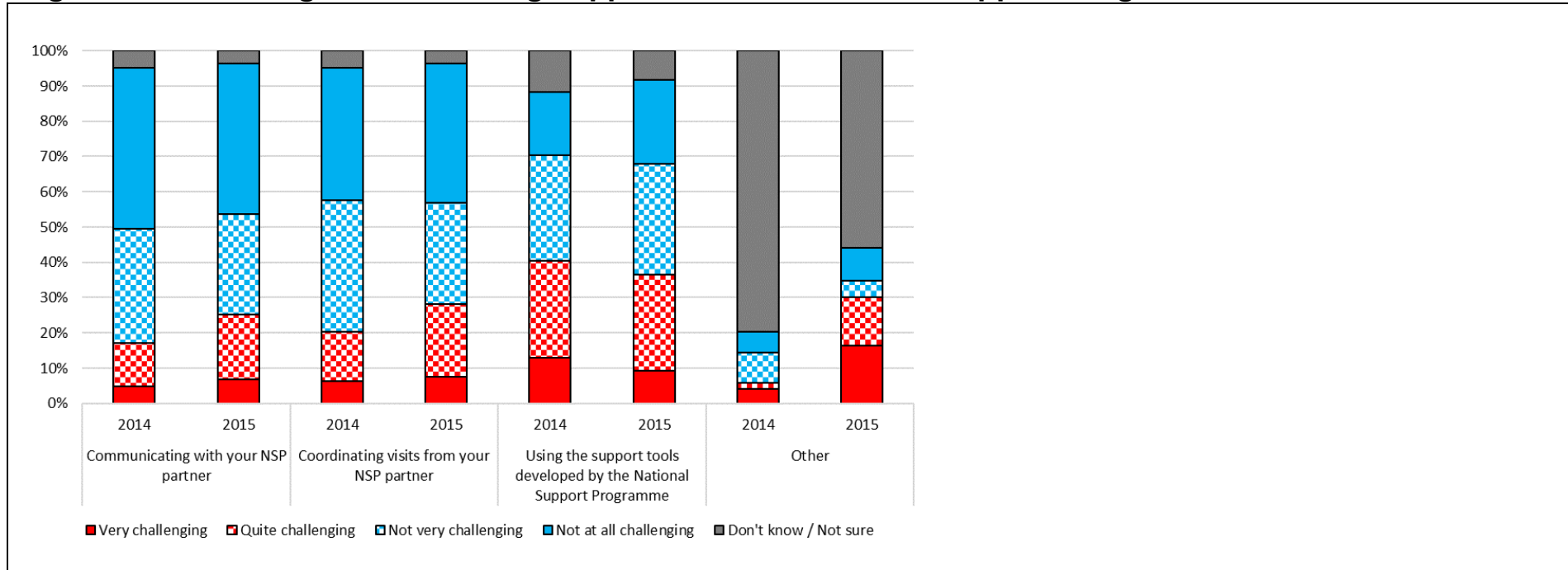
Source: Survey of School Leaders 2014 and 2015
Type of question: Series of single-response items
N=Variable (352 in 2014 and 393 in 2015)
N. Missing = Variable
(Communicating with your NSP partner: 2014 = 130, 2015 = 143,
Coordinating visits from your NSP partner: 2014 = 130, 2015 = 145,
Using the support tools developed by the National Support Programme: 2014 = 130, 2015 = 143
Other: 2014 = 130, 2015 = 350

6.19 Although uptake of the NSP appears to have been high (see paragraph 6.14), it is nonetheless worth reflecting on the reasons why some schools chose not to access support. Interestingly, in 2015, of the 38 senior leaders who said they had chosen not to do so, the most frequently cited reason was that they had chosen to access support from another provider (12 senior leaders). The second most frequently cited reason was the belief that they did not require any support. Although such views could be perceived as somewhat contradictory, in reality, they are much more likely to speak to the variable progress of schools in implementing the LNF (see Section 3) and a steady increase in alternative sources of support for schools (not least from the Consortia).

Effectiveness of support provided through the NSP

6.20 Overall, satisfaction in the quality of the support delivered through the NSP, appeared mixed. Of those who chose to respond to this survey question in 2015, just over half (55% - see Figure 6-2) had found the support they had received helpful (very helpful or quite helpful) in embedding the LNF as a curriculum planning and assessment tool at their school. This was a slight increase on the 50% who indicated that this was the case in 2014. However just over one fifth (21%) had not found the support helpful. Such findings were corroborated by feedback from practitioners in case study schools in 2016. In such visits, some practitioners expressed concerns around the quality of support available through the NSP. In many cases, this appears to have been an issue of expectation management, with schools looking for the NSP to deliver more 'specialist' support than they were able to provide within the parameters of their contract with the Welsh Government. As such clearer guidance for schools about what they could and could not expect from the NSP might have been helpful in managing the expectations of senior leaders more successfully.

Figure 6-2: Perceived helpfulness of the support provided through the National Support Programme
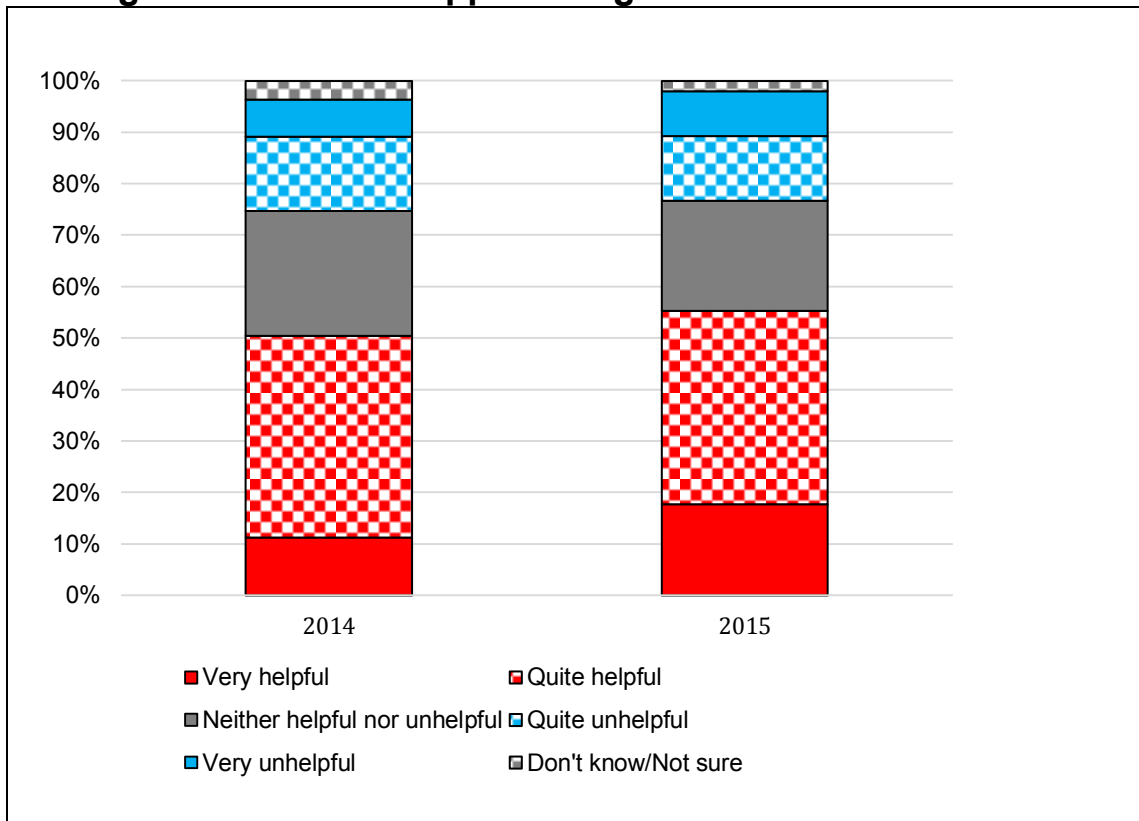
Source: Survey of School Leaders 2014 and 2015
Type of question: Single-response
N=Variable (352 in 2014 and 393 in 2015)
N. Missing = Variable (2014 = 130, 2015 = 138)

Key findings:

Effectiveness of guidance resources and teaching materials developed by the Welsh Government

- Satisfaction amongst practitioners with the materials produced by the Welsh Government to support the implementation of the LNF is mixed. In particular, there is a desire amongst practitioners to see more detailed guidance on how they should embed the teaching of literacy and numeracy across the curriculum.

- Feedback on the guidance materials produced by the Welsh Government to support the implementation of the National Tests was variable. Although satisfaction amongst senior leaders with the test administration handbook and the sample materials produced by the Welsh Government to help familiarise pupils to sit the Tests was high, satisfaction with the diagnostic tools designed to help practitioners to interpret test scores was slightly lower (although over two-thirds of respondents to the 2015 survey indicated they were satisfied). This may indicate an appetite for further investment in these resources.

Effectiveness of the National Support Programme

- Take-up of the NSP has been high. By July 2015 it is encouraging that just under two-fifths of senior leaders indicated that their school had accessed tailored support from their NSP Partner (up from under one third in 2014).

- Satisfaction with the support provided by NSP Partners is mixed, though just over half of the senior leaders had found the support received to be helpful in embedding the LNF as a curriculum planning and assessment tool.

7. Effectiveness of the support made available by Consortia to support the implementation of the NLNP

7.1 In addition to the support delivered as part of the NSP, through the School Effectiveness Grant (and latterly the Educational Improvement Grant), Consortia have also had responsibility for supporting schools to implement the LNF and the National Tests. Given their increased role with the discontinuation of the NSP, it is important to consider the extent to which schools have looked to access Consortia support, and the extent to which it appears to have met their needs.

7.2 As discussed in Chapter 2, reflecting the character of the settlement reached by each Consortium with their constituent Local Authorities (and indeed schools), the volume/type of support available to schools appears to have differed markedly. Given the scale of the fieldwork undertaken over the course of the study, it is not possible to consider the relative performance of each Consortium. Nonetheless, in the following section we draw out what is working well from the perspective of practitioners (and what Consortia might wish to do more of) as well as what could be improved.

7.3 It is interesting that, given the perception that Consortia would take on a greater role in providing support to schools in 2015, just under three-fifths (57% - see Figure 7-1) of the senior leaders who answered this question had accessed support. This represented a slight decrease on the proportion of senior leaders who had accessed support from their Consortia in the previous year (59% in 2014).

Figure 7-1: Perceived helpfulness of 'other' support accessed in addition to/instead of the National Support Programme
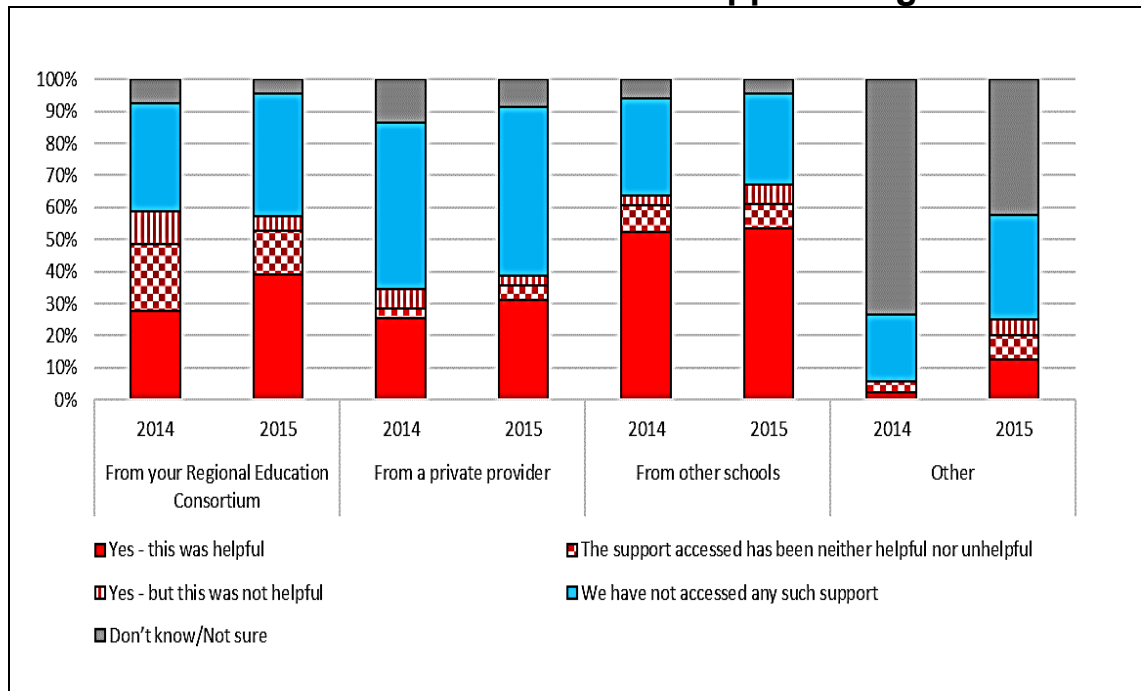
Source: Survey of School Leaders 2014 and 2015
Type of question: Single-response
N=Variable (352 in 2014 and 393 in 2015)
N. Missing = Variable
(From your Regional Education Consortium: 2014 = 131, 2015 = 157,
From a private provider: 2014 = 131, 2015 = 169,
From other schools: 2014 = 131, 2015 = 157
Other: 2014 = 131, 2015 = 353)

7.4 In many cases, the principal source of additional support in implementing the LNF appears to have come from other schools. Of those senior leaders who responded to this question, over two-thirds (67%) indicated that this had been the case. That said, before judging the effectiveness of the support offered by the Consortia (of those who had accessed support from their Consortium, just over two-thirds indicated that it had been helpful) it is important to acknowledge that, in most cases, they have been moving more towards a brokerage model. As a result, it is likely that some senior leaders have failed to distinguish between support accessed on the initiative of their school and that brokered/delivered by their Consortium (where facilitating school-to-school support has been the primary approach used by Consortia to meet their objectives). Although the change in approach might have had the unintended consequence of reducing the perceived effectiveness of the work of the Consortia, in reality the results may provide a positive indication of the value of moving towards a school-led improvement model.

7.5   Following the end of the NSP, feedback from practitioners in case study schools (obtained between March and July 2016), suggests that the role of the Consortia in providing support to help schools embed the LNF and the National Tests appears to have increased. For instance, practitioners in seventeen of the nineteen schools we visited had accessed some form of support from the Consortia. In those two schools in which there was no clear evidence that they had been working with the Consortia both were involved in other collaborative activities.

Facilitation of school-to-school support

7.6   Perhaps unsurprisingly, given the increasing emphasis placed by Consortia staff on supporting a self-improving system, it was notable that the most frequently mentioned interactions between schools and the Consortia appeared to occur through facilitated events such as moderation meetings (whereby local clusters are invited to get together and discuss their approach to assessment and tracking) or professional learning communities. In these events practitioners from different schools were encouraged to get together and develop a shared approach to overcoming an issue or challenge (for instance how to teach literacy and/or numeracy across the curriculum). In total, nine of the nineteen schools we visited were involved in this activity and that this was supported in some way by staff at the Consortia.

