

LITERACY AND NUMERACY FOR LEARNING AND LIFE:

The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020

SUMMARY UPDATE ON IMPLEMENTATION OF ACTIONS IN THE STRATEGY IN 2014 JANUARY 2015

Introduction

One third of the way through its lifespan, implementation of the Literacy and Numeracy Strategy remains a priority for the Minister for Education and Skills.

The 2015 budget highlighted the ongoing commitment to supporting literacy and numeracy. In a context where budgets continue to be constrained, literacy and numeracy was one of the few areas which saw additional investment which was not driven by demographic pressure. An additional investment of €6 million was announced which will bring the funding for 2015 to €13.8 million.

In 2014, there has again been significant progress under many of the 41 actions and almost 180 sub-actions in the Strategy. The data available indicate that some of the targets in the Strategy have already been met. In view of this, the Minister for Education and Skills has announced that an interim review of the Strategy planned for 2016 will now take place in 2015.

In this document, progress is set out under the chapter headings of the Strategy.

1. Enabling Parents and Communities to Support Children's Literacy and Numeracy Development

Information for Parents - General

Television

In 2014, Animo TV, RTE and the National Adult Literacy Agency (NALA) were successful in their application to the Broadcasting Authority of Ireland for funding of a second series of "The Family Project". NALA had sought greater focus on early years for this series, if the funding application was successful. *The Family Project 2* again showcased the educational tools and techniques that are available to all families. The programme, a six-part series, followed families from around Ireland working together to overcome educational issues affecting their lives. The programme teamed up six well-known and inspirational people with six families and ran on RTE 1 Television from 26 May 2014 to 30 June 2014. The series average viewing was 10.8 %, down compared to 2013 which was 15.6%.

The series was successful in raising awareness of resources which are available to parents and families (see below in relation to online resources). In 2014 there was more of a focus on smaller children. It proved hard to get families with very young children to participate as the main focus. The series is currently being repeated on Mondays RTE1 at 7.30pm and is attracting a higher viewership to date.

Interestingly, the audience for the first programme on 17th November was 201,900 [the share was 14.14%], with a further 10,400 catching it on RTÉ +1. That means that the repeat attracted more viewers than the original TX [which was 179,800]. According to RTE this is very rare.

Online Support and Awareness Raising

The website www.helpmykidlearn.ie was developed by NALA to support implementation of the Strategy and is particularly targeted at the parents of children aged 0-12.

Statistics for the second year of operation of www.helpmykidlearn.ie (from 7 September 2013 to 6 September 2014) are set out below:

- 92,600 users (in 2013 same period there were 66,743 unique visitors)
- Average per week: 1,780 (in same period 2013 average: 1,283 visitors a week)
- 116,574 sessions (78,138 in same period 2013 figure was and for September to December 2012 since site live, there were 14,954 visits)
- 22.3% of users return (figure 26.4% in same period 2013)
- Bounce rate 41.04% - percentage of single-page visits where the person left the website from the entrance page without interacting (in 2013 same period it was 27.25%).
- 787 referrals came from www.education.ie during this period (680 in same period 2013).
- 1,215 people signed up for monthly tips (an additional 400 from last year - 822 same period 2013).
- Circular sent from the Department of Education to schools on 15 May 2014 including reference to z-cards. <http://www.education.ie/en/Schools-Colleges/Services>Returns/Supporting-Assessment/Standardised-Testing-in-Primary-Schools.html>.

On 8 November 2014 NALA began a Facebook campaign resulting in a dramatic increase of 15,894 users on the last month. As of 25 November 4,659 likes.

Information for Parents - Curricular

Aistear, (the early childhood curriculum framework for all children from birth to six years) - contains ideas, suggestions and practical examples of how parents can support their children's early learning and development. The Aistear Toolkit (published on the NCCA website) also contains information leaflets for parents and provides information on how parents and services can work together. The NCCA has also developed information sheets for parents on how they can help their children in their learning of Maths

Home School Community Liaison

The work of the HSCL Coordinator (available to DEIS Band 1 & 2 primary schools and post primary schools) is directed towards bringing parents closer to their child's learning. DEIS School Planning should also include inputs, outputs and outcomes in relation to parental involvement in their child's learning.

Tusla was established on January 1, 2014 as an independent legal entity, comprising HSE Children & Family Services, the Family Support Agency and the National Educational Welfare Board as well as incorporating some psychological services and a range of services responding to domestic, sexual and gender based violence.

Tusla is now responsible for the work of the HSCLOs.

