Standardised Testing in English Reading and Mathematics in the Irish Primary School

A Survey of Irish Primary Teachers

Michael O'Leary, Zita Lysaght, Deirbhile Nic Craith and Darina Scully

with Anastasios Karakolidis, Paula Lehane, Maeve McCafferty and Vasiliki Pitsia

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Preface

In the years since 2007, the role of standardised testing in Irish primary schools has become increasingly prominent. All schools are now required to administer standardised tests in English reading and Mathematics in second, fourth and sixth classes, and to report the aggregated results to their boards of management and the Department of Education and Skills (DES). As of September 2017, the results are used at national level as part of the process involved in determining the allocation of special educational teaching resources to schools. Schools are also required to share the results with parents at the three mandatory testing points and to do this in written format using end-of-year school reports. Of concern, however, are various problematic issues that have been associated with standardised testing in other jurisdictions over the past 20 to 30 years. The international literature suggests that when test scores are shared widely and used for purposes beyond internal planning, the associated sense of accountability can lead to a culture of 'teaching to the test' with teachers spending excessive amounts of class time engaged in test preparation activities, and in more extreme cases, engaging in unethical behaviours in an attempt to raise test scores. There are also concerns that a heightened focus on standardised testing may inhibit pupil learning through 'narrowing of the curriculum' - a phenomenon that encompasses classroom practices such as a reduction in the amount of time spent on non-tested content, the fragmentation of knowledge into discrete facts, and the increased use of teacher-centred pedagogies.

Although the 'stakes' attached to standardised testing in Irish primary education remain relatively low in comparison to some other countries, recent policy changes have undoubtedly increased the focus on these instruments. In the wake of these changes, this survey of Irish primary teachers was conducted. A collaborative effort by the Centre for Assessment Research, Policy and Practice in Education (CARPE) and the Irish National Teachers' Organisation (INTO), this research aimed to gather information about the attitudes and practices of Irish primary teachers with respect to standardised testing, and ultimately, to inform policy making in relation to same.

This report is divided into ten sections. The first two sections focus on the history of standardised testing in Irish primary schools and on the supports for standardised testing that have been put in place over the past number of years. Sections 3 and 4 provide a synopsis of the key findings from the Irish and international research literature on standardised testing. Section 5 provides all the relevant details pertinent to the empirical study carried out with Irish primary teachers in May 2017, while Section 6 describes the profile of those who participated in the study. The findings are presented in Section 7 and synopsised in Section 8. The penultimate section contains a detailed discussion of the study's conclusions and recommendations. The report ends with an epilogue which attempts to highlight the study's significance and the importance of conducting follow-up research.



Acknowledgements

The authors are deeply indebted to the 1,564 teachers from schools all over Ireland who took the time and trouble to complete the study questionnaire either online or in hard copy. The data have already given us a better understanding of how they use and feel about standardised testing in English reading and mathematics and will be an invaluable resource in shaping educational policy for many years to come. A sincere word of thanks is also due to 42 members of various INTO committees (CEC and national) and the 99 teachers who were involved in the two major pilot studies conducted to ensure that the final questionnaire was of a high quality.

We gratefully acknowledge the important contributions of Claire Garvey and Ann McConnell at the INTO Head Office in helping us navigate the sampling process and in monitoring hard copy questionnaires as they were being returned. The task of transcribing and collating what teachers wrote in the hard copy questionnaires fell to them also and we are extremely grateful for their diligence in getting the work done so quickly and accurately. The painstaking work of proofing and preparing the manuscript for publication was carried out by the INTO Publications team and Jim Bennett.

A draft report was sent for review to Arlene Forster (National Council for Curriculum and Assessment), Harold Hislop (Department of Education and Skills, DES), Mark Morgan (Professor Emeritus, DCU), Damian Murchan (Trinity College), Evelyn O'Connor (Department of Education and Skills, DES), Gerry Shiel (Educational Research Centre), Eugene Wall (Mary Immaculate College) and Noel Ward (INTO). Their insightful and detailed feedback has greatly enhanced the final version of the report and we are fortunate to have been able to draw on their expertise. The authors are, of course, fully responsible for any errors and omissions in the report as well as the conclusions drawn from the data gathered and recommendations made on that basis.

The members of the project's Steering Committee (Catherine Flanagan, Deirdre Fleming, Luke Kilcoyne, Rosena Jordan and Siobhan Lynskey) have been working with us since June 2016. Their input during our many face-to-face meetings as well as their close reading of various draft documents that have been sent to them have helped shape and refine all elements of the design and implementation of this study. Our sincere thanks go to every one of them.