7.7   Feedback on these types of activities was broadly positive. In the context of an increased focus on improving the use of pupil-level data to support teaching and learning, some of the senior leaders welcomed the opportunity for their school to participate in moderation/standardisation activities. Those involved in Professional Learning Communities also welcomed the opportunity to find out what other schools were doing and identify elements of effective practice. Where such activities appeared most effective it was noted that the Consortia had played an active role, not just acting as a facilitator but also contributing to the sessions by sharing their expertise. As noted by one middle leader

> 'it is useful that we are able to share what we are doing, but I don't think much of this is best practice, even if it helps us to move in the right direction…it is helpful when we hear from [staff at the Consortia] as they have oversight of what is happening outside of the [local] authority' (Middle leader in a primary school).

Facilitation of peer-to-peer support

7.8   As discussed in Chapter 2, in addition to supporting school-to-school support Consortia have looked to harness the expertise of individual practitioners perceived to be excelling in the teaching of literacy and/or numeracy (even though they may not be working in a school or Department working to the same standard). Such work has built on the learning of initiatives such as the Outstanding Teachers of Literacy and Numeracy Programme (OTLN).

7.9   Launched in 2013, the OTLN has been delivered by the Consortia and was initially funded under the School Effectiveness Grant. This set out a duty on the Consortia to support 'sharing of best practice through the use of outstanding teachers of literacy and numeracy to provide coaching and mentoring opportunities for teaching staff who are in need of additional support' (Welsh Government, 2013d). Within the framework set out by the Welsh Government, Consortia were encouraged to develop a model best suited to meet the needs of the schools in their area (and their overall delivery model).

7.10   As set out in our Interim Report, Consortia decided to adopt a range of different approaches in relation to the number of Outstanding Teachers of Literacy (OTLs) and Outstanding Teachers of Numeracy (OTNs) supported through the programme, and the way in which support was to be delivered to schools. Such variation has posed evaluative challenges, not least to consider the relative performance of the programme in each Consortia area before coming to any programme level assessment.

7.11   As set out in Figure 7-2, the evaluation of OTLN is further hampered by low levels of reported take-up. In 2015, of those senior leaders who responded to the survey, just 65 of 431 (15%) had accessed some support from an OTL or an OTN (48 of 352 – 14% said this was the case in 2014). Of these, only ten were from South-East Wales (one more than in 2014).

Figure 7-2: Access to support from an OTL and/or an OTN
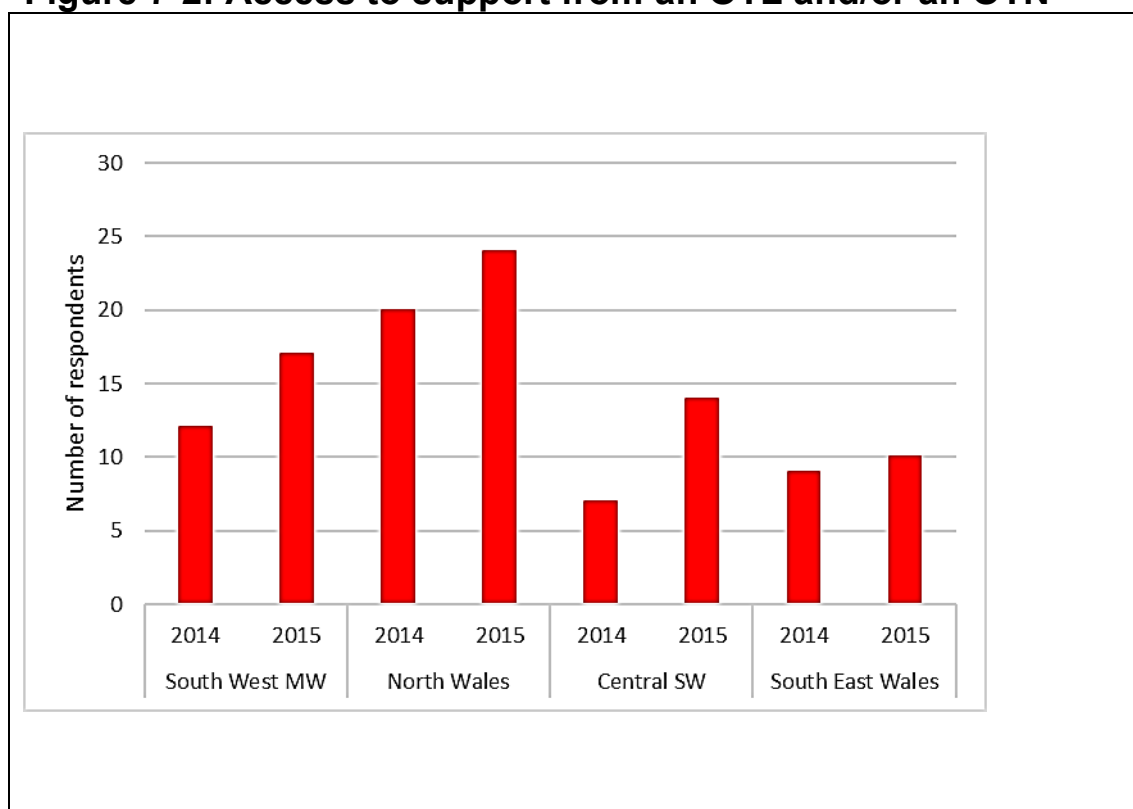
Source: Survey of School Leaders 2014 and 2015
Type of question: Single-response
N=Variable (352 in 2014 and 431in 2015)
N. Missing = Variable
(South West MW: 2014 = 34, 2015 = 40,
North Wales: 2014 = 30, 2015 = 31,
Central SW: 2014 = 20, 2015 = 23
South East Wales: 2014 = 11, 2015 = 5
Missing: 2014 = 18, 2015 = 44)

7.12 Given these constraints, it seems most appropriate to restrict the scope of analysis, to an assessment of take-up of the support on offer. In doing so, it is notable that (in 2015), less than one quarter (23%) of those senior leaders who answered the question had accessed support. While the programme was never designed to support every school in Wales, this level of take-up seems low.

7.13 In interviews with staff at the Consortia it was evident that although Consortia had used the funding set aside by the Welsh Government to support the delivery of peer-to-peer support, few had actively promoted the concept of an 'Outstanding Teacher'. As noted by one literacy specialist: 'few teachers are comfortable with the idea that they are teaching excellent or outstanding lessons all day every day… we have used [instead] the concept of a Lead Practitioner'. As a result some senior leaders may have accessed support funded through the initiative without realising it.

7.14   In April 2015, the decision was taken by the Welsh Government to make changes to the way that Consortia were funded through the introduction of the Education Improvement Grant[29]. Although this stipulated that Consortia should still seek to support improvements in the quality of teaching in literacy and numeracy, they were given the freedom to choose how they did so. Although Consortia appear to have sought to use the expertise of OTLs and OTNs within their region (and indeed supported the recruitment of additional practitioners), OTLs and OTNs are no longer considered as a specific intervention or programme.

7.15   Setting aside issues relating to identifying those schools who have accessed support from an OTL and/or OTN, it is important to reflect on what the performance of the initiative can tell us about the effectiveness of peer-to-peer support models. Feedback from Consortia staff was mixed. They argued that, although it was important that steps were taken to harness the expertise of practitioners who were not necessarily working in high-performing schools, it was important to acknowledge the challenges this posed, not least the willingness of senior leaders to allow their most effective practitioners to leave the classroom in order to support staff at other schools. Moving forward, the Welsh Government may wish to consider what additional incentives could be offered to senior leaders to work in this way. Without such incentives, it is difficult to see how the volume of peer-to-peer working can be increased.

Support from their Challenge Adviser

7.16   Given the emphasis placed by Consortia on the role of Challenge Advisers as a broker of support for schools, it was surprising that staff in only eight of the nineteen schools indicated that they had accessed such support to help raise the quality of teaching of literacy and numeracy. Even where senior/middle leaders indicated that they had accessed some support, they felt that improving the quality of teaching of literacy and numeracy had not been their primary concern (even where they thought they needed it).

7.17   A number of factors appear to have contributed to this outcome, principally the implications arising from the introduction of a tiered support model. In all four of the Consortia there was evidence that Challenge Advisers had either moved (or were moving) to an approach in which those schools deemed in the most need, received the most support. In practice the level of support allocated to individual schools appeared to be decided based on their school

---

[29]Please see:
http://gov.wales/topics/educationandskills/schoolshome/raisingstandards/education-improvement-grant-for-schools/?lang=en

categorisation[30]. As a result, those schools classified as either 'Red' or 'Amber' received considerably more support than those schools identified as 'Green' or 'Yellow'. Although Consortia staff felt that it was right to tailor support in this way they acknowledged that such an approach did not necessarily highlight those schools that had **specific** needs around the teaching of literacy and numeracy. As summarised by one of the Challenge Advisers

> 'while I am glad we are now in a position to provide more support to schools that are identified as Red and Amber, those schools often have bigger problems than the need to teach literacy and numeracy across the curriculum. Where schools have the capacity to support the introduction of the [NLNP] we often don't have the time [to support them]' (Challenge Adviser)

7.18   Where Challenge Advisers had sought to help schools to improve the quality of teaching of literacy and numeracy feedback was mixed. For instance, while some of the senior leaders praised their Adviser for helping them to access support from the Literacy and Numeracy team at the Consortia, or helped release funding for them to access support from a private provider, others queried whether their Adviser had the expertise to help them identify and overcome barriers to improvement in this area. For example, one senior leader noted that;

> '[Until recently] our Adviser didn't come from a Primary background…we would have farcical conversations where he would identify challenges that were completely different to the ones we had identified…he didn't have the expertise to offer us the support we needed' (Senior Leader, Primary School).

Although it would appear to be unrealistic to expect that every Challenge Adviser is a literacy and/or numeracy expert, Consortia may wish to consider whether they have any outstanding training and support needs that could help to improve the quality of support that they offer the schools they work with.

Support from subject-experts

7.19   The take-up of subject expert support from Consortia to support the implementation of the LNF and the National Tests, amongst the schools we visited was mixed and seemed to reflect differences in the amount of funding

---

[30]Please see:
http://gov.wales/topics/educationandskills/schoolshome/raisingstandards/schoolcategorisation/?lang=en

available. Indeed, just over two-fifths (eight of the nineteen schools we visited in 2016) had accessed support in this way. Furthermore, the types of support accessed by schools in different Consortia areas also appeared to be variable. Common forms of support included 'formal' CPD courses, the provision of bespoke or tailored training for individual schools or a group of schools with similar needs and the availability of teaching aids/materials and resources.

7.20   In schools that accessed this type of support, feedback was broadly positive. Indeed, none of the staff indicated that they had not benefited from the support that they had received. However, even where such support had been accessed by practitioners many felt that they (and indeed their colleagues) needed more if they were to ensure that literacy and numeracy were taught effectively across the curriculum – particularly non-English/Welsh and Maths specialists (staff in eleven of the schools indicated that they would benefit from further training). This view was summarised by one of the middle leaders who argued that 'the true impact of the LNF will only be realised if non-specialists are equipped with the skills to teach literacy and numeracy' (Middle leader in a secondary school).

Additional support needs

7.21   Where some staff perceive that they have required additional support to improve the quality of teaching of literacy and numeracy, it is important to consider why their perceived needs are not being met. Consideration of the feedback from staff in case-study schools revealed common barriers:

- **Identifying a high quality provider:** Although many of the senior/middle leaders were broadly positive about the support they had accessed from the Consortia, they noted that this did not mean that they felt that the Consortia had the capacity or expertise to meet all of their needs. Although many acknowledged that they had pre-existing relationships with other (commonly private) providers on whom they could call, there were gaps in expertise that they would be reluctant to fill with a provider with whom they had no prior experience. It was suggested that Consortia could do more to support schools in the identification of high quality providers where they could not provide that type of support in-house.

- **Meeting the cost of training and support:** Some classroom practitioners indicated that they had struggled to obtain sign-off from senior leaders to access training in school time, because of the cost to the school (principally paying for a cover teacher). This issue was felt

to have been exacerbated given the pace of reform implemented by the Welsh Government and the need for staff to get on top of changes to curriculum and assessment (such as changes to the GCSE English, Welsh - as a first language - and Maths syllabi).

- **Releasing staff for training:** Senior/middle leaders in some of the schools we visited acknowledged a trade-off between the benefits of staff attending training and the negative effect that the absence of a classroom teacher could have on the performance of the pupils they taught. Although it was recognised that the support provided internally (commonly by the school's Literacy and/or Numeracy Coordinator) would only go so far to improving the quality of teaching or literacy and numeracy (particularly of none-English/Welsh or maths specialists the disadvantages of releasing staff for a training programme commensurate with their needs were prohibitive.

Key findings:

- Despite the perception that Consortia would take on a greater role in providing support to schools following the end of the NSP, in 2015 just under three-fifths of the senior leaders had accessed support from their Consortia to improve the quality of their teaching of literacy and/or numeracy. Over two-thirds indicated that they had accessed support from other schools. Where Consortia have found to be facilitating this type of activity this could be considered a positive outcome.

- Although anecdotal, in 2016 feedback from case study schools indicate that the role of Consortia in providing support may have increased following the end of the NSP.

- The most frequently mentioned support activity delivered by Consortia was the facilitation of school-to-school collaborative activities such as professional learning communities. The feedback on such activities was broadly positive.

- Despite investment by the Welsh Government in peer-to-peer support initiatives (such as the Outstanding Teachers of Literacy and Numeracy Programmes), the scale of this type of activity is relatively limited. Nonetheless, where practitioners receive support to deliver peer-to-peer support this can be effective.

- Given the emphasis placed by Consortia on the role of Challenge Advisers as a broker of support, it is notable that less than half of visited schools had accessed support to help them improve the quality of their teaching of literacy and/or numeracy despite feeling that they had unmet needs.

- Demand for support from subject experts outstripped the existing capacity of Consortia. Nonetheless where schools had accessed support this was helpful in supporting an improvement in the quality of their teaching of literacy and/or numeracy.

8. Impact of the NLNP in supporting improvements to professional practice

8.1   The LNF and the National Tests were thought by staff in primary, secondary and special schools to have brought a positive change to the Welsh education system. They were said to have had a positive impact on the quality of teaching and learning, use of assessment data and collaborative practice, as intended (and also summarised in the logic model in Chapter 1).

Perceived impact of the LNF and National Tests on the quality of teaching and learning

8.2   The most important indicator of the success of the LNF will be the extent to which it is found to support an improvement in the quality of teaching and learning in literacy and numeracy. It is instructive to consider the perceptions of senior leaders, not least because their confidence that the LNF will support positive pupil outcomes is crucial to securing the ongoing engagement of practitioners over the medium to long-term.