Parents' Councils

The Department continues to fund the National Parent Councils, Primary and Post-Primary to support the involvement of parents in education. In 2014, funding for the NPC Primary was €523,465 and NPC Post-Primary was €221,000

Parents' Charter

The Minister plans to include legislative amendments to support a Parents' Charter in the *School Admissions Bill*. The aim is that the legislative amendments will foster a culture change in how schools engage with students and parents on a daily basis. They will also create a power for the Minister to publish statutory guidelines that will be based on these principles and which will set out detailed actions and standards that will apply in all schools. The Minister hopes to publish these guidelines in 2015 before the end of the current school year.

2. Improving Teachers' and Early Childhood Care and Education Practitioners' Professional Practice

There continues to be significant progress in this area, in particular in relation to teachers, in line with the implementation timescale set out in the Strategy and the Teaching Council's work on the teaching continuum. However, work is also advancing in relation to the education and training provision of early years practitioners.

Early Years

This Department is undertaking a review of education and training programmes, in Early Childhood Care and Education (ECCE) that are currently delivered through the Further Education and Training and Higher Education sectors.

The type of key competencies required of the early years workforce was the subject of a detailed study by the European Commission in 2011 ('Competence Requirements in Early Childhood Education and Care', or the 'CoRe report') which resulted in recommendations to support competence development from a systemic perspective.

The education and training sector has a key role to play in ensuring that the learning outcomes of ECCE programmes support the development of the relevant competencies identified in the CoRe report and elsewhere including in the Literacy and Numeracy Strategy.

The review of ECCE education and training programmes will examine the extent to which such programmes:

- are being delivered as efficiently as possible
- are subject to appropriate quality assurance procedures at institutional level
- meet the demands of the learning community, including the extent to which they incorporate flexible learning, modular delivery, progression routes, and opportunities for recognition of prior learning (RPL)
- equip graduates with the skills, knowledge and dispositions to work in the area of early years education, which is one element of the overall education continuum
- prepare graduates for social diversity¹
- are delivered by appropriately qualified experts in the field of early years education.

Initial Teacher Education

Entry Requirements

A public consultation process was undertaken by Teaching Council on proposals to raise entry requirements to Primary Initial Teacher Education programmes and further research has been commissioned from the ESRI. The research report is due to be received by the Teaching Council in early 2015.

Post-Primary Registration Requirements

For post-primary level, in 2012, the Council approved Teaching Council Registration: Curricular Subject Requirements (Post-primary), which set out the Council's revised subject criteria, to be met by persons entering post-graduate programmes of initial teacher education and persons graduating from post-primary concurrent ITE programmes.

New Extended Initial Teacher Education Programmes – Primary Teaching

Reconfigured and extended B.Ed programmes for primary teaching commenced in September 2012 and reconfigured and extended primary and post graduate courses commenced in September 2014.

The revised programmes must comply with the Teaching Council's Policy on the Continuum of Teacher Education and its *Initial Teacher Education: Criteria and Guidelines for Programme Providers* which set out mandatory elements to be included in all ITE programmes including Literacy and Numeracy and the learning outcomes required for graduates of ITE programmes. The *Criteria and Guidelines*

¹ Investing in children: breaking the cycle of disadvantage (European Commission C(2013) 788)

also provided that the programmes must include 30 weeks(25%) on school placement for concurrent programmes and 24 weeks (40%) for consecutive programmes and also set out the nature of the extended placement.

The Teaching Council has reviewed and accredited the reconfigured B.Ed programmes and is in the process of reviewing and accrediting the primary post-graduate courses.

New Extended Initial Teacher Education Programmes – Post-Primary Teaching

Reconfigured and extended concurrent programmes for post-primary teaching commenced in September 2013 and reconfigured and extended consecutive post primary programmes commenced in September 2014. As in the case of primary programmes, the revised programmes must comply with the Teaching Council's Policy on the Continuum of Teacher Education and its *Initial Teacher Education: Criteria and Guidelines for Programme Providers*. These set out mandatory elements to be included in all ITE programmes including Literacy and Numeracy and the learning outcomes required for graduates of ITE programmes.

The Teaching Council has reviewed and accredited the majority of the reconfigured post-primary programmes and is in the process of reviewing the remaining courses.

Induction

The National Induction Programme for Teachers (NIPT) continues to deliver a workshop programme for newly qualified teachers (NQTs). There are 3,663 NQTs registered for the 2014/15 workshop programme. Participation in 10 of the 12 workshops offered is a Teaching Council requirement for registration although the NIPT encourage all NQTs to complete all workshops.