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Executive Summary

Study Context

The introduction of compulsory standardised testing of reading and mathematics in September 2007 was a significant development in the context of Irish primary schools as up to that point the use of standardised tests was at the discretion of individual teachers and schools. Four years later the publication of the National Literacy and Numeracy Strategy (Department of Education and Skills, 2011a) and Circular 0056 (DES, 2011b) not only made standardised testing of reading and mathematics in second, fourth and sixth classes mandatory, but also required that schools report their aggregated data to boards of management and the Department of Education and Skills (DES) at the end of the school year. While the stakes associated with these changes can be considered relatively low in comparison to those resulting from the use of standardised tests for accountability purposes in other parts of the world, the recent decision to use test results as one criterion in determining the allocation of special educational teaching resources to schools (DES, 2017a) could be interpreted as a move towards a higher-stakes model. Experiences elsewhere indicate that, even in the absence of truly high stakes, merely increasing the frequency of standardised testing can have unintended negative consequences. Some of these are discussed in this report under three themes derived from a review of the international research literature: the illusion of success, narrowing of the curriculum and pressure to perform. Empirical studies on the effects of standardised testing in Irish primary schools, while dating back to the 1970s, are few in number and no large scale study has ever been conducted on the impact of the policy changes introduced in 2007 and updated in 2011 – all of which provide a strong argument for this study being both timely and potentially important.

The Study

The study was undertaken jointly by the Centre for Assessment Research, Policy and Practice in Education (CARPE) at Dublin City University (DCU) and the Irish National Teachers' Organisation (INTO) and designed to gather information about Irish primary teachers' use of, beliefs about and attitudes to standardised tests in reading and mathematics. The specific research questions addressed were as follows:

- 1. How are teachers using standardised tests in reading and mathematics in Irish primary schools?
- 2. What are teachers' perceptions about the impact of standardised tests on (a) their professional practice and (b) on pupil learning?
- 3. What are the professional development needs of teachers with respect to standardised testing?
- 4. What are teachers' beliefs about and attitudes towards standardised testing?
- 5. What advice, if any, would teachers offer to Irish educational policy makers about the practice of standardised testing in English reading and mathematics in Irish primary schools?

Following a series of pilot studies, a questionnaire incorporating mainly closed-ended questions was developed and, using the INTO database, was administered to a simple random sample of 5,0000 teachers in May 2017. Half of the sample was randomly selected to receive a hard copy of the questionnaire using the mailing addresses in the database. The other half was sent a link to the online copy using email addresses in the database. Those receiving hard copy questionnaires were also given the option of completing the questionnaire online.

Response Rate and Respondents' Profile

A total of 1,564 questionnaires was returned – a response rate of 31% which can be considered acceptable given the rates achieved in past INTO studies. The percentage of questionnaires completed online (52%) and in hard copy was roughly similar. Based on random sampling assumptions, the margin of error associated with the 95% confidence interval around descriptive statistics in this study is approximately $\pm 2.5\%$ (this margin of error refers to sampling error and doesn't account for other sources of error such as non-response error).

For the most part, the sample achieved was reflective of the population of teachers in Irish primary schools. The majority of respondents were female and were evenly distributed across categories representing different levels of experience and classes taught. Learning Support, Resource and EAL teachers were somewhat over-represented in the sample as were teachers from large schools and DEIS Urban 1 schools.

Findings

Teachers' Use of Standardised Tests (Research Question 1)

The majority of teachers reported that they used standardised tests of reading and maths once a year during the summer term. One in five indicated that someone other than the class teacher administered the tests and two thirds of those said the practice had been in place for five years or more and had been implemented to ensure that all testing guidelines were followed correctly. The inclusion of class-based STen¹ scores on summer report cards was the most widely used approach for communicating the outcomes to parents/guardians and one in four indicated that it was common practice to explain the measurement error associated with standardised test scores.

The majority of teachers indicated that they used standardised test results to identify pupils' strengths/ weaknesses/progress, to inform the preparation of IEPs, to group and grade pupils, to make adjustments to their planning and to evaluate their own teaching effectiveness. These practices were likely to occur once or twice a year, however, up to a quarter of respondents indicated that they never used standardised tests for many of these purposes. Respondents were much more likely to discuss standardised test results with other teachers or with parents than with pupils.

The overwhelming majority of teachers reported that standardised tests results were used in their schools to select pupils for learning support and for broad whole-school evaluation purposes. Fewer indicated that their schools used test data to select pupils for gifted/talented programmes and for checking that teachers were emphasizing skills that needed to be improved based on past test results. Approximately three out of every four respondents noted that standardised test results were used at least once in the school year to generate discussion among staff about how to strengthen teaching and improve test scores.

¹ STEN and STen are used interchangeably to denote the Standard Ten Score.

Teachers' Perceptions about the Impact of Standardised Testing on their Professional Practice (Research Question 2a)

About half of the respondents reported that they spent either a few days or a week or more per year revising curriculum topics relevant to the standardised test with up to half a day being spent on test-taking skills or strategies for coping with test anxiety. One in three said that they spent some time each year getting pupils to practise on the kind of item formats found in the standardised tests.