8.3   Considered in this light, the Welsh Government should be encouraged that, of those senior leaders who responded to the online survey in 2015, around four-fifths felt that the introduction of the LNF had a positive impact on the quality of teaching and learning at their school (80% in literacy and 78% in numeracy – see Figure 9-1). This was an increase on the proportion (just over two-thirds) in 2014 (70% and 67% respectively).

Figure 8-1: Perceived impact of the LNF on the quality of teaching and learning
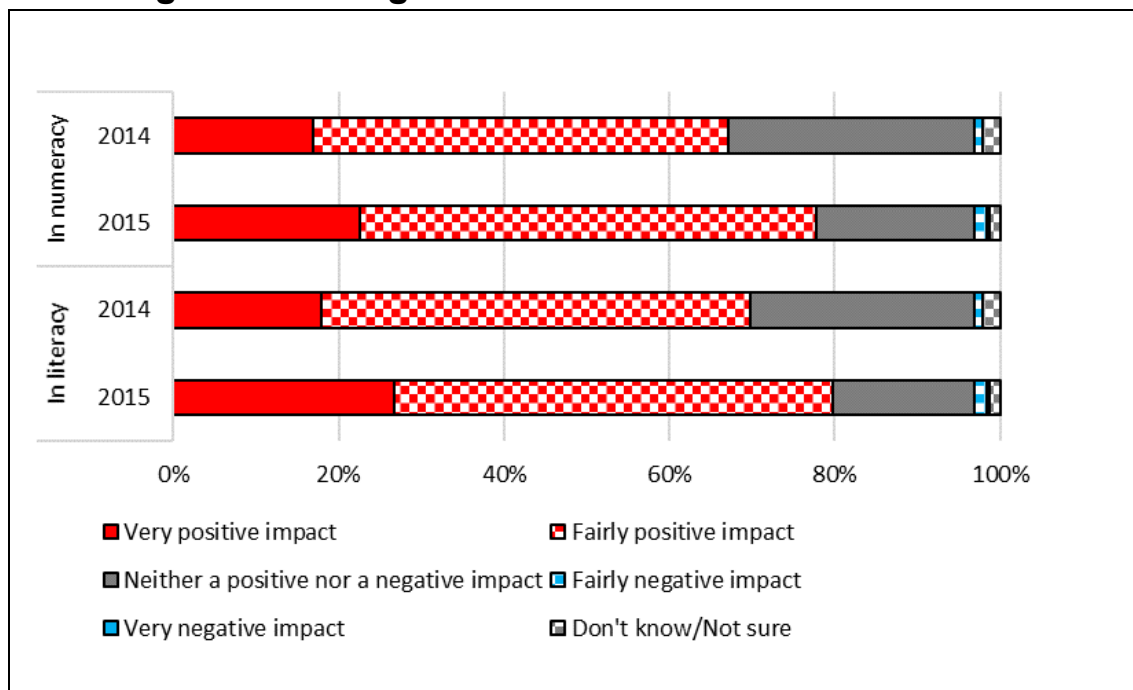
Source: Survey of School Leaders 2014 and 2015
Type of question: Single-response
N=Variable (352 in 2014 and 431 in 2015)
N. Missing = Variable
(In numeracy: 2014 = 157, 2015 = 108,
In literacy: 2014 = 157, 2015 = 110)

8.4   Interestingly, when the responses are considered by phase, in 2015 the impact of the LNF was perceived as having a more positive impact amongst secondary respondents than those from a primary background. This reflects a change from the earlier 2014 findings:

- In 2014, between one half and two-fifths of primary respondents felt that the introduction of the LNF had made a positive impact on the quality of teaching and learning in literacy and numeracy (46% and 39% respectively). Around one third of secondary respondents said this was the case (33% and 29% respectively).

- In 2015, the proportion of secondary respondents who indicated that the LNF had had a positive impact on the quality of teaching and learning had increased to over three-quarters in literacy (76%) and two-thirds (62%) in numeracy. Of those who responded to related questions from a primary school around two-thirds felt that the introduction of the LNF had had a positive impact (66% on the teaching of literacy and 67% on the teaching of numeracy).

8.5   In interpreting these findings, it may be helpful to reflect on the different starting points of primary and secondary practitioners. As discussed in the Interim Report, some practitioners (both primary and secondary) felt that the cross-curricular approaches promoted through the LNF were much closer to those already used in many primary schools. The LNF does appear to have encouraged some secondary schools to deliver more lessons using cross-curricular approaches; schools we visited in 2016 were looking for opportunities within the curriculum, with some engaging pupils in discussions about what they would like to learn and how, and then incorporating these ideas into lesson plans.

8.6   On the whole, there had been more limited gains in using cross-curricular approaches in secondary schools than in primary schools. Instead, there was evidence to suggest that secondary schools were making wider use of approaches teaching literacy and numeracy 'across the curriculum'. Each of the secondary classroom teachers we spoke with in 2016 mentioned that their lessons now placed a greater emphasis on literacy and numeracy as a result of the LNF, and noted that this was also informed by school-wide and departmental plans. As noted by one classroom practitioner:

> 'if you had asked a teacher who was responsible for teaching literacy and numeracy [prior to the LNF] they would have said those who teach English and Maths. Now I would be surprised if anybody didn't see it as a cross-curricular effort' (Classroom practitioner)

8.7   The findings from the school leaders' survey indicated a perception that the LNF and the National Tests were helping to improve the consistency and quality of literacy and numeracy teaching. Over one quarter of the 352 respondents felt that the introduction of the LNF had led to a fairly positive impact on the quality (29%) and consistency (28%) of teaching in both literacy and numeracy. The 2016 case study visits align with these findings, with senior leaders' views remaining mixed in 2016. Staff in secondary schools appeared to see clearer linkages between the National Tests and the steps taken to improve the quality and/or consistency of teaching and learning. However, in primary and special schools the links were not as clear and the National Tests were thought to have a limited impact on teaching and learning decisions.

8.8   During school visits, staff said that this was delivered through a range of strategic activities, such as whole-school planning of where literacy and numeracy would occur in lessons. Approaches in the classroom supported this further by adopting a consistent approach to the teaching of graphs (numeracy), or asking pupils to answer written and verbal questions in full,

properly constructed sentences (literacy) for example. The teachers we spoke with had no concerns about adopting a consistent, school-wide approach to literacy and numeracy and all were familiar with, and used resources provided by their school.

8.9   In line with more mixed feedback about the National Tests, around one-third of the respondents were unsure whether the National Reading Test (37%) and the National Numeracy Tests (32%) had yet had an impact (whether positive or negative) on the quality or consistency of learning (43% and 35% respectively). However, less than one-tenth thought that the Tests had either a 'fairly negative', or 'very negative' impact on these indicators (see Figure 8-1).

8.10   The 2016 case study visits align with these findings, with senior leaders' views remaining mixed in 2016. Staff in secondary schools appeared to see clearer linkages between the national tests and the steps taken to improve the quality and/or consistency of teaching and learning. However, in primary and special school settings the links were not as clear and the national tests were thought to have a limited impact on teaching and learning decisions.

8.11   A softer impact of the NLNP appears to have been on primary, secondary and special school teachers' self-reported confidence. This impact is multi-faceted, with teachers in case-study schools mentioning feeling more confident across different aspects of professional practice including:

- being more secure in their own literacy and numeracy knowledge, so they can question pupils better about their knowledge

- knowing that their lessons support the teaching of the LNF

- being more confident when making decisions about pupil targets, due to increased or improved use of data.

Perceived impact of the LNF and National Tests on the use of assessment data

8.12   Chapter 3 and 4 introduced the progress that schools had made implementing the LNF and National Tests. This section considers the perceived impact of the LNF and National Tests on the use of assessment data.

8.13   Despite the scale of the changes to their practice already made by many of the schools we visited in 2014, staff, for the most part, were hesitant about claiming any impact on practice at that stage. In all but two of the schools we visited then, interviewees felt that it was too early to make such judgements. Nonetheless, in most cases, schools were hopeful that the introduction of the

LNF would lead to an improvement in the use of assessment data to inform teachers about pupil needs, identify curriculum gaps and so support teaching and learning. By 2016, this hope appeared to be realised as staff in primary, secondary and special schools all spoke of increased use of assessment data for a variety of purposes.

8.14   It is also helpful to look at the evidence the 2014 and 2015 surveys provide on the impacts of the National Tests on teaching and learning. In line with improvements in the perceived utility of pupil-level data from the National Tests from 2014 to 2015, the proportion of senior leaders who felt that the availability of test data had a positive impact on the quality or consistency of teaching at their school increased from around two-fifths to around three-fifths, as shown in Figure 8-2. This provides further indication that schools have engaged with the Tests more over time, perhaps due to their perceived value in driving improvements in teaching and learning.

Figure 8-2: Impact of the availability of pupil level data from the National Tests on the quality of teaching and learning
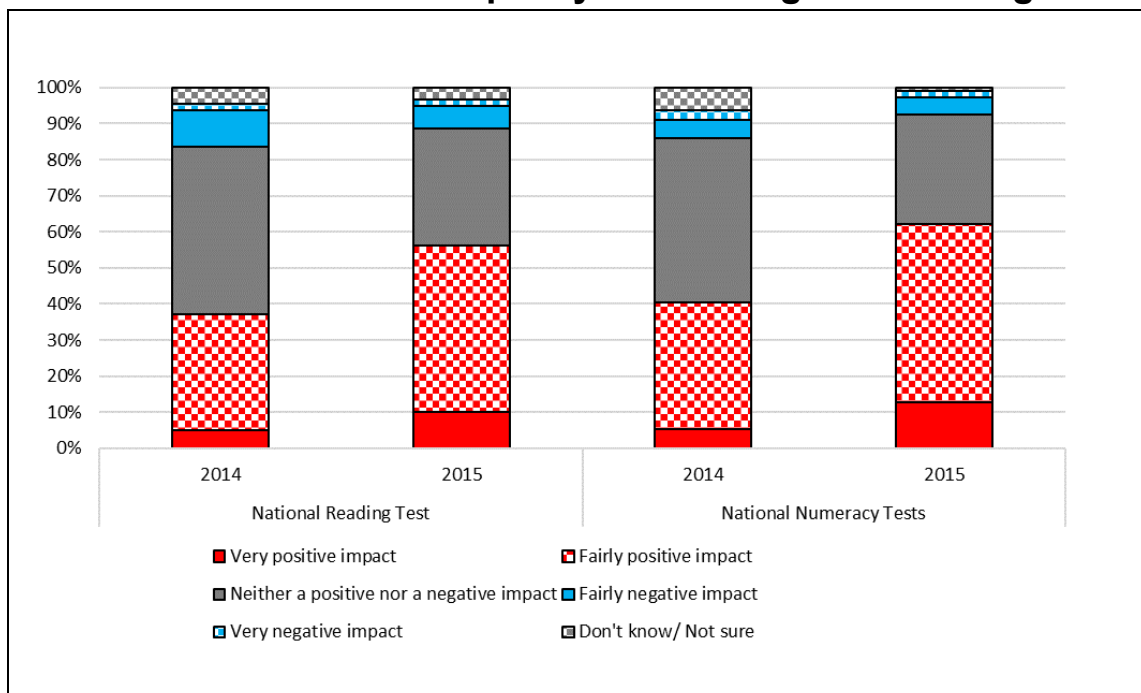
Source: Survey of School Leaders 2014 and 2015
Type of question: Single-response
N=Variable (352 for the National Reading Test and the National Numeracy Tests in 2014)
N. Missing = Variable
(National Reading Test: 2014 = 70, 2015 = 106,
National Numeracy Tests: 2014 = 109, 2015 = 113)

8.15　At the school level, data from the national tests was used to inform lesson planning and delivery. As noted above, school-wide and departmental plans for literacy and numeracy informed what teachers taught in the classroom. There was recognition that focusing on all the LNF strands all of the time would be overwhelming, so often schools chose to focus, over a defined period of time (typically an academic year or term), on strands where there was the greatest need for improvement. The strands on which they focused were identified based on pupils' results in the national tests, and, typically, were the areas in which pupils had the lowest results across the school. In secondary schools, there were examples of national test data being used to inform decisions about allocating pupils to 'catch-up' groups and subject sets.

8.16　Across all schools the adoption of a consistent, school-wide literacy and/or numeracy marking schema appeared to be central to embedding the LNF, although, numeracy marking schemes were less prevalent than literacy marking schemes. The marking schemes, typically, were developed by the literacy and/or numeracy coordinator with support from senior leadership, which helped to ensure that they were used. Classroom teachers were generally complimentary about these marking schema. They thought that they encouraged them to be more pro-active in assessing the use of literacy and/or numeracy skills in their lessons, reflecting that, previously, they might not have assessed them, or might have done so in ways that led to intra-subject confusion for the pupil. At the classroom level, therefore, assessment of literacy and numeracy across the curriculum appears to be more consistent as a result of the LNF.

Perceived impact of the LNF and National Tests on the quality and frequency of collaborative activity

8.17　In 2014, the NLNP appeared to have had limited impact on the quality and frequency of collaboration between teachers within schools as mentioned in Chapter 7. Of the 20 schools we visited, four (one primary, three secondary schools) thought that the NLNP had made a demonstrable difference to levels of collaboration between practitioners within their school. In 2016, there was evidence of greater collaboration both within and between schools. The LNF appeared to be the greatest contributing factor to achieving more collaboration. The National Tests appeared to have had a lesser impact, although some collaboration did occur as a result.

8.18　Nearly all staff we spoke with in primary, secondary and special schools in 2016 thought that the NLNP had contributed to collaboration *within* their school. The most common mechanisms for internal collaboration were INSET and twilight CPD sessions. Internal CPD provided a platform for coordinators

to cascade training and share learning from school to school collaboration, the sessions also supported a school-wide dialogue about the NLNP.

8.19 Collaboration clearly increased between 2014 and 2016, and positive impacts as a result of greater collaboration has been realised. Primary and secondary schools in three of the four consortia areas reported that their respective consortia had an influential role encouraging collaboration between schools and facilitating meetings. Schools who had attended these meetings thought that there had been a number of benefits:

- Gaining access to a broad range of expertise, widening the learning, ideas and resources available to them.

- Providing reassurance about their approach. Schools welcomed the opportunity to speak with others about their approaches and it appears to have given them greater confidence.

- Enabling moderation of approaches. The meetings were said to be useful for ensuring that a broadly consistent approach was taken across clusters (and, in some cases, wider geographical areas).

- Promoting improved relationships. Interviewees in schools thought that the meetings enabled relationships to be developed and strengthened. Staff thought that this made some schools less defensive and contributed to constructive conversations about how primary schools might address literacy and numeracy issues earlier to assist their secondary colleagues, for example.

- Enabling an increased focus on teaching and learning. Schools that had collaborated prior to the NLNP, thought that the LNF had encouraged consortia-led meetings to have a greater focus on teaching and learning which was thought to be positive.

Key findings

- The LNF has had a positive impact on the quality of teaching and learning in primary, secondary and special schools since its introduction in 2013. The impact of the LNF on the quality of teaching and learning has materialised more quickly than the national tests, which has been slower to be realised. This is what might have been expected, due to the sequencing of their introduction.