The primary literacy programme concentrates on teaching and managing a reading lesson and the primary numeracy workshops places emphasis developing good practice in mathematics teaching.

At post-primary level, the workshops are around content-based literacy and numeracy for all.

Continuing Professional Development – Summer Courses

781 summer courses were run this year, 607 face- to-face, 154 on- line and 20 blended courses². Of the total number of summer courses approved (781), 84 were cross-sectoral and 5 were post-primary.

All courses were required to include a focus on literacy (English and Irish), numeracy, school self-evaluation and school improvement.

² Blended is a combination of face to face and online.

Summer courses were available to primary and post primary teachers. Primary teachers who undertake the summer courses get an entitlement to EPV (Extra Personal Vacation) days.

Workshops were provided by the Professional Development Service for Teachers (PDST) in areas such as reading fluency, mental maths and writing through the education centre network. PDST in collaboration with the Special Education Support Service (SESS) co-designed, co-presented and co-evaluated new seminars for Principals and Link Teachers (Literacy & Numeracy) in relation to 'Improving Literacy and Numeracy through School Self-Evaluation'. These seminars were delivered to both primary and post-primary principals and teachers. In addition to the above, phase 2 of this initiative will include School Self-Evaluation (SSE) and Assessment.

SESS designed and delivered a new course 'Communication and Language: Supporting Pupils with Special Educational Needs (Primary)'

Continuing Professional Development – General

The PDST continues to provide in-school support with literacy and numeracy featuring high on the agenda.

At post primary level one day events were provided for link teachers in both literacy and numeracy. Workshops commenced in October for all teachers in both literacy and numeracy. PDST continue to provide in-school support with literacy and numeracy featuring high on the agenda.

The Junior Cycle for Teachers team has already provided CPD in relation to the new specification for English. This CPD is intended to support, a strong focus on the development of students' literacy skills.

The Inspectorate provided advice to the PDST on the content and delivery of workshops for literacy and numeracy link teachers and their principals. The Inspectorate advised the JCT design team on the Junior Cycle CPD rollout and the development of rollout of English at Junior Cycle to English L1 teachers. Apart from advising on content, all workshops/seminars delivered as part of Project Maths (see below) and the roll out of the Junior Cycle reforms are observed by an audience of critical friends before finally being agreed. The audience includes members of the Inspectorate

In addition, the Inspectorate has supported the development of an L1 workshop for senior cycle English teachers which is currently being developed for delivery in the current school year.

Continuing Professional Development – Project Maths

As part of the ongoing provision, the final Project Maths workshops - workshops 9 and 10 were rolled out to all teachers in 2013/14.

The first cohort of participants graduated from the professional Diploma in Mathematics Teaching programme in Q4 2014. An additional offering of places was made in February 2014 and attracted 290 applicants. This means that if all existing participants graduate, there will be 811 additional fully qualified teachers of Mathematics in the system.

A decision on whether there will be another offering of the course in 2015-2016 is currently being discussed.

Resources

The National Educational Psychological Service has produced guidelines for staff on best practice in teaching basic literacy and numeracy skills to learners in Youthreach and Community Training Centres. The guidelines were developed as part of the Department of Education and Skills' prioritisation of literacy and numeracy development. These guidelines are intended for practitioners, tutors, teachers, managers and coordinators in any centre where there are learners who struggle with basic skills.

3. Building the Capacity of School Leadership

The actions in the Strategy in this area focus on CPD, school self-evaluation and leadership programmes for new and aspiring school leaders.

The Department has been considering school leadership across the continuum for some months. In particular, the question of how expertise amongst school leaders can be shared is being considered and the current leadership supports for schools are being actively reviewed. The Department has engaged in detail with the National Association of Principals and Deputy Principals and the Irish Primary Principals Network, to see how the strengths of these organisations can be used to better support school leadership. There is broad agreement on how to proceed and an announcement will be made in 2015.

Junior Cycle

As part of the CPD programme in respect of the Junior Cycle Framework, there will be ongoing CPD provision for school leaders in aspects related to leading learning in the school, change management, planning and on a wide range of pedagogical topics including the use of various assessment modes to inform students' learning. Provision commenced in early in 2013/14 for 2 members of staff from each post-primary school. 1,240 school leaders have attended to date.

School Self-Evaluation

In 2014 the PDST in conjunction with the DES Inspectorate and other support services are providing one day events for school leaders and link teachers demonstrating the integration of school self-evaluation with literacy and numeracy.