The vast majority of teachers maintained that they were unaware of questionable test preparation and administration practices occurring in their own school. About one in four said that they were aware of what might be described as low-level 'teaching to the test' in their school, such as focusing teaching and pupils' attention on content that was on the standardised tests. Less than one in ten claimed that they were aware that some pupils in their school were receiving grinds prior to standardised testing. Relatively small percentages of teachers also said that they were aware that, in their schools, pupils were given more time than allowed, had questions rephrased for them, had access to potentially helpful materials during testing, or were given inappropriate support e.g. hints during testing. However, one quarter indicated that they were aware of questionable test administration practices occurring in schools other than their own.

The vast majority of teachers claimed that they felt pressure from within themselves to improve their pupils' standardised test scores. About half reported feeling pressure from parents, a third from inspectors, their principals, or their teaching colleagues with a quarter feeling pressure from pupils and the media.

Teachers' Perceptions about the Impact of Standardised Testing on Pupil Learning (Research Question 2b)

Just under two thirds of teachers reported that standardised test scores had either improved or remained constant over the preceding three years. Large percentages of teachers cited factors including changes in teaching strategies, the *Literacy and Numeracy Strategy* and changes in teacher effectiveness, as influences on their schools' test scores. Other factors deemed to be relevant included changes in internal evaluation practices, changes in textbooks, changes in pupil demographics and alignment of curriculum with test content. Up to one in four felt that a focus on test-taking skills, familiarity with test content, changes in test preparation and administration practices were factors.

Teachers' Professional Development Needs (Research Question 3)

While about two thirds of respondents indicated that they engaged in some Continuous Professional Development (CPD) focused on standardised testing during 'Croke Park hours', almost three quarters reported that they had not engaged with the area during in-service or induction, with over half reporting no input on the topic during their pre-service teacher education programmes.

Two resources were chosen by most teachers as being useful for improving their understanding and use of standardised tests – the testing manuals and in-school professional discourse. Most indicated that there was a 'go-to' person on the staff of their school who was considered highly knowledgeable about standardised testing. About half said they found the National Council for Curriculum and Assessment (NCCA) Assessment Guidelines useful but many others indicated that they did not know about them or other resources on the NCCA and PDST websites. Responses regarding PDST courses, summer courses, DES circulars/website and inspectors' input were diverse with many teachers unaware of them or divided on the extent to which they found them useful.

The vast majority of teachers expressed a very strong desire for CPD in the area of standardised testing. Priorities included guidance on how to use results to make decisions about children with special needs, how the tests could be used to guide planning, teaching and learning and how to communicate the results to parents. CPD on the more technical aspects of standardised testing such as the meaning of different standardised scores, validity and the application of the Standard Error of Measurement (SEM) were also considered important.

Teachers' Beliefs and Attitudes (Research Question 4)

Findings regarding teachers' beliefs about and attitudes to standardised tests are organised around four themes: validity, communication/reporting, positive effects and negative effects.

Validity: the majority of teachers agreed that some pupils in their class were not capable of taking standardised tests due to learning difficulties and that performance differences in standardised tests reflected differences in the characteristics of pupils as opposed to differences in teacher effectiveness. The majority also held the belief that standardised test scores were not an accurate measure of EAL pupils' achievements. There was a lack of consensus on whether or not standardised test scores were an accurate reflection of their pupils' mastery of basic skills and whether or not there was a difference between what should be taught and what the standardised tests emphasised.

Communicating and reporting: two thirds agreed that standardised test scores should be included on summer report cards with just over half feeling that age-based rather than grade-based STens were sometimes more appropriate for reporting purposes. A majority disagreed that parents had a good understanding of standardised test scores or that the results helped prospective parents evaluate a school. Teachers held divided opinions on the use of standardised test scores for school accountability and educational policy-making purposes.

Positive effects: about half of the respondents agreed that standardised testing had focused their attention on both basic and higher-order skills in reading and mathematics but disagreed that standardised testing had led to improvements in their own teaching or had challenged weaker teachers to do a better job. Divided opinion was evident with respect to teachers' beliefs on whether or not standardised testing had helped them clarify which learning goals were important, was an appropriate way of focusing attention on the impact of teaching on pupil achievement or improved the quality of teaching and learning in their schools.

Negative effects: three out of every four teachers agreed that some pupils in their classes were extremely anxious about taking standardised tests and about half felt that the parents took the results of standardised tests too seriously. Three quarters disagreed with the idea that their school was more interested in increasing standardised test scores than in improving overall pupil learning. One in four felt that standardised testing encouraged 'teaching to the test'.

Teachers' Commentary and Advice about Standardised Testing (Research Question 5)

A total of 1,062 teachers responded to the following open question: What two pieces of advice would you offer to Irish educational policy makers about the practice of standardised testing in English reading and mathematics in Irish primary schools? Following a process of iterative content analysis and coding of the teachers' advice and the additional commentary they proffered, eight themes were identified and presented here in alphabetical order.

- 1. Changes to the Tests: Teachers called for standardised tests to be revised, replaced and/or changed and for review of this kind to occur regularly. There were also calls for greater alignment between