- The NLNP has resulted in greater use of across the curriculum and cross-curricular approaches to teaching literacy and numeracy. These approaches, introduced as part of LNF activities, have created a sense of shared responsibility amongst teachers to teach literacy and numeracy. This was being achieved in primary, secondary and special schools, although the respective journey of each type of school had been different. Secondary schools had made the biggest step change, due to their existing structures and processes, whereas primaries had made fewer changes due to prevalence of cross-curricular approaches prior to the LNF.

- The NLNP has had a positive impact on teacher collaboration within schools, and between schools. The LNF in particular was said to have encouraged teachers to communicate to ensure consistent and effective teaching of literacy and numeracy.

- The teaching of literacy and numeracy was thought to be more consistent as a result of the LNF. Operational approaches, such as school-wide marking schemes, appeared to be effective means to achieving this. Greater consistency was thought to be positive, particularly for pupils' understanding of literacy and numeracy.

9. Impact of the NLNP on pupil learning outcomes

9.1   The NLNP was designed to support improvements in pupil attainment in literacy and numeracy in schools in Wales. At this stage, it was not anticipated that the NLNP could have had a significant impact on outcomes. This is because, although two age cohorts of pupils progressed fully from Key Stage 2 to Key Stage 3 between 2011 and 2015 (and three age cohorts progressed fully from Key Stage 3 to Key Stage 4), none would have experienced teaching under the NLNP through the whole of a Key Stage (see Figure 9.5) . The analysis that was undertaken was carried out in order to explore the ways in which the impact of the NLNP could be best assessed in the future, given that these are programmes for all schools in Wales.

9.2   This chapter, therefore, explores the evidence on pupil outcomes and looks in detail at attainment across Key Stages, over time, for different groups of pupils.

- It looks first at the data that was used in the analysis and provides a profile of the pupil cohorts, exploring any changes over time (from 2011 to 2015) in their composition.

- It then provides an overview of attainment at a national level in English/Welsh and maths at Key Stages 2, 3 and 4, looking at emerging trends in the proportion of pupils (and sub-groups of pupils) achieving the expected levels in these subjects.

- The chapter then provides a discussion of the findings of a series of hierarchical (multilevel) models, which look at the changing outcomes at each Key Stage over time. These models control for background characteristics at school level (such as size and medium of instruction) and pupil level (such as gender, ethnicity, eligibility for Free School Meals, Special Educational Needs and prior attainment). This helps to explore how much of the observed changes in outcomes can be explained simply by changes in cohort composition and how much may be related to external factors (such as changes in pedagogy).

- Finally, the chapter looks at the relative rate of progress in different subjects amongst successive cohorts of pupils (those progressing from Key Stage 2 to Key Stage 3 and from Key Stage 3 to Key Stage 4 between 2011 and 2015). This analysis was undertaken in order to see whether the rate of progress made between Key Stages by the pupils who were exposed to the NLNP was greater than for pupils in earlier cohorts.

Data used

9.3 Analysis in this section is based on an extract from the National Pupil Database covering the period from 2011 to 2015.[31] The extract incorporated data on attainment in English, Welsh[32] and maths for all pupils who were in Key Stage 2, Key Stage 3 or Key Stage 4 in those years. It also includes more detailed teacher assessment data on pupil attainment in the speaking and listening, reading and writing elements of English and Welsh in Key Stages 2 and 3. It should be noted that, although the NLNP was not targeted directly at the teaching and assessment of Welsh as a second language, outcomes for the subject are reported here to provide an exploratory analysis of literacy in Welsh as a second language and provide the foundation for future research in this area.

9.4 The individual pupil-level data for all secondary schools in Wales was used both to provide descriptive statistics and to facilitate more complex multilevel analyses. This analysis was undertaken to assess whether there is any evidence at this early stage that the NLNP may have supported any improvement in pupil achievement in literacy and numeracy. In doing so, the following factors need to be borne in mind:

- The extent to which the LNF is embedded in schools is variable and the length of time over which particular cohorts of pupils will have experienced teaching under the LNF has also differed.

- Prior to the extension of the LNF in 2015, the NLNP focussed primarily on supporting pupils in Years 2 to 9, which means that one cannot attribute any changes in attainment in GCSE outcomes at Key Stage 4 directly to NLNP.

- Moreover, the NLNP is not operating in isolation for this age group; initiatives such as the GCSE English and Maths Project have sought to improve the quality of teaching for pupils at Key Stage 4.

- Finally, although the curriculum in English, Welsh and maths at Key Stage 4 supports the development of literacy and numeracy skills,

---

[31] The national reading and numeracy tests were designed as diagnostic tools, not a comparative measure of attainment between pupils. Standardised scores have been calculated to provide an assessment of **in-cohort** rather than **between-cohort** variation. In other words, it is possible to see whether or not a pupil's attainment in a year means that they have improved relative to their in-year peers, but not whether pupils in different cohorts are performing at higher or lower levels than their other cohorts. As a result, it is **not** possible to assess the comparative year-on-year progress of pupils in Wales.

[32] Including Welsh as a second language.

GCSE assessments do not provide a direct assessment of these skills[33].

Profile of the cohorts

9.5   The profile of the various cohorts from 2011 to 2015 data varied little in terms of their background characteristics, such as gender, ethnicity, eligibility for Free School Meals (FSM) and Special Educational Needs (SEN). In each academic year, for example, boys tended to outnumber girls (with a mean of 51% male and 49% female students across all three Key Stages). The proportion of pupils from minority ethnic backgrounds was consistently low (a mean of 7% at Key Stage 2 and 6% at Key Stages 3 and 4), although it varied by region and local authority.[34] Pupils eligible for FSM made up just under one fifth of each Key Stage cohort, while around one fifth had some form of special educational needs (though only between three and four per cent in each cohort had a statement of needs).

9.6   Using the official school language medium descriptor of StatsWales[35] our analysis of the data extract showed that the majority of pupils (around three-quarters of each age cohort) were educated in English-medium schools[36], with less than one tenth based in Welsh-medium schools. A further one sixth were educated in schools in which Welsh was spoken (with either Welsh or English as the dominant, though not sole, language of instruction).[37] These schools were bilingual or dual stream schools, used Welsh as a significant language of instruction alongside English, or were predominantly Welsh-medium but with significant use of English.

9.7   This homogeneity of the demographics across the years in pupil profiles and in school background characteristics, means that any changes in attainment outcomes for pupils are likely to be related to changes in, for example, the

---

[33] Although as noted previously a new GCSE in Mathematics and Mathematics – Numeracy was launched in 2015.

[34] As indicated in data from the Annual School Census, around 10% of all pupils are from a minority ethnic background, though they are not evenly dispersed across Wales. The highest proportion of such pupils are found in four local authorities: Cardiff (35% of all minority ethnic pupils are in schools in Cardiff and make up 31% of the school population in the city region); Newport (12% and 23% respectively); Swansea (10% and 13%, respectively) and the Vale of Glamorgan (5% and 11% respectively).

[35] https://statswales.gov.wales/Catalogue/Education-and-Skills/Schools-and-Teachers/Schools-Census/Pupil-Level-Annual-School-Census/Welsh-Language

[36] The Stats Wales descriptors attached to the data are used throughout this analysis rather than the general definitions used when defining school medium in the Welsh Government guidance http://gov.wales/topics/educationandskills/publications/guidance/defining-schools-welsh-medium/?lang=en

[37] The language medium used in special schools is not recorded as a descriptor and so these schools could not be incorporated into some aspects of the analyses.

curriculum that is taught, in the pedagogical approaches that are used in schools, or in the assessment regimes that are adopted.

Overview of pupil attainment

9.8 Over the five academic years (2010/2011 to 2014/2015) for which we analysed attainment data, the proportion of pupils reaching the expected levels at Key Stages 2, 3 and 4 in English, Welsh, Welsh as a second language[38] and maths **increased,** as set out in Figures 9-1 to 9-4. The analysis was based on pupils achieving:

- Level 4 or higher at Key Stage 2

- Level 5 or higher at Key Stage 3

- GCSEs in these subjects at Grade C or higher, which was translated (for analytical purposes) into Level 7 or higher at Key Stage 4 (see Annex D).

9.9 The increases were most marked in these subjects at Key Stage 3[39]. For English/Welsh and maths at Key Stage 2, the increases in the proportion of successful pupils were in the order of between five and eight percentage points, compared to between nine and twelve percentage points at Key Stage 3. Changes in the proportion reaching the expected level at Key Stage 4 were closer to those seen at Key Stage 2 (except in Welsh where change at Key Stage 4 was minimal – a difference of less than one percentage point).

---

[38] As noted previously the NLNP was not targeted directly at the teaching and assessment of Welsh as a second language. We have reported outcomes for that subject here to provide a full analysis of the teaching of Welsh and to provide an evidence base for any future research.
[39] Although this was not the case for Welsh as a second language, as here there was an even more notable rise at Key Stage 2 (an increase in the proportion of pupils reaching the expected levels of attainment in Key Stage 2 of over 25 percentage points from 51.6% to 77.2% over the five years).

Figure 9-1: Percentage achieving the expected attainment level at Key Stages 2, 3 and 4 in English:
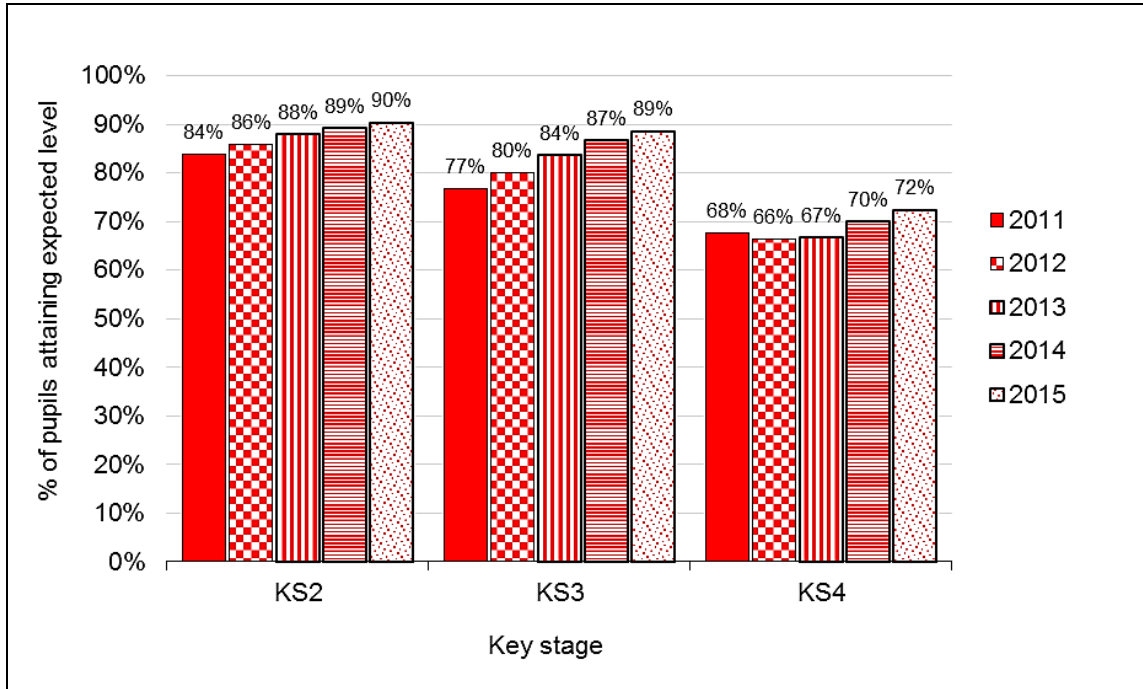
Source: SQW analysis of Welsh Government data extract

Figure 9-2: Percentage achieving the expected attainment level at Key Stages 2, 3 and 4 in Welsh:
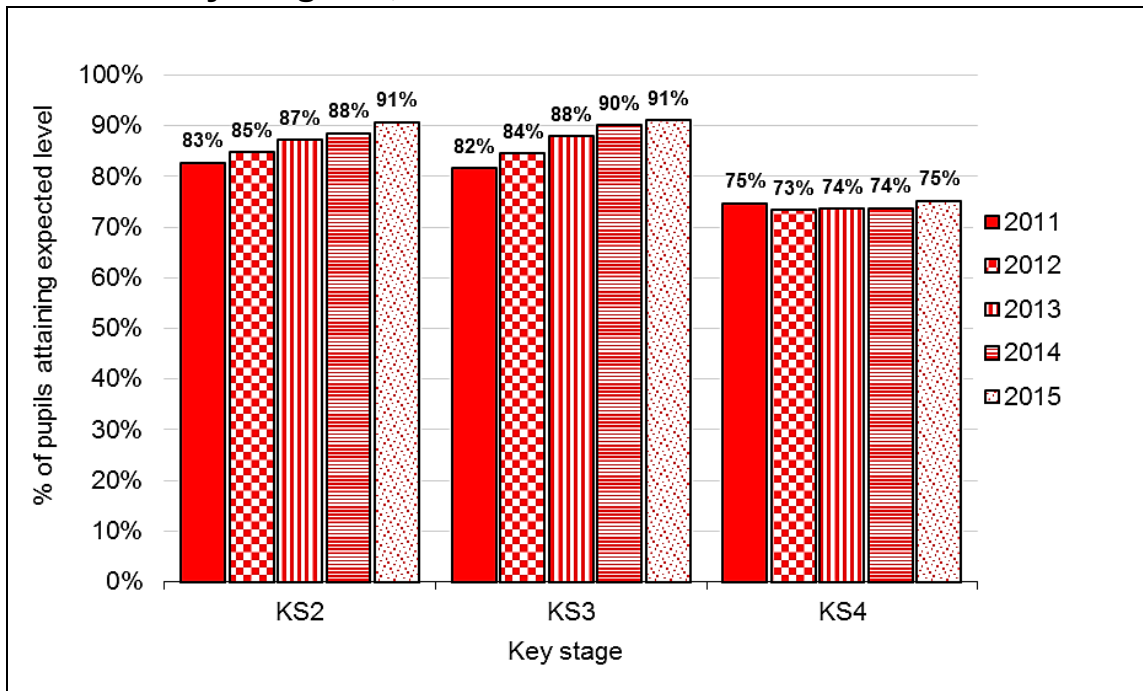
Source: SQW analysis of Welsh Government data extract

Figure 9-3: Percentage achieving the expected attainment level at Key Stages 2, 3 and 4 in Welsh as a second language:

Source: SQW analysis of Welsh Government data extract

Figure 9-4: Percentage achieving the expected attainment level at Key Stages 2, 3 and 4 in maths:

Source: SQW analysis of Welsh Government data extract

85

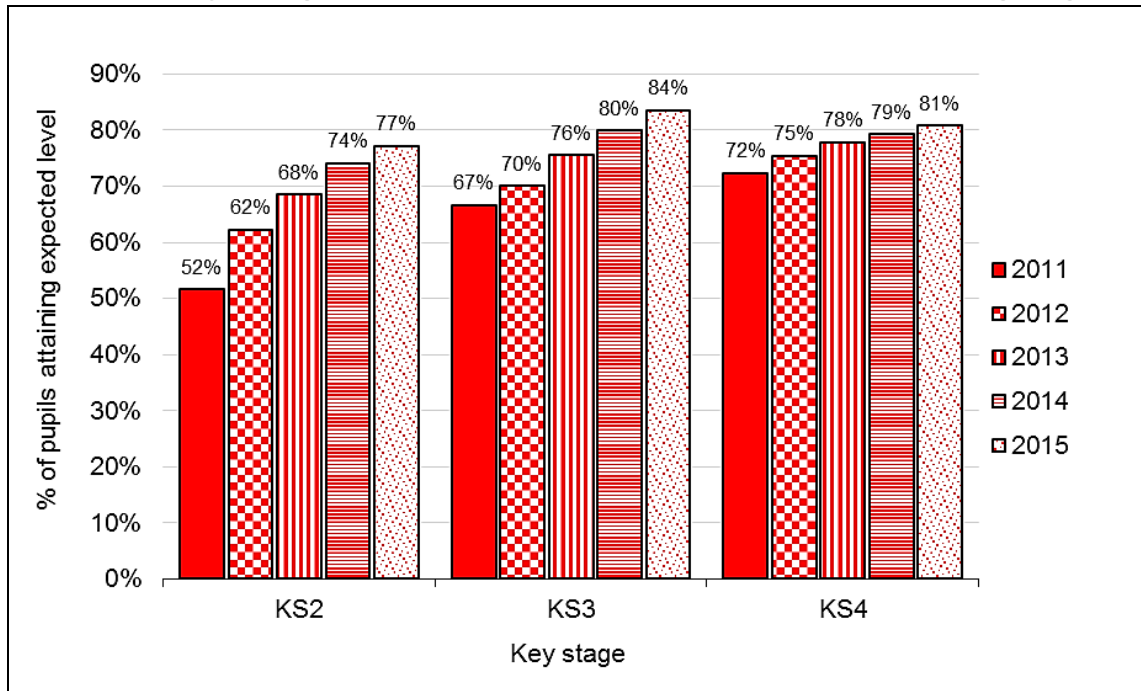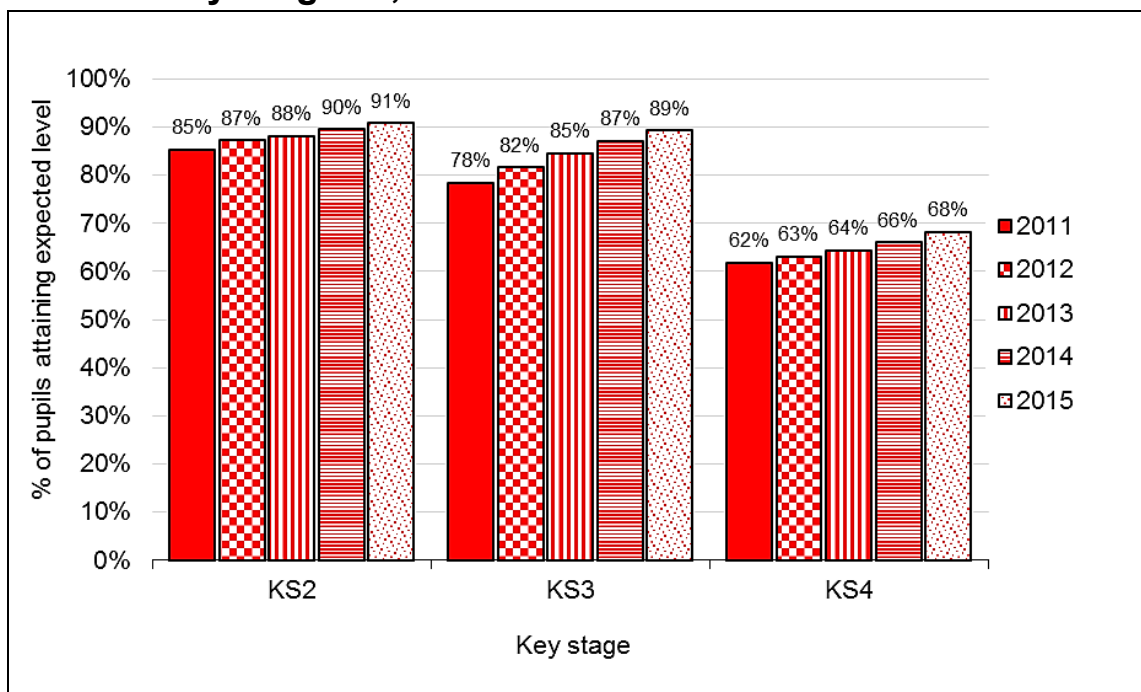9.10   It is encouraging that, while the proportion of pupils achieving the expected levels improved in all subjects and at each key stage across the five years, there has also been a **narrowing of the gap in attainment** between the more disadvantaged pupils and their peers since 2011.[40] This is evident both as measured by their eligibility for FSM *and* as indicated by the level of deprivation of the area in which their school was situated.

9.11   Between 2011 and 2015, the gap in Key Stage 3 attainment between pupils in schools in the most disadvantaged areas and the least disadvantaged areas in Wales decreased by five percentage points in English, Welsh and Welsh as a second language, and by six percentage points in maths. In 2011, 71% of those in the most disadvantaged areas achieved the expected level in English, compared to 83% of their peers in the least disadvantaged areas (a gap of 12 percentage points). By 2015, the proportion had increased to 85% in the most deprived areas (an increase of 14 percentage points over the five years) and 92% in the least deprived areas (an increase of nine percentage points), thus narrowing the gap to seven percentage points in that subject. The narrowing of the attainment gap was most evident at Key Stage 3 (see Annex D).

- In 2011, for example, 56% of FSM pupils achieved the expected level in English at Key Stage 3, compared to 81% of their less disadvantaged peers, a gap of 26 percentage points. Over the five years to 2015, that **gap was reduced by eight percentage points** (closing the gap to 18 percentage points, with 92% of non-FSM pupils and 74% of FSM pupils reaching the expected level).

- In maths, the gap in attainment was **reduced by seven percentage points**; 83% of non-FSM pupils, compared to 59% of FSM pupils achieved the expected levels in 2011 – a gap of 24 percentage points. In 2015, 92% of non-FSM pupils and 75% of FSM pupils achieved the expected levels (a narrower gap of 17 percentage points).

- The biggest change occurred in Welsh, where there was a 13 percentage point reduction in the gap between pupils eligible for FSM and their non-FSM peers. In 2011, 84% of non-FSM pupils and 60% of FSM pupils achieved the expected levels but in 2015, 92% of non-FSM pupils and 81% of FSM pupils achieved the expected levels.

---

[40] The exceptions to this narrowing of the gap were in a) Welsh at Key Stage 2, where the gap (of three percentage points) was constant between 2011 and 2015) and b) in Welsh as a second language at Key Stage 4. At Key Stage 4, less progress was made in the most disadvantaged areas (an increase in the proportion reaching the expected level from 72% to 76%) than in the least disadvantaged areas (an increase from 78% to 88%), leading to a widening of the gap from six percentage points to twelve percentage points.

9.12 A higher proportion of girls achieved the expected level of attainment across all Key Stages, and in all subjects *except* in Key Stage 4 maths. In this subject, 62% of boys and 61% of girls were successful in 2011, a gap of one percentage point that remained through to 2015 (with 69% of boys and 68% of girls achieving the expected levels in that year). However, in other subjects, the **performance gap between boys and girls narrowed in Key Stages 2 and 3** across the five years. This was most marked at Key Stage 3, where the gender gaps in those attaining the expected levels for English, for Welsh and for Welsh as a second language decreased by over five percentage points in each case.

9.13 **Progress was also evident amongst pupils with some measure of special educational needs.** The gap between Key Stage 3 pupils with no special needs and those receiving additional support (pupils with a special educational need but with no statement) achieving the expected level in English was 47 percentage points in 2011, but was reduced by 20 percentage points to 27 percentage points in 2015. The closure of the gap was rather less evident (at three percentage points) for those with a statement of special needs at Key Stage 3, although just under one third of the four per cent of pupils with such a statement in 2015 achieved Level 5 or higher in English and maths.[41]

9.14 In Key Stage 4, however, the story for such pupils was less positive in English, Welsh (as a first language) and maths. As we might expect, proportionally more pupils without SEN than their peers with SEN achieved the expected level of attainment at GCSE, with 82% of those without SEN achieving it in English and Welsh and 76% achieving it in maths. However, the gap between pupils with no SEN and those needing additional support **narrowed in English** (by two percentage points). It remained the same in Welsh and **widened** (by two percentage points) **in maths,** suggesting that more progress may have been made in raising the attainment of SEN pupils in English over that time period than in the other two subjects. The gap also **increased** between those with no SEN and with a statement or those receiving additional support (pupils with a special educational need but with no statement) by two percentage points in English, eight percentage points in Welsh and four percentage points in maths.

9.15 The exception to this story was in Welsh as a second language, where, by 2015, the gap in those achieving the expected level narrowed:

---

[41] It should be noted that the numbers of pupils with a statement of SEN at Key Stage 3 (1,119 in 2015, down from 1,381 in 2011) were low.

- between pupils without SEN and those receiving additional support (reducing from 35 percentage points to 23 percentage points)

- between those with no SEN and those with a statement or those receiving additional support (pupils with a special educational need but with no statement) (reducing from 43 percentage points to 21 percentage points).

9.16   The story with regard to ethnicity was not straightforward. Across all subject areas and across all Key Stages, the proportion of pupils from both white and minority ethnic backgrounds achieving the expected levels in the core subject areas increased, and, especially at Key Stage 3, with a higher proportion of pupils from minority ethnic groups being successful.

9.17   The biggest exception to this was amongst minority ethnic pupils taking GCSE Welsh as a first language at Key Stage 4.[42] Here the percentage of pupils successful in attaining the expected level in the subject decreased by nine percentage points (from 82% to 73%) over the five years, compared with an increase of one percentage point (to 75%) amongst pupils from a white ethnic background. That teaching of Welsh to minority ethnic pupils has become more successful in other Key Stages is evident in the increases over time observed amongst pupils in those age groups; an increase from 76% to 87% in Key Stage 2 and from 87% to 93% in Key Stage 3. The comparative level of success may simply be down to the greater ease with which (as evidence shows) younger pupils are able to adapt to a new language. However, the number of minority ethnic pupils in this dataset is very small and further work is needed to understand what is driving this pattern of attainment.

9.18   Overall, therefore, there has been a **marked improvement, across all Key Stages, in attainment in the core subjects at Key Stages 2, 3 and 4 over the five years from 2011**. While there are some between-pupil differences, the story of progress in these subjects is broadly positive. To conclude that the various improvements in English/Welsh and maths across the Key Stages and within and between different population groups (particularly at Key Stage 3) were associated with (or could be attributed to) the implementation of the NLNP alone would be to overstate the case, however. Not only were improvements in attainment noted prior to its introduction, but the level of

---

[42] It should be noted that the proportion of young people from black and ethnic minority groups in any Key Stage is relatively small (a mean of 7% at Key Stage 2, 5% at Key Stage 3 and 6% at Key Stage 4)

exposure of any single cohort to the teaching approaches and strategies influenced by it (or by the diagnostic tests and support programmes linked to it) was quite varied. It should also be noted that other Welsh Government policies have been introduced over this time period (including the Pupil Deprivation Grant) which may have contributed to improvements in outcomes.

9.19   For this reason, therefore, and rather than relying solely on the cross-sectional analysis of attainment data, we also explored the relative level of progress made by different cohorts of pupils over the period, controlling (where possible) for known differences between schools and between pupils. The following sub-section presents the story that emerged from that analysis.

Assessing progress over time

9.20   In order to ascertain whether being exposed to teaching under the LNF was associated with any changes in pupil outcomes, we adopted a hierarchical modelling approach (multilevel modelling), establishing two different sets of models to look:

- first, at the attainment of each year group against a range of different outcomes (the levels achieved in English, Welsh, Welsh as a second language[43] and Maths) in order to identify the main factors in the available data that appeared to be associated with higher levels of attainment (whether at school or pupil level)

- second, at the amount of progress between Key Stages made by pupils in different cohorts and the factors that appeared to be associated with greater levels of progress (including time since the introduction of the LNF).

9.21   In this second set of models we wanted to look at the **rate of pupil progress** (examining levels and sub-levels of attainment over time) rather than whether or not pupils had achieved the expected level of attainment (for which we would have used a logistic model). Since we wanted to consider pupil progress in similar terms within and between cohorts we translated Key Stage 4 data into comparable levels and sub-levels, rather than using total point scores at GCSE. While this may mean that some of the granularity in outcomes (particularly for the older pupils) may be lost, since raw scores are more detailed than sub-levels, using this approach enabled us to consider and compare the data across the three key stages in similar ways. It also facilitated an exploration of the association between teacher assessments (at

---

[43] As we noted above, the NLNP does not specifically target Welsh as a second language.

Key Stages 2 and 3) of speaking and listening, reading and writing outcomes in English/Welsh and the progress pupils made in English/Welsh over time.

9.22   At school level, the background factors built into the models included school size and level of deprivation. At pupil level, these variables included gender, ethnicity, eligibility for Free School Meals, Special Educational Needs status and the main language medium of tuition in their school. We should note that the five datasets to which we had access provided information at a single point in time (2011, 2012, 2013, 2014 and 2015) so we did not have prior attainment at earlier Key Stages for all pupils. Ideally, comprehensive models would also have included a range of other school-level variables (including consistent and comparative measures of school quality and ethos) and pupil-level variables. These pupil-level variables (both hard measures such as pupil attendance and softer measures such as attitudes to learning) would be those known from previous research to be associated with pupil attainment, but these data were not available to us at the time of analysis.