Workshops have continued and data gathering and analysis with 42 events provided so far this school year and demand continuing for further provision. Extra events will be scheduled.

Other Activities

All activities offered by the PDST aim to be current and relevant to the leadership of teaching and learning at a given time. Materials modules and case studies are reviewed as each delivery schedule is planned. Leadership materials have been revised to reflect the need to support the literacy and numeracy strategy. Also programmes have been modified to include specific modules on leading literacy and numeracy and school self-evaluation.

PDST offered School Leadership Programmes, Misneach, Forbairt, Tanaiste (PP) and Toraíocht to almost 2,000 school leaders this year. These programmes offered support on the range from aspiring to newly-appointed to established school leaders.

4. Improving the Curriculum and Learning Experience

There continues to be considerable progress in this area with curricular change and innovation a feature at all levels.

Primary

Work is ongoing in the NCCA on the development of a new integrated English and Irish specification at primary level. The NCCA has consulted on their work so far which is focussed on junior infant classes through to second class. The findings of the consultation are informing the development of the curriculum. It is expected that the new curriculum will be available to schools from September 2015 and implemented from September 2016. The emphasis is not only on reading and writing but also on the listening and speaking aspects of the languages.

The NCCA has begun work on the structure of the revised primary maths curriculum in line with the specification for the junior cycle maths curriculum. Development of maths learning outcomes for children from infants to second class in primary schools will also be informed by the work of maths researchers and experts. In this context, two background research papers³ were launched by Minister O’Sullivan in November 2014.

Post-primary – Junior Cycle

³ **Mathematics in Early Childhood and Primary Education (3-8 years) *Definitions, Theories, Development and Progression*** by Drs Elizabeth Dunphy, Thérèse Dooley and Gerry Shiel With Deirdre Butler, Dolores Corcoran, Miriam Ryan and Joe Travers

International Advisor: Professor Bob Perry

Mathematics in Early Childhood and Primary Education (3-8 years) *Teaching and Learning* by Thérèse Dooley, Elizabeth Dunphy and Gerry Shiel With Deirdre Butler, Dolores Corcoran, Thérèse Farrell, Siún NicMhuirí, Maura O’Connor, and Joe Travers

International Advisor: Professor Bob Perry

The English specification for Junior Cycle has been implemented in schools since September 2014. The specification reflects the concerns of the Literacy and Numeracy Strategy. This is what the specification provides in relation to the key skills of Literacy and Numeracy:

Growth in language and literacy are core concerns of English. Students will develop their literacy skills as they become actively involved in the skills of oral language, reading and writing.

In oral language they will engage in purposeful discussion of texts, ideas and dispositions and in so doing develop their own listening and speaking skills. They will develop their reading skills by encountering a variety of texts which they learn to read with fluency, understanding and competence using a broad range of comprehension strategies.

In further developing their literacy, students will engage in purposeful planning, drafting and writing in a variety of different genres as they show increasing awareness of audience and style.

In their general literacy progression, students will deepen their critical awareness of language, leading to rich enquiry into texts in all their forms. As a result of this awareness they will learn how language works, helping them to make informed language choices to express themselves and to find, use, and communicate information and ideas.

In English students develop their numeracy skills as they gather information through questionnaires, surveys and personal records presenting their findings in different formats and to different audiences. They learn to recognise patterns in language (e.g. rhythm and metre in poetry) and patterns in literary and non-literary texts. They become aware of the spatial dimension in their study of stage drama and through numeracy skills to solve problems in general.

The explicit concerns in the Strategy on the detail of the curriculum are clearly reflected in the new specification.

The NCCA short course on digital media literacy has also been available to schools since September 2014.

A background paper for consultation on Irish for Junior Cycle set the context for development of the new Junior Cycle Irish specification. It reflected the concerns highlighted in the Strategy. The work of the development group on Irish is ongoing.

Note that the key skills of literacy and numeracy are being embedded in *all* new specifications for Junior Cycle subjects and short courses as they are developed.

(Project) Maths

The new mathematics curriculum is now fully rolled out to all post-primary schools.

A key objective of Project Maths is to improve attainment levels in Maths and to increase the number of students taking higher-level in the Junior Certificate and in the Leaving Certificate.

Take-up for 2014 at Leaving Certificate was over 27%, compared to 25.6% in 2013. At Junior Certificate, take up was 54% in 2014 up from 52% in 2013. These figures in turn represent significant increases on the 2012 and 2011 figures.

The 25 CAO bonus points undoubtedly played a significant role in this welcome increase, but Project Maths also supports increased numbers of students taking Higher Level.

Report on Project Maths and PISA 2012: Performance in Initial Project Maths Schools and Non-initial Schools on PISA 2012 Mathematics and Problem-solving and on Junior Certificate Mathematics (2014)

The Educational Research Centre (ERC) published a report on the initial impact of Project Maths as a curriculum reform intervention using PISA 2012 as an assessment tool. The purpose of this analysis was to compare the performance of students in the 23 Initial Project Maths schools (the first cohort of schools to roll out Project Maths) with those in the Non-initial schools using data from PISA assessments.

There is evidence that Project Maths is having an initial positive impact on student achievement in Maths.

- 15-year olds in the 23 schools in which Project Maths was implemented initially achieved an expected score on PISA maths that was 10 points higher than the score of students in Non-initial schools.
- Students in the Initial schools achieved an expected score that was one-third of a grade point higher than the corresponding score of students in Non-initial schools in the Junior Certificate examination.
- There was also evidence of stronger performance on PISA Space and Shape, with girls in Initial schools showing most improvement. Shape and space is one of the areas of mathematics where Irish students have performed poorly in the past and one of the key aims of Project Maths was to address this issue

Project Maths appears to have had a negative impact on student attitude in the Initial Schools.

- Compared to students in Initial schools, students in Non-Initial schools achieved higher scores of Intrinsic Motivation; they demonstrated a more positive Mathematics Self-concept and lower Mathematics Anxiety; and they scored better on Maths-related Behaviour and Intentions to Work in or Study Maths.
- The outcomes relating to student attitude are disappointing but hardly surprising, given the negative sentiments being expressed by a range of stakeholders. It is unlikely that the level of anxiety felt by teachers didn't transmit to their students.

There are positive findings about the impact of Project Maths on teaching and learning:

- The negative sentiments of students is offset somewhat by the relatively positive findings in relation to teaching and learning and the wider range of teaching approaches etc. being used in the Initial schools.
- In the main, the principals in the Initial schools were also more positive about the possible impact of Project Maths than the remainder of their peers.

5. Helping Students with Additional Learning Needs to Achieve their Potential

Significant resources are targeted at students with additional needs as part of ongoing provision. Information on additional progress is outlined below.

DEIS Evaluation

DEIS is the subject of ongoing evaluation to ensure its successful implementation and to inform future policy. Making sure that the intervention is effective is a critical aspect of DEIS. Both the Educational Research Centre (ERC) and the DES Inspectorate have conducted a series of evaluations on aspects of the DEIS programme and the findings of this work are contained in a series of reports published since 2009.

There is clear evidence from the research undertaken to date that the DEIS programme is having a positive effect on tackling educational disadvantage.

- Research carried out by the ERC in DEIS urban primary schools in 2007, 2010 and 2013 showed consistent improvement in both the literacy and numeracy levels of pupils.
- Preliminary findings of ERC research of DEIS implementation at post-primary level also show encouraging trends in terms of attainment levels and of pupil retention rates. There is a significant upward trend from 2009 onwards in attainment levels in both English and Mathematics at Junior Cert level.
- Research carried out by the DES Inspectorate shows that the majority of DEIS schools are now engaging in effective planning for improvement. The findings indicate that where schools have taken a whole-school, evidence-based approach to improving literacy, especially at primary level, they report improvements in pupil attainment levels.
- The DES *Retention Rates of Pupils in Second Level Schools 2007 Entry Cohort* (January 2014) shows that the improvement in DEIS schools' retention rates in recent years, has been significantly higher than the overall improvements nationally – up from 68% to just over 80%.

However, the research also shows that overall performance in DEIS schools continues to remain below the national average indicating that continued supports are required to maintain and build on the gains made.

A Joint DES/ERC Research Seminar - *Learning from DEIS*' – was held in May 2014 at which researchers from the ERC and the DES Inspectorate and DES Statistics Section presented published research to an audience of DEIS schools and other education partners. At the Seminar, plans were announced to commission one further piece of research in relation to DEIS, to provide, recommendations for a renewal of policy in relation to educational disadvantage, including DEIS.

The overall objective of this project is to provide the Minister with a consolidated report on DEIS incorporating information in relation to the various inputs, processes, and educational outcomes contained in the findings from the DEIS research conducted to date. In order to provide a wider context, the report will also review other related Irish and international research on educational disadvantage together with examples of best practice. Preparation of the report, by the ESRI, is underway and is scheduled for completion in early 2015.