9.23   At this point we should emphasise that the models were exploratory and contained only a limited number of background variables, drawing on the data provided in the NPD extract. At the base case (the first run of the model before the background variables are included), most of the variance noted in outcomes (that is, the difference between levels achieved by the highest and lowest attaining pupils at the different Key Stages) in Key Stages 2 and 4 was seen (as might be expected) at pupil level (from 63% at Key Stage 2 to 75% at Key Stage 4). In other words, nearly two thirds of the difference in attainment amongst pupils at Key Stage 2 is down to differences in background characteristics between pupils. The remainder of the variance related to differences in pupil performance between schools.[44] At this stage, we also included information on the four Regional Educational Consortia in the models. None of the variance appeared to be at this level (in other words, there appeared to be no systematic or non-random variance by consortia) and so, in order to run the most 'parsimonious' models, we opted to run models at two levels only (school and pupil level). The explanatory power of the final models (which included pupil-level prior attainment) was high, explaining between 80 and 99% of the differences between schools and (depending on

---

[44] The models showed a surprisingly high proportion of the variance at school level at Key Stage 3 (69%), however, suggesting that outcomes at Key Stage 3 were more strongly associated with the schools than with differences between pupils. This finding would benefit from further exploration in order to see whether it was an artefact of the data or of the focus that there has been on Key Stage 3 in recent years in schools in Wales.

subject and key Stage) between one-quarter and two-thirds of the differences between pupils. [45]

Attainment at Key Stages 2, 3 and 4

9.24 Once background variables at school- and pupil-level had been included in the models, the findings related to attainment showed:

- successive cohorts of girls were associated with higher levels of attainment in English, Welsh and Welsh as a second language across all key stages

- successive cohorts of boys were associated with higher levels of attainment in maths across all Key Stages

- pupils from black and minority ethnic groups[46] were associated, year on year, with:

  ➢ higher levels of attainment in English at Key Stage 3 (though there were no significant differences at Key Stages 2 and 4)

  ➢ lower levels of attainment in Welsh at Key Stage 2 (though there were no significant differences at Key Stages 3 and 4)

  ➢ higher levels of attainment in Welsh as a second language across all Key Stages

  ➢ higher levels of attainment in maths across all Key Stages

- successive cohorts of pupils eligible for free school meals and with some level of special educational needs were associated with lower levels of attainment in English, Welsh, Welsh as a second language and maths across all Key Stages.

9.25 While the data on the proportion of pupils achieving the expected levels shows a closing of the attainment gap between girls and boys in English at Key Stages 2 and 3, the analysis suggests that girls continue to achieve higher overall levels in that subject, once the models control for other factors. This distinction is also evident at Key Stage 4. Equally, while girls' overall attainment in maths continues to improve in Key Stages 2 and 3, there is little to suggest that this has yet translated into a statistically significant improvement at Key Stage 4. The gap between boys and girls at Key Stage 4

---

[45] See Annex B.

[46] Even though the proportion of pupils from black and minority ethnic groups is small, these attainment findings are significant when all other background characteristics are taken into account.

(while not large) has been narrowed by only the smallest of margins over the last five years (0.15 percentage points).

9.26 For different sub-groups of pupils, the analyses suggest that some of the strategies supporting young people with special educational needs may be having an impact for some pupils and in some subjects, although improvements are by no means universal:

- the cohorts of pupils receiving additional support were associated with increasing attainment over time in English and in Welsh as a second language but appeared to be associated with reducing levels of attainment in maths (although the statistical association is weaker)

- successive cohorts of young people with a statement of SEN (or EHC) were associated with lower attainment over time in English and in Welsh, but with increased attainment in maths (although significant, the statistical association is relatively weak, however).

9.27 Some different outcomes were also evident between pupils in schools of different types; successive cohorts of pupils taught through the medium of Welsh, or predominantly in Welsh, were significantly associated with higher levels of attainment in Welsh at Key Stage 3 than pupils in English medium schools. Between 2013 and 2014 and between 2014 and 2015, there were also significant improvements in attainment at pupil level in these Welsh-medium schools, suggesting that there have also been some positive changes in the teaching of the subject in Welsh-medium schools over the last two years.

9.28 Improvements in attainment at Key Stage 3 were also evident in relation to more disadvantaged pupils. The data indicates that schools in which there were a high proportion of pupils eligible for Free School Meals were associated with lower levels of attainment in every subject across all key stages over time. However, as we have seen, more pupils eligible for FSM achieved the expected levels in recent years (even though their overall level of attainment remained lower than their peers). There was also clear evidence of improvement in recent years amongst pupils eligible for free school meals at Key Stage 3, once other background variables (including gender, ethnicity and SEN status) were controlled for. Pupils' scores at Key Stage 3 were higher in 2014 and 2015 in English, Welsh as a second language and maths (and in Welsh in 2015) than their FSM peers from previous years. This was also evident at Key Stage 4 in English (in 2014 and 2015).

Identifying age cohorts for the NLNP

9.29 These apparent changes over time, controlling for background variables, suggest the need to look at differences between successive age cohorts of pupils and whether or not the extent of improvement in the subjects that are core to the LNF can be linked to its implementation. Over the time period from 2011 to 2015, two age cohorts of pupils progressed fully from Key Stage 2 to Key Stage 3 and three age cohorts progressed fully from Key Stage 3 to Key Stage 4, as set out in Figure 9-5.

9.30 The discussion that follows looks at the progress made by these five age cohorts, building in pupils' prior attainment in the previous key stage. We also explore the levels of association between prior attainment in the various elements of Key Stage 2 English and Welsh scores (speaking and listening, reading and writing).

Figure 9-5: Structure of the five cohorts (LNF was introduced in 2013)

	Cohort 1	Cohort 2	Cohort 3	Cohort 4	Cohort 5
2011	KS2		KS3		
2012		KS2		KS3	
2013 (LNF introduced)			KS4		KS3
2014	KS3			KS4	
2015		KS3			KS4

Source: SQW

Progress from Key Stage 2 to Key Stage 3 (Cohorts 1 and 2)

9.31 Not surprisingly, high prior attainment at Key Stage 2 was associated with pupils making the most progress at Key Stage 3, and was particularly evident in relation to maths. The majority of pupils made at least two levels of progress between the Key Stages in English, Welsh and maths (the expected progress is a minimum of one level, from Level 4 to Level 5), those pupils with higher attainment at Key Stage 2 were associated with a progression of closer to three full levels.

9.32 Cohort 2, who would have had more exposure to teaching under the LNF, were associated with a greater level of progress (of about two additional months) in both English and Maths over the three years from Key Stage 2 to 3, once pupil-level and school-level variables were included in the subject

models.[47] While this is encouraging, the extent of progress in both subjects made by pupils in schools in which there was a high proportion of pupils eligible for Free School Meals was lower (by nearly one level) than that achieved by pupils in less disadvantaged schools.

9.33 That is not to say that there was no narrowing of the gap between socio-economically disadvantaged pupils and their peers at an individual level. Cohort 2 pupils eligible for Free School Meals appeared to have made more progress than similar pupils in Cohort 1, but the differences were not significant except in Welsh (as a first language), where the gap between disadvantaged and other pupils was reduced.

9.34 Clearly, improvements between cohorts were not universal; they varied markedly by pupil background and by school type, as summarised below:

- Girls in Cohort 2 made more progress in English than their female peers in Cohort 1, as well as making more progress than boys. This suggests, that the gender gap continued to widen across the cohorts for this subject.

- The marginally higher progress made by girls in all four subjects across the two Key Stages was not reflected in a greater level of progress in Cohort 2 than Cohort 1, other than in English, however. No gender differences were significant for Cohort 2 in maths or Welsh (whether as a first or a second language).

- Pupils with a statement of SEN and those receiving additional support (pupils with a special educational need but with no statement) in Cohort 2 made more progress in both maths and Welsh as a second language than their peers in Cohort 1, although there was a still a gap between their outcomes and those of their peers with no SEN.

- While there were no significant differences in the extent of progress made by the two cohorts in Welsh (whether as a first or second language), the attainment gap in this subject between pupils eligible for Free School Meals in Welsh-medium schools and their less disadvantaged peers in those schools was narrowed in Cohort 2.

- There were no statistically significant differences between the progress made by pupils in Welsh-medium and English-medium schools in any subject from Key Stage 2 to Key Stage 3, although the progress made by pupils in Welsh as a second language was significantly greater in

---

[47] No statistically significant difference between cohorts was evident for Welsh.

Welsh-medium than in English-medium schools even though this was only a small population of pupils.

- Pupils in bilingual schools made more progress overall in English and maths than those in English-medium schools. This was equivalent to just under 16 additional weeks of progress. However, the scale of difference in attainment was lower in Cohort 2 (around just over four weeks additional in English and about eight weeks in maths), suggesting that the differences between English-medium and bilingual schools were reducing.

9.35 Finally, while pupils' overall level of attainment in Key Stage 3 English and Welsh (and in maths) appeared to be most strongly associated with their reading scores at Key Stage 3, the amount of progression they made in the two languages from Key Stage 2 to 3 were more strongly associated with their writing scores.

Progress from Key Stage 3 to Key Stage 4

9.36 Progress from Key Stage 3 to Key Stage 4 was less dramatic than progress from Key Stage 2 to Key Stage 3. The mean level of progression from Key Stage 3 to Key Stage 4 was just under two levels in English, but less than one in Welsh (though over two levels in Welsh as a second language, reflecting the data on pupil trajectories reported earlier) and notably less than one level in maths. Once all available background variables at school and pupil level had been included, including prior attainment, girls continued to be associated with higher levels of progress than boys in all subjects but maths. Higher levels of progress were also seen for pupils from minority ethnic backgrounds (except in Welsh as a second language) and (other than in English), pupils from Welsh-medium schools.

9.37 As at Key Stage 3, while reading appeared to be most strongly associated with pupils' overall level of attainment in Key Stage 4 English and Welsh, it was their writing scores that were most strongly associated with the amount of progress they made in the two languages from Key Stages 3 to 4.

9.38 There was no evidence of a clear and consistent cohort effect, however. It should be remembered that, until 2015, the LNF was not in place for Key Stage 4. Pupils in Cohort 5 may have had some experience of the LNF at Key Stage 3, although their counterparts in Cohort 3 (who would have taken their GCSEs in the year in which the LNF was introduced at Key Stage 3) and Cohort 4 (who completed Key Stage 3 the year before its launch) would not. Nonetheless there are some statistically significant differences between the cohorts in terms of the progress they made over the three years from Key

Stage 3 to Key Stage 4, though we cannot attribute any differences to the LNF.

- Pupils eligible for Free School Meals in Cohort 5 made more progress in English than their counterparts in earlier cohorts (equivalent to just under four weeks) and so reduced the gap in attainment between them and their less disadvantaged peers by about 0.06 of a level.

- Pupils receiving additional support in Cohort 5 also made more progress in English than their peers in Cohorts 3 and 4, while those with a statement of educational needs made more progress in Welsh.

- The progress made by pupils in Welsh-medium schools in Cohort 5, however, was significantly lower in English, Welsh and maths (a trend also observed in maths in Cohort 4) than in earlier cohorts. This pattern was also evident in bilingual schools, suggesting that any gap between the progress of pupils in Welsh and maths (there was no significant difference in English) in English-medium and Welsh-medium schools (once prior attainment is controlled for), may be narrowing.

9.39 The analysis undertaken here, whilst exploratory, suggests that there may be value in continuing to look at cohort progression alongside pupil trajectory in core subjects in Wales in order to explore the longer-term impact of the NLNP.

Key findings

- Since 2011, there have been notable increases in the proportion of pupils achieving the expected levels of attainment in all three Key Stages in English, Welsh, Welsh as a Second Language and maths. While there were still gaps in attainment between pupils eligible for FSM and their peers, or with some measure of educational needs and their peers, by 2015, in most cases, these gaps had been reduced. In all cases, improvements were more obvious at Key Stage 2 and Key Stage 3 than at Key Stage 4.

- As the statistical analysis of cohort data has shown, there is little to suggest that these improvements can be attributed directly to the implementation of the NLNP. There is some indication that pupils made more progress in English and maths during transition from Key Stage 2 (in 2012) to Key Stage 3 in 2015 than their peers in previous years. At Key Stage 4, however, there was no evidence of a cohort effect (which may also reflect the fact that the extension of the LNF timing into Key Stage 4 only took place in 2015).

- Nonetheless, the exploratory analysis conducted here suggests that there is value in reviewing the impact of the NLNP through the lens of the exposure of different cohorts (and different sub-groups in those cohorts). This would enable analysts to look not only at change in the percentage of pupils achieving the expected levels of attainment, but at the progress being made by the pupils in those cohorts relative to their historical peers, at least for the next few years.

10. Findings and Recommendations

10.1   This section summarises the main findings from the evaluation and presents recommendations for the Welsh Government to consider to support the ongoing implementation of the LNF and the National Tests and improvements in pupil achievement in literacy and numeracy.

Impact of the introduction of the NLNP

10.2   As summarised in the logic model for the programme (see Figure 1-1 in Chapter 1), the NLNP was designed to address the issue of low literacy and numeracy levels amongst pupils in Wales in recognition that these were often associated with low educational achievement overall (particularly at Key Stage 4).

10.3   In order to achieve this, the Welsh Government and its partners invested in a range of mechanisms to support an improvement in the quality of teaching, the use of assessment data to support learning and the quality and frequency of collaboration within and between different schools. Since the introduction of the NLNP in 2013, there is evidence to suggest a **positive impact against all three objectives**. However, there is still work to do before the LNF and the use of National Test data can be considered fully embedded in most schools.

10.4   Statistical analyses of changes on the learning outcomes achieved by pupils between 2011 and 2015 have shown **notable increases** in the performance in English, Welsh (both as a first and second language) and Maths at Key Stage 2, Key Stage 3 and Key Stage 4. However, at this stage it is not possible to suggest that these improvements can be attributed directly to the implementation of the NLNP.

Impact on the quality of teaching

10.5   After a slow start, there is evidence to suggest that practitioners perceive that the implementation of the LNF, and to a lesser extent the National Tests, has had a **positive impact on both the quality and consistency of teaching** of literacy and numeracy. Perhaps understandably, progress in secondary schools continues to be slower than in primary schools where practitioners are less familiar with teaching literacy and numeracy across the curriculum (and where appropriate, incorporating cross-curricular approaches within their lessons). However, it was notable that in many of the schools we visited staff welcomed an increasing sense of shared ownership over the development of pupils' literacy and numeracy skills.

Impact on the use of assessment data to support teaching and learning

10.6   There was evidence of considerable changes in the administrative processes of schools to support and promote the use of data collected by schools to assess pupil progress in relation to the year-on-year expectation statements set out in the LNF. However, practitioners were hesitant to associate the introduction of the LNF with an improvement in the awareness of the progress made by individual pupils. Having said this, the implementation of a whole-school approach to tracking the progress of pupils (against the expectation statements in the LNF) was credited with improving overall consistency of assessment. It was expected that this would lead to an improvement in school development planning over the medium- to long-term.

10.7   There is some evidence to suggest that practitioners perceive the additional data from National Tests as supporting an improvement in the use of data. However, there is variability which makes it difficult to judge the extent to which data is supporting an improved understanding of the learning needs of individual pupils. For instance, while some schools used the data to identify pupils in need of additional support, others used it solely to inform school development planning.

Impact on the quality and frequency of collaborative activity

10.8   There is evidence to suggest that the introduction of the NLNP has supported an improvement in both the quality and frequency of collaboration between practitioners within schools and between different schools. The principal driver behind this activity has, increasingly, been Consortia who have taken on a key role in facilitating activity.

Barriers and enablers to implementation of the NLNP

10.9   The extent to which schools have been able to implement the LNF and learn from the National Test data appears to have been enabled by a number of factors while there have been other factors which have acted as a barrier to progress.