In addition, inspectorate DEIS evaluations have taken place in 10 primary and 10 post-primary schools in 2014. A composite report based on the findings from 44 DEIS evaluations at each level is currently being prepared and will be published in early 2015.

Case Study - Limerick DEIS Primary Schools Literacy Development Project

As part of the Programme Innovation and Development Fund (PIDF), which is the central resource of Supporting Social Inclusion and Regeneration in Limerick (SSIRL), the Limerick DEIS Primary Schools' Literacy Initiative receives funding to build capacity amongst teachers in each of the 15 DEIS Band 1 participating schools across the city. The project aims to assist teachers to better their understanding of children's language and literacy development. The approach employed in the initiative is to upskill participating teachers through continuing professional development in the areas of language and literacy instruction. These teachers then share, extend and support existing good practice within their participating schools. As part of the Department's commitment to regeneration in Limerick, Teacher Allocation Section has approved the retention of 8 ex-quota teaching posts for the 15 DEIS Band 1 Limerick City schools on a shared basis for the 2014/15 school year.

Special Needs

Provision for over 11,200 whole time equivalent learning support/resource teacher posts, including those provided under the General Allocation model, are being provided in primary & post primary schools in order to provide additional teaching support to pupils with special educational needs or learning support requirements.

10,965 whole time equivalent Special Needs Assistant (SNA) posts provided for primary, post-primary and special schools in 2014, with a further 145 posts provided

to the end of 2014 under Budget 2015, bringing the number of SNA posts available to the NCE to 11,110 by the end of 2014.

Post-graduate courses related to the teaching of students with special education needs are continuing in 2014 with the same allocation of places as before. Circulars for 2015 are currently being drafted.

Initial teacher education

The revised ITE programmes must comply with the Teaching Council's Policy on the Continuum of Teacher Education and its *Initial Teacher Education: Criteria and Guidelines for Programme Providers* which set out mandatory elements to be included in all ITE programmes including literacy, numeracy, teaching, learning and assessment and inclusive education including special education, multiculturalism, disadvantage and the learning outcomes required for graduates of ITE programmes.

The learning outcomes for graduates of ITE programmes include that the graduate will demonstrate knowledge and understanding of the impact of pupils' backgrounds and identities on learning and the need to use differentiated approaches, and apply knowledge of the individual potential of pupils, dispositions towards learning, varying backgrounds and identities to planning for teaching.

6. Improving Assessment and Evaluation to Support Better Learning in Literacy and Numeracy

There was early significant progress in putting in place the frameworks for improved assessment arrangements. These are now being progressed.

Early Years

The Department has funded the development of Trinity Early Screening Test (Test 2R), which is a tool to both evaluate the early development of early literacy skills and to provide a learner profile to enable teachers to plan interventions.

Increased budgetary provision in 2015 has allowed for the recruitment of a new team of early childhood education inspectors. The new team will work with the early childhood sector to promote and enhance good educational practice. This is an initiative across the Departments of Education and Children and Youth Affairs.

Primary

In accordance with Circular 0056/2011, schools are required to report on children's progress to their parents twice during each school year. One of these reporting events must include a written report at the end of the school year. The other reporting event may include a meeting, or a meeting and a written report. To support schools, the NCCA has produced report templates.

The NCCA has also developed an end-of-year 6th Class Report Card to support the dual purpose of reporting to parents and transferring pupil information to post-primary

schools. This was optional for 2013/14 but will be compulsory in 2014/15 (circular 45/14).

In line with 0056/2011, primary schools submitted their 2013/14 standardised test results in English reading and mathematics using an on-line facility. Standardised test results for Irish reading were also collected from Irish-medium schools. The Inspectorate is currently analysing these results.

National Assessments of Mathematics and English Reading

National assessments of English reading and mathematics at Second and Sixth classes were conducted in May 2014 by the Educational Research Centre in a representative sample of 150 primary schools using secure tests.

The ERC report published on January 12, 2015 focuses on the performance of pupils in National Assessments 2014 (NA 2014) relative to the performance of pupils who participated in National Assessments in 2009 (NA 2009).

Strengths

Overall performance on reading and mathematics in Second and Sixth classes was significantly higher in NA 2014 than in NA 2009. These are the first significant improvements in standards in reading and maths recorded by the national assessments in over thirty years. (The last time improvements were noted was 1980, when the 1980 data was compared to the 1972 data).

There has been a reduction in the proportion of lower-achieving students and an increase in the proportion of higher achievement students in both English reading and mathematics.

There has been an improvement in the area of Shape and Space. This is encouraging, given the difficulties that Irish students have had with this element of maths in PISA.

Gender differences in relation to English reading and mathematics in NA 2014 were relatively small.

All of the targets in the National Literacy and Numeracy Strategy relating to attainment at primary level have been reached well in advance of the scheduled target date of 2020.

Areas for development

While the results of NA 2014 are welcome, it is clear that there is much scope for improvement, especially in the case of mathematics and DEIS schools.

There is considerable scope for pupils in Second and Sixth classes to improve further on higher-level mathematical processes, including their ability to apply and problem solve.

While there have been improvements in reading in DEIS schools since NA 2009, there has been no real reduction in the gap between pupils in DEIS urban schools and pupils in other school types. The large proportion of very low achievers in reading in DEIS urban Band 1 schools is a particular concern. With some exceptions, performance in mathematics in DEIS schools is still well below national standards

Actions

The analysis of the context data from questionnaires administered in NA 2014 is yet to be completed. This means that it is difficult to confidently attribute the improved performance to any single factor.

However, the improvement could be attributed to the range of measures being implemented as part of the National Literacy and Numeracy Strategy, particularly in relation to teacher continual professional development and the emphasis that has been placed on target setting in literacy and numeracy in schools. It is to be noted that while the performance of sixth class pupils in NA 2014 was strong, they would not have had the full benefit of the National Literacy and Numeracy Strategy throughout their schooling. Greater improvements were seen at second class level possibly because pupils in these classes benefitted from the Literacy and Numeracy Strategy when they were in the junior classes unlike their counterparts in sixth class.

The significant improvements in pupils' performance are of course welcome. Given that no significant improvement had been achieved in reading or maths over three decades, the targets for improvement in the National Literacy and Numeracy Strategy in 2011 were thought to be ambitious. However, given that these have now been achieved for the overall student population, there is scope to reconsider these overall targets and seek further improvement as part of an interim review of the National Literacy and Numeracy Strategy. In light of the results of the National Assessments, an interim review of the Strategy, originally planned for 2016, will now take place in 2015.

Post-Primary

OECD Programme for International Student Assessment (PISA) 2012

PISA 2012 results were published in December 2013. The results showed that in 2012, Ireland's 15-year-olds scored significantly above the OECD average in mathematics, science and reading and significantly better in all areas than in 2009.

Ireland was placed 13th of the 34 OECD countries for mathematics and 4th out of 34 countries for reading.

In PISA 2012, Irish students performed at levels similar to those achieved by Irish students prior to 2009 for mathematics and reading. There had been an unexpected drop in the performance of Irish students on these domains in 2009.

The mathematics and reading results in 2012 are in line with Ireland's performances in 2000, 2003 and 2006. Performance on reading is at a very high level but it has not

improved since Ireland began participating in PISA. Our performance on mathematics now places us above the OECD average, but the actual performance of Irish students has not improved. Nevertheless, it must be acknowledged that the standards of reading and mathematics, as measured on the PISA tests, have been maintained despite the fact that the students who took the PISA tests in Ireland in 2012 come from considerably more diverse backgrounds (with more migrants, more students with special needs and more students staying at school longer) than in previous years.

The performance of Irish students on the print-based mathematics test places Ireland among the “above average” performing OECD countries in this domain but not in the top group of countries. Ireland’s ranking is 13th out of 34 OECD countries and 20th out of 65 participating countries. Thirty-four countries participated in the test of computer-based mathematics and Ireland ranked 15th among the 23 participating OECD countries and 20th among all participating countries. Boys significantly outperform girls on both print- and computer-based mathematics in Ireland.

Irish students’ performance on the print-based reading test places Ireland among the “above average” performing OECD countries in this domain but Ireland is not in the top group of countries, which comprises five Asian countries. Ireland’s ranking, based on its mean score, is 4th out of 34 OECD countries and 7th out of 65 OECD and partner countries. On the digital reading test, Irish students are 5th amongst 23 participating OECD countries and 9th among all participating countries (note that not all PISA countries took part in the digital reading tests). Irish girls outperform boys on both print and digital reading.

PISA 2012 Computer Based Assessment of Problem Solving

In PISA 2012, problem solving was included as an optional assessment. Of the 65 countries that participated in the 2012 PISA assessments, 44 countries/economies, including Ireland and 27 other OECD countries, participated in a 40-minute computer-based assessment of problem-solving. In Ireland, 1,303 15 year old students in 183 schools participated in the computer-based assessment of problem solving. The results of this assessment were published in April 2014 after the publication of the results of the main study.