Enablers

10.10 Progress in embedding the LNF and the National Tests appears to have been enabled by:

- the prioritisation of improving literacy and numeracy outcomes for pupils by Consortia and the resourcing of support mechanisms to support this objective

- a growing consensus amongst practitioners of the potential value of the LNF in supporting an improvement in pupils' literacy and/or numeracy outcomes leading to the prioritisation of the Framework at a strategic and operational level

- increasing confidence amongst practitioners of the value of National Test data as an accurate assessment of achievement in literacy and numeracy

- the increased emphasis placed by Consortia on facilitating school-to-school and (to a lesser extent) peer-to peer partnership working, as a means of supporting the sharing of effective practice in embedding the LNF and the National Tests.

Barriers

10.11 Progress in embedding the LNF and the National Tests appears to have been hindered by:

- variability in the prioritisation attached by non-English/Welsh or maths specialists within the Consortia to implementing the LNF and using data from the National Tests.

- a perceived lack of clarity in guidance materials produced by the Welsh Government about how literacy and numeracy should be taught across the curriculum in a secondary and special school context and to what extent cross-curricular approaches (such as Rich Tasks) should be adopted in day-to-day practice

- uncertainty amongst practitioners of how best to use National Test data to support individual pupils, particularly those that have historically performed at a level below their age-related expectation

- the capacity of Consortia to support the identification and mitigation of the support needs of schools in their areas.

Recommendations

10.12 In considering how progress in implementing the NLNP can be maintained (and indeed enhanced) we recommend that the Welsh Government should:

- work with Consortia to encourage practitioners, regardless of their role to prioritise the use of the LNF and the National Tests as key tools in promoting an improvement in literacy and numeracy outcomes

- Consider whether additional resources could be set aside to support non-English, Welsh or maths specialists to improve the quality of their teaching of literacy and numeracy.

- Work with partners such as Estyn and the Consortia to identify examples of good practice in embedding the LNF and the use of National Test data within a school's curriculum planning and assessment cycle.

- Encourage schools to embed the regular assessment of the quality of teaching of literacy and numeracy within their self-evaluation cycle and ensure that any training needs in literacy and numeracy are prioritised

- Consider in advance of the introduction of adaptive online testing whether existing diagnostic tools provided to schools can be enhanced to better support practitioners in interpreting test results from paper-based tests and identifying appropriate approaches to supporting learner progression.

- Develop an analysis plan to support a longer term evaluation of the impact of the NLNP on pupil outcomes. This could build on the exploratory analysis undertaken as part of this evaluation.

- Encourage schools to widen their outreach activities with parents to support understanding of and engagement in the pedagogical practices being used to support the advancement of literacy and numeracy.

References

BMG Research (2014) Research into the implementation of the National Reading and Numeracy Tests (Online) Available at: http://gov.wales/docs/caecd/research/2014/140820-research-implementation-national-reading-numeracy-tests-en.pdf (Accessed: 31/05/2017)

Carr C and Morris M (2015) Evaluation of the National Literacy and Numeracy Programmes: Interim Report (Online) Available at: http://gov.wales/statistics-and-research/evaluation-national-literacy-numeracy-programmes/?lang=en (Accessed: 31/05/2017)

Donaldson G (2015) Successful Futures (Online) Available at: http://gov.wales/docs/dcells/publications/150225-successful-futures-en.pdf (Accessed: 31/05/2017)

Estyn (2013) Annual Report 2012-13 (Online) Available: http://www.estyn.gov.uk/english/annual-report/annual-report-2012-2013/ (Accessed: 05/01/2015)

Estyn (2015) Improving schools through regional education consortia (Online) Available at: https://www.estyn.gov.wales/thematic-reports/improving-schools-through-regional-education-consortia-june-2015 (Accessed: 02/09/2015)

Furlong J (2015) Teaching Tomorrow's Teachers (Online) Available at: http://gov.wales/docs/dcells/publications/150309-teaching-tomorrows-teachers-final.pdf (Accessed: 10/03/2015)

Leighton Andrews (2011) Teaching makes a difference (Online) Available at: http://giv.wales/topics/educationandskills/allsectorpolicies/ourevents/teachingmakesadifference/?lang=en (Accessed: 05/01/2015)

OECD (2012) PISA 2012 Technical Report (Online) Available at: http://www.oecd.org/pisa/ (Accessed: 05/01/2015)

Welsh Government (2013) National Literacy and Numeracy Framework (Online) Available at: http://learning.wales.gov.uk/docs/learningwales/publications/130415-lnf-guidance-en.pdf (Accessed: 05/01/2015)

Welsh Government (2013a) Programme for Government (Online) Available at: http://gov.wales/about/programmeforgov/?lang=en (Accessed: 05/01/2015)

Welsh Government (2013b) Professional Learning Communities (Online) Available at: http://learning.wales.gov.uk/docs/learningwales/publications/130830-plc-guidance-en.pdf (Accessed: 05/01/2015)

Welsh Government (2013c) Supplementary curriculum planning guidance (Online) Available:
http://learning.gov.wales/docs/learningwales/publications/130124supplementarycurriculumguidanceen.pdf (Accessed: 04/10/2016)

Welsh Government (2013d) School Effectiveness Grant and Pupil Deprivation Grant 2013–2015 (Online) Available at: http://gov.wales/docs/dcells/publications/130426-school-effectiveness-grant-2013-2015-en.pdf (Accessed: 05/01/2015)

Welsh Government (2014) Assessment, recording and reporting using the National Literacy and Numeracy Framework (Online) Available at:
http://learning.wales.gov.uk/docs/learningwales/publications/140710-assessment-recording-reporting-using-the-lnf-en.pdf (Accessed: 05/01/2015)

Welsh Government (2014a) The national model for regional working (Online) Available at:
http://gov.wales/topics/educationandskills/publications/guidance/national-model-for-regional-working/?lang=en (Accessed: 01/10/2014)

Welsh Government (2014b) Curriculum for Wales: Phase 1 - revised literacy and numeracy arrangements (Online) Available at:
http://gov.wales/consultations/education/curriculum-for-wales-revised-literacy-and-numeracy-arrangements/?lang=en (Accessed: 05/01/2015)

Welsh Government (2014c) National Reading and Numeracy Tests (Online) Available at: http://learning.wales.gov.uk/resources/improvementareas/assessment-and-target-setting/national-reading-and-numeracy-tests/?lang=en (Accessed: 05/01/2015)

Welsh Government (2014e) Qualified for Life (Online) Available at:
http://gov.wales/docs/dcells/publications/141001-qualified-for-life-en.pdf (Accessed: 05/01/2015)

Welsh Government (2014f) Research into the implementation of the National Reading and Numeracy Tests (Online) Available at:
http://gov.wales/docs/caecd/research/2014/140820-research-implementation-national-reading-numeracy-tests-en.pdf (Accessed: 06/03/2015)

Welsh Government (2014g) Revised areas of Learning (Online) Available at:
http://gov.wales/docs/dcells/consultation/141017-revised-areas-of-learning-responses.pdf (Accessed: 05/01/2015)

Welsh Government (2014h) Rewriting the future: raising ambition and attainment in Welsh schools (Online) Available at: http://learning.gov.wales/news/sitenews/family-and-community-engagement-toolkit-and-guidance/?lang=en (Accessed: 05/05/2015)

Welsh Government (2014i) School Census Results 2014 (Online) Available at: http://gov.wales/docs/statistics/2014/140724-school-census-results-2014-en.pdf (Accessed: 05/01/2015)

Welsh Government (2015) Minister's Written Statement – New Deal for the Education Workforce (Online) Available at: http://gov.wales/about/cabinet/cabinetstatements/2015/newdealeducation/?lang=en (Accessed: 09/07/2015)

Welsh Government (2016) The National Literacy and Numeracy Programme - a strategic action plan (Online) Available at: http://learning.gov.wales/resources/browse-all/national-literacy-and-numeracy-programme/?lang=en (Accessed: 16/01/2017)

Welsh Government (2017) National Reading and Numeracy Tests – Test administration handbook 2017 (Online) Available: http://learning.gov.wales/docs/learningwales/publications/161101-test-admin-handbook-2017-en-v2.pdf (Accessed: 16/01/2017)

Annex A: Background to the NLNP

A.1   The National Literacy and Numeracy Programmes (NLNP) sit at the heart of the Welsh Government's Programme for Government (Welsh Government, 2013a) and the Department for Education and Skills (DfES) School Improvement Action Plan (Leighton Andrews, 2011) and have more recently been fully endorsed in Qualified for Life (Welsh Government, 2014a). The rationale behind the NLNP is the desire to address the issue of low literacy and numeracy levels amongst pupils in Wales, and to take steps to ensure that this is addressed. The NLNP seeks to improve achievement and raise educational standards through improved and enhanced teaching practices in literacy and numeracy (supported through initial teacher education and training – ITET, and a range of professional development activities) and improved assessment of progress (through a national programme of testing). The NLNP comprises of a number of elements including legislative measures such as the introduction of the National Literacy and Numeracy Framework (henceforth referred to as the 'LNF') and the National Reading and Numeracy Tests (hereafter referred to as the 'National Tests') and support activities. The principal components of the NLNP are briefly summarised below.

The LNF

A.2   The LNF was developed in partnership with practitioners and phased in over a two year period, being first published in January 2013. Since September 2013, schools in Wales have been required to place the LNF at the heart of the school curriculum. The LNF encourages an approach to teaching and learning across the curriculum centred on the development of pupils' literacy and numeracy skills from Reception through to Year 9. For literacy the key strands are; oracy, reading and writing skills, and in numeracy; numerical reasoning, number skills, measuring skills, and data handling skills. The LNF is a continuum of learning for all learners including those with additional learning needs. It also supports practitioners in being able to assess the progress of pupils. Since September 2014, assessing the progress of students against the expectation statements of the LNF has been a statutory requirement.(Welsh Government, 2013).

The National Tests

A.3   The National Reading Test and a National Numeracy Test (procedural) were introduced in May 2013. In May 2014, the National Numeracy Test (reasoning) was introduced. The Welsh Government adopted a phased approach to the introduction of the national tests to allow schools time to

prepare for their introduction and access available support. The National Tests were designed to supplement the formative evidence collected by practitioners through the assessment of pupil progress against the expectation statements set out in the LNF. They represented the Welsh Government's efforts to deliver a consistent approach to the assessment of pupils from Year 2 to Year 9. They provide a basis on which practitioners can diagnose and assess the performance of their pupils against their peers, locally, regionally and at a national level and have been designed to facilitate reporting to parents.

Measures available to support and deliver the programme

A.4   The NLNP includes a range of measures designed to improve the quality of literacy and numeracy provision in Wales. In addition to the LNF and the National Tests, it includes:

- **The National Support Programme (NSP):** Commissioned by the Welsh Government in January 2013 and delivered by CfBT Education Trust (CfBT), the NSP has represented perhaps the single greatest investment to support schools in the implementation of the LNF. Following a phased model of delivery, every primary and secondary school in Wales has been able to access a targeted support programme (after a short period at the outset Special schools and Pupil Referral Units also became eligible for support). Launched in February 2013 through a series of national events, the NSP was delivered in four distinct phases:

- **Phase 1: Understanding the LNF.** Delivered from March 2013 to January 2014, NSP Partners[48] engaged schools, and introduced the LNF. Work was also done to establish where schools were in terms of responding to the LNF and to identify immediate priorities for support.

- **Phase 2: Audit and Direct Partner Support** Completed in April 2014, NSP Partners supported schools in the completion of a self-evaluation or audit of their progress in implementing the LNF and provided advice and information on the initial stages of implementing the LNF. This was used to help the identification of priorities for support.

- **Phase 3: School Implementation Support.** From April 2014 to July 2015 based on the priorities identified in the school audits, NSP

---

[48] Every school in Wales is eligible to receive support from an NSP Partner. NSP Partners have been recruited by CfBT and are responsible for supporting schools to introduce the LNF and the National Tests through a tailored programme of support.

Partners coordinated a targeted programme of support, including access to subject-specialists.

- **Phase 4: Sustaining and embedding.** The focus of this phase was on mainstreaming activity and planning for ongoing support for the LNF as the NSP was phased out and accountability for the delivery of support transferred to the Consortia. This phase was intended to run between September 2015 and July 2016, however progress made by Consortia and the NSP meant that the phase was delivered alongside phase 3 and the NSP was brought to a close in July 2015.

- **The Outstanding Teachers of Literacy and Numeracy Programme (OTLN):** In order to access the School Effectiveness Grant (from 2013 to 2015) regional education Consortia (henceforth referred to as 'Consortia') were required to support: '*sharing of best practice through the use of outstanding teachers of literacy and numeracy to provide coaching and mentoring opportunities for teaching staff who are in need of additional support* (Welsh Government, 2013c). Following the launch of the Educational Improvement Grant, from April 2015, the Consortia have gained increased flexibility to choose how to use their funding to support an improvement in the quality of teaching of literacy and numeracy in their areas. Considerable latitude in programme-level guidance through the SEG enabled the delivery models adopted by the four Consortia to differ, both in terms of the number of OTLs or OTNs recruited, and in the intensity of support provided. With the launch of EIG, such a diversity of approach is likely to increase as Consortia seek to further adapt their initial model to fit with local needs and priorities.

- **A range of guidance materials and resources housed on the Learning Wales website:** Although not specifically designed solely to support the NLNP when it was launched in September 2013, Learning Wales was developed to provide a one stop shop for practitioners to access the latest statutory guidance and contemporary research. By providing practitioners with access to higher quality resources, particularly around literacy and numeracy, it is hoped that this will support an improvement in the quality of teaching in literacy and numeracy. Specific LNF support made available through Learning Wales included guidance documents, training packs and a range of exemplification and classroom resources.

- **Specific guidance developed to support the development of Professional Learning Communities (PLCs):** Initially launched in

2008 to support the implementation of the School Effectiveness Framework, the National Model for PLCs was developed by the Welsh Government to provide practitioners with an effective model of peer-to-peer collaboration. PLCs are based on current research on the effectiveness of different types of peer-to-peer working and the characteristics of effective learning models. Using the National Model, PLCs have the potential to enhance the quality of professional learning. (Welsh Government, 2013b).

- In 2014, the Minister for Education and Skills launched the **New Deal for the Education Workforce**, underpinned by a Professional Learning Model (PLM). The PLM is based on professional learning approaches proven to have the most sustainable impact on raising standards of professional practice. One of the four core strands of the PLM is focussed on 'Effective Collaboration' (Welsh Government 2015).

A.5 In turn, these initiatives are reinforced by **support offered by the four regional education Consortia (Consortia), principally through linked Challenge Advisers (CA).** As outlined in the National Model for Regional Working, Consortia have taken on a key role in supporting schools to improve the quality of teaching and literacy and numeracy, principally by supporting the implementation of the LNF alongside support offered by the NSP. Although the delivery model adopted by Consortia has differed depending on local circumstance, and the preferences of their constituent Local Authorities (LAs), a key part of this must include provision for each school to have access to a Challenge Advisor (CA). CAs provide a direct link between the Consortia, the appropriate LA and a school, and provide a source of support and challenge. Responsible for taking forward all aspects of school improvement, this includes support around teaching of literacy and numeracy. Where required, CAs are authorised to broker access to specialist support. In many cases this will mean the provision of funding for access to support from subject specialists.

Annex B: Research Design

B.1 This section discusses the approach adopted by the evaluation team in order to meet the aims of the study. The key research activities by strand are summarised in Table B-1. The following text discusses the methods used for this final phase of the research only; full details on the activities in the earlier phases are included in the interim report.

Table B-1: Key research activities by strand

Evaluation Strand	Evaluation Activities	Description
Process Evaluation	Stakeholder consultations	Interviews with key stakeholders in September-October 2013, and July-September 2014 and July 2015- July 2016
	E-survey of school leaders	An e-survey of school leaders in primary and secondary schools (including specialist schools) in June-October 2014 and May-July 2015
	E-survey of Outstanding Teachers	An e-survey of Outstanding Teachers of Literacy and Numeracy in June-July 2014
	Area-based case studies	Visits to twenty schools in four local authority areas in September to December 2014 and 19 schools in six local authority areas in January to July 2016
	Thematic case studies	Two thematic studies in September to December 2014 and January to March 2014. • *The impact of the NLNP on NQTs*: Interviews recently qualified teachers and school-based mentors. • The impact of reforms to Literacy and Numeracy Provision within *Initial Teacher Training:* Interviews with senior staff, lecturers, ITT students and school-bases mentors.
Impact Evaluation	Baseline and trend analysis of pupil attainment data	Analysis of baseline and pupil attainment data from the Schools Census

Source: SQW

Stakeholder consultations

B.2 Initial stakeholder consultations, which took place in September-October 2013, were followed up by a further round of meetings in July-September 2014 and July-September 2015, and some additional interviews in the period

up to July 2016. Interviews were targeted at those with strategic oversight of key elements of the NLNP. These have included:

- Project Leads at the Welsh Government for each element of the NLNP

- Literacy and/or Numeracy Lead at Estyn

- the Head of the MEP Alliance

- the Expect Advisor to the Welsh Government for Initial Teacher Training

- the Literacy and/or Numeracy Lead in each of the four RECs

- the accountable officer for the delivery of the National Reading and Numeracy Tests at the National Foundation for Educational Research

- the accountable officer for the delivery of the NSP at CfBT Education Trust

- the Heads of the three ITT Centres in Wales.

B.3   Consultations were conducted using a semi-structured topic guide. Where possible, meetings were undertaken face-to-face, but some were undertaken by telephone. A total of 15 consultations took place in September-October 2013. Thirteen consultees contributed to discussions in July-September 2014. Nineteen did so between July 2015 -July 2016.

B.4   Consultations were used to enrich our understanding of each element of the NLNP, and its impact on educational professionals. We have also looked to understand the barriers and enablers encountered by stakeholders in implementing the NLNP, and how this has been perceived to have had an impact on the performance of the Programmes.

E-survey of school leaders

B.5   We undertook an e-survey of school leaders in Wales in late June-October 2014 and in May-July 2015. Targeted at senior leaders in Primary and Secondary schools (including senior leaders in specialist settings) this survey has aimed to provide an insight into:

- Levels of school engagement with the NLNP

- Reasons for accessing support or implementing changes

- Reasons for not accessing support or implementing changes

- The challenges faced by schools accessing support and implementing changes

- The perceived impact of the NLNP on the quality and consistency of the teaching of literacy and numeracy.

B.6   Using contact information provided by the Literacy and/or Numeracy Leads in each of the four Consortia, the survey was sent out to a total of 1,605 email addresses in June 2014. Of these, 1,575 were confirmed as valid addresses. In 2015, refreshed contact information was provided by one of the three consortia areas. In total the survey was sent out to 1,561 valid email addresses. To maximise the response rate to the survey, a number of techniques have been adopted by the evaluation team in partnership with the Welsh Government:

- The survey was promoted in the Welsh Government's weekly newsletter. This introduced the evaluation team and discussed how the findings would be used.

- Where possible, SQW sent a personalised link to the survey to each senior leader for whom we had contact information. This set out the purpose of the survey and invited them to respond. An email address for one of the evaluation team was also provided, this enabled potential respondents to provide feedback on the survey and/or ask any questions about its purpose and use.

- Respondents were invited to respond to the survey in either English or Welsh, depending on their personal preference. The introductory email was also provided in both languages.

- A reminder strategy was put in place to encourage completion by non-respondents. A reminder email, with a direct link to the survey, was sent out on a bi-monthly basis between July and October 2014.

B.7   In 2015 responses were secured from 431 schools (a response rate of 28%). This was a marked increase (18%) on the 352 responses achieved in 2014, and is likely to have indicated greater familiarity amongst senior leaders of the evaluation and the importance placed on the study by the Welsh Government. Nonetheless, despite the improved response rate, in interpreting the results of the survey it is important to acknowledge a number of constraints on our analysis. Primarily, although a sample size of 431 has the potential to provide reasonably accurate insights into the population as a whole, care must be taken when examining any sub-populations within this.

B.8   In determining the extent to which findings derived from the survey are likely to provide a reliable insight into the population, it is important to consider how the characteristics of respondents compare to those of the whole population. For instance, responses comprised of school leaders from 257 primary (60% of the respondents) and 105 (24% of the respondents) secondary schools, with a further 69 respondents representing middle schools, Pupil Referral Units and Special Schools. As of January 2015, the Schools Census indicates that there were a total of 1,330 (around 84% of the population) primary schools, and 207 secondary schools (around 13% of the population). (Welsh Government, 2015) This indicates that we had a proportionately higher response from secondary schools and a proportionately lower response from primary schools than might be anticipated from the national profile. As such, in interpreting our results it will be important that we consider the extent to which this respondent profile might have influenced our results. That said, by obtaining responses from 51% of all secondary schools in Wales (if broken down by school-type) the results obtained by secondary school leaders have the potential to provide a more accurate picture of the views of that population as a whole.

B.9   As of January 2015, a total of 489 (around 31%) schools in Wales were classified as Welsh Medium (including Dual Stream, Bilingual and Transitional schools as appropriate). (Welsh Government, 2014g) School leaders from 125 Welsh-medium schools (26% of the population of such schools) responded to the survey. This response rate gives us confidence that the views of Welsh-medium practitioners have been taken into account.

B.10   Despite the broadly representative breakdown of respondents, it was notable, however, that the number of respondents to individual questions was variable. The minimum number of non-responses from school leaders in 2015 to questions pertaining to the National Reading Test was 106 (25% of the total number of respondents and higher than the seven per cent of respondents in 2014). Conversely, only 70 respondents (16% of the total number of respondents) to the survey did not answer questions pertaining to the embedding of the LNF in the assessment cycle in the school, which compared favourably with the 263 missing responses in 2014 (75% of all respondents in that year). The proportion of item non-responses has been taken into account in the survey analysis, although the charts in the report present the data based on respondents only

Area-based case studies

B.11   We conducted 20 school case study visits in four LA areas in September-November 2014. A further 19 visits took place in January-July 2016. Visits were undertaken in order to understand the awareness, engagement and impact of key elements of the NLNP on individual practitioners, schools, and the wider school cluster.

B.12   To support this approach we took into account a number of considerations in the selection of case study schools in 2014 and in 2016:

- **The REC to which the school belonged**; In order to take account of differences in the approach adopted in each REC, five schools were selected within each REC area.

- **The historic performance of each LA**: Within consortia areas, historically, pupil outcomes have differed considerably. Using data pertaining to the progress made by disadvantaged pupils, and feedback from the Literacy and/or Numeracy Lead in each area, we identified two LAs representing those with the most favourable and least favourable results.

- **The nature of the local education ecosystem**: In order to develop an understanding of the impact of the NLNP on the culture of education within specific localities, and in consultation with the Literacy and Numeracy Lead in each REC we initially identified two secondary schools within a 10-15 mile radius of each other within the target LA. To give us a good cross-section of different levels of historic performance schools, where possible schools were selected at a variety of different stages in their school improvement journey. Once engaged, and with the support of the appropriate CA we recruited a further two primary schools (in most cases one feeder for each secondary school) and a local Special School or Pupil Referral Unit (PRU). This gave us a total of five schools in each case-study area.

- **The language of schools**: Steps were taken to ensure that a number of Welsh-medium schools were included within the sample.

B.13   Consistent with the approach set out above between September and November 2014 we undertook a total of 20 school visits in four LAs (one in each Consortia area). Although we had initially planned visits to eight secondary schools and eight primary schools, visits were undertaken in seven secondary schools, nine primary schools, three special schools and one PRU. The decision to recruit the additional primary school in one of the four areas

was taken following the decision by one secondary school to pull out due to a change in senior leadership, and the reluctance of other local secondary schools to engage at short notice. Faced with the alternative of looking at a different geographic area, the decision was taken to recruit an additional feeder primary school.

B.14   In 2016, the intention had again been to visit 20 schools across four LAs (one in each Consortia). In practice, we undertook 19 school visits in six LAs (across all four Consortia areas). The decision to increase the sample of schools into additional local authorities was driven by the reluctance of senior leaders to participate in the study. Common concerns included the potential distraction for pupils and teachers of a visit during the examination season and the need to justify engagement in 'yet another research project' (Senior Leader in a Primary School). Unfortunately, one secondary school, with whom a visit had been booked, was unable to facilitate a visit on the day due to staffing issues. We were unable to rearrange the visit to the school or to set up a visits to another secondary school before the end of the academic year.

B.15   In each case study school, interviews were undertaken with a range of different stakeholders including; senior leaders, middle leaders[49], classroom teachers, parents and pupils. Interviews were undertaken both singularly in a discussion group format. The number of interviews undertaken with each stakeholder group is summarised in Table B-2 below.

Table B-2: Number of interviews undertaken in 2014 and 2016

Stakeholder group	Number of Interviews	
	2014	**2016**
Senior Leaders	23	22
Middle Leaders	-	36
Classroom Teachers	40	27
Parents	27	18
Pupils	116	117

Source: SQW

B.16   Interviews were undertaken using a semi-structured topic guide and, where possible, recorded. Qualitative analysis software was used to code the responses and to support an accurate disaggregation of the views of sub-populations such as school leaders or classroom teachers.

---

[49]In 2016, researchers explicitly asked to interview middle rather than senior leaders (particularly in secondary schools). In practice, in a number of schools, senior leaders wanted to participate. Where possible, such requests were accommodated.

B.17 In order to gain a holistic understanding of each school and its engagement in the NLNP, interviews with each schools Challenge Advisor (CA) and other practitioners involved in the delivery of support were undertaken. In 2014 we undertook interviews with a total of 16 CAs (and in some cases Senior CAs) and with 12 NSP Partners. In a number of cases schools shared the same CA and NSP Partner. However in other cases schools either did not know who their CA was (and this could not be confirmed by the appropriate REC), or did not have an NSP Partner. In such cases no interviews were undertaken. In 2016, we undertook interviews with seven CAs and six support partners (in most cases such staff worked for Consortia). In two of the four Consortia, strategic consultees indicated that due to capacity constraints they did not feel that it would be appropriate for us to talk to CAs in their region. As a result interviews with CAs were only undertaken in two regions.

Impact Evaluation

B.18 Pupils come from a variety of home and school backgrounds and have different academic and other abilities. In order to analyse the impact of the NLNP on pupil attainment, it is important to take account of these differences, as well as the fact that the programme was launched in 2013 and so pupils will have had different degrees of exposure to it.

B.19 The National Pupil Database (NPD) data made available by the Welsh Government was hierarchical, with information identifiable at different levels (pupil, school, consortia) and so we adopted a multilevel modelling approach to data analysis. This process begins by identifying the outcome variable (such as Welsh language levels at Key Stage 3) and then, for each level of data, the background levels that might be thought to influence the outcome (such as sex, prior attainment, number of years of exposure to the National Literacy Framework). Regardless of the outcome variable that is selected, it is expected that there will be differences of outcome at each level:

- pupils will be different from each other

- pupils within one school will be collectively different from those in other schools

- pupils in schools in one consortium will be collectively different from those in other consortia.

B.20 These differences can be measured in terms of the extent to which each outcome variable is 'conditioned' by the background variables at each level. By analysing the data in this way, we can see the overall effect of each of the variables and identify the variables that have a significant impact.

B.21 The explanatory power of the basic attainment models, which did not include prior attainment (summarised in Table B-4) was moderate. Once the pupil background and school level variables were included in the models, the basic models explained around one third of the variance between pupils at Key Stages 2 and 3 (and between 80% and 99% of the school variance). The explanatory power at Key Stage 4 was more variable. The models for English and maths explained over 90% of the variance at school level but only 24% and 17%, respectively, at pupil level. Those for Welsh and Welsh as a second language explained a lower proportion of the variance at school level (37% and 44%, respectively), though a similar proportion of the variance at pupil level (22% and 15%, respectively).

B.22 These models highlighted the importance of including pupil prior attainment in the models, something that was subsequently central to the progress models (from Key Stage 2 to Key Stage 3 and Key Stage 3 to Key Stage 4). For these models, we were able to construct a number of cohorts, matching data for prior attainment at earlier Key Stages to the outcome data at later Key Stages. The explanatory power of these models was high, with the inclusion of pupil prior attainment decreasing the level of variance between pupils by between one half and two thirds in most cases (though not in Welsh as a second language, where the variance was reduced by between two fifths and one half). In other words, a high proportion of the difference in outcomes between pupils can be explained by looking at their academic attainment in previous years. Pupils who did well in earlier key stages tended continued, on the whole, to do well in (and make the expected level of progress to) their current key stage.

B.23 While the explanatory power of the progress models is relatively high, they still indicate that there are other factors that would need to be included in the models in order to develop a more comprehensive analysis of the factors associated with pupil progress (particularly at Key Stage 3, where school level variance appeared higher than at the other Key Stages). The outcomes of the modelling, therefore, should be treated as illustrative at this stage, and caution should be used in looking at the scale (though not the direction) of any change.

B.24 We should note, however, that the models contain only the variables to which we required access; they do not contain attendance data. Nor do the models identify causality, but simply the significant factors that appear to have some relationship with the selected outcomes.

Table B-4: Percentage of variance explained by the models

Multilevel models		Percentage of pupil level and school-level variance explained				
		Attainment (cross-sectional)			Progress (longitudinal)	
Subject		Key Stage 2	Key Stage 3	Key Stage 4	Key Stage 2 to Key Stage 3	Key Stage 3 to Key Stage 4
English	Pupil	33%	29%	24%	54%	61%
	School	97%	99%	93%	99%	92%
Welsh	Pupil	31%	30%	22%	55%	65%
	School	80%	99%	37%	92%	82%
Welsh as a Second Language*	Pupil	31%	27%	15%	40%	50%
	School	85%	98%	44%	97%	54%
Maths	Pupil	29%	25%	17%	56%	65%
	School	97%	99%	89%	88%	84%

* The NLNP does not specifically target Welsh as a Second Language
Source: SQW