PISA 2012 is the second cycle of PISA that has included individual problem solving as an additional assessment domain. The assessment of problem solving was last included in 2003 but has been significantly revised since then. Most notably, the assessment in 2012 moved to a computer-based platform that allows for the inclusion of interactive problems (i.e. where students can explore the situation to uncover additional relevant information). Examples of interactive problem situation include encountering technological devices (e.g., mobile phones or ticket vending machines) for the first time. The 2003 assessment of problem solving included static problems only (i.e. where all the information is disclosed at the outset and the problem situation is not dynamic).

Also while PISA 2003 tested cross-disciplinary problem-solving, PISA 2012 expressly excluded problems requiring expert knowledge of particular curricular areas for their solution.

The performance of Irish students on problem solving was good but there was considerable scope for development. The following are some of the positive features of Ireland's performance:

- Students in Ireland performed at the OECD average on problem solving in PISA 2012. Ireland is ranked 17th of 28 participating OECD countries and 22 of all 44 participating countries/economies.
- The performance of lowest-performing students and highest-performing students on problem solving is similar to the OECD average for such students.
- The proportion of students in Ireland performing below the baseline level of proficiency (i.e. below Level 2) is similar to the OECD country average.
- There is no significant difference between the performance of male and female students in Ireland. The performance on problem solving of both male and female students in Ireland is similar to the corresponding OECD averages.
- The mean score of students in Ireland with an immigrant background is significantly higher than the corresponding average for the OECD although significantly lower than that for native students in Ireland.
- Performance on interactive problem solving assessment items is stronger in Ireland than expected, given the relative difficulty of these items compared with the static items

Some of the challenges identified by the report include the following:

- There is considerable scope for improvement in the development of problem solving competences particularly among the lowest and the highest performing students. Neither is Ireland among the top performing countries. English speaking countries that participated such as Canada, Australia and New Zealand performed significantly better than Ireland.
- Given that the performance of students in Ireland in mathematics has been characterised as average in the earlier cycles of PISA and just slightly above average in 2012, it should come as no surprise that performance on the computer-based assessment of problem-solving is not stronger in Ireland.
- The findings also suggest that a lack of familiarity with using computers (at home and at school) for school-related tasks may have contributed to lower performance on the computer-based assessments in Ireland and disadvantaged them relative to students in other countries.
- Students reported lower levels of use of ICTs in school in general, in maths lessons and at home for school related tasks when compared to the average across all 34 OECD countries.
- The problem solving performance of students in Ireland is over 18 points lower than expected given their performance in print mathematics, reading and

science and just under 10 points lower than expected when their performance on the computer based assessment of mathematics and reading are accounted for. This indicates that the effect of computer delivery on performance is about nine points in Ireland.

- The adverse effect of computer based assessment on performance is particularly evident in the case of students with an immigrant background.
- There will therefore be need to consider the implications of plans to move fully to computer based assessment across all domains in PISA 2015

International Testing

The Department has committed to participation in PISA 2015 study for 15 year olds and the Trends in International Mathematics and Science Study (TIMSS) 2015 at 4th class and 2nd year. Irish students will also participate in the Progress in International Reading Literacy Study (PIRLS) in 2016.

School-Self Evaluation/Inspection

Both primary whole school evaluations (WSE) and post-primary whole school evaluations – management, leadership and learning (WSE-MLL) evaluations continue to include a review of the school's self-evaluation processes.

Primary and post primary schools were invited to request SSE advisory visits from members of the Inspectorate. These visits will be conducted in the final term of 2014. 278 post primary and 1352 primary schools requested visits.

Literacy and numeracy continue to feature during the evaluation of English, Irish and Mathematics in all WSE inspections at primary level. The extent to which they are developed in a cross-curricular manner forms part of the evaluation of other curricular areas. Cross curricular development of literacy and numeracy also features in post-primary evaluations and is referenced in inspection tools such as those for subject and incidental inspections.

Conclusion

There continues to be a significant cross-departmental engagement in delivering the actions in the Strategy. National and international evaluations appear to indicate that this coherent joined up approach is beginning to lead to progress. The challenge is to maintain momentum and continue to implement the actions of the Strategy while evaluating its ongoing impact on the system through measurement of the targets set out in the Strategy itself and through complementary qualitative analysis.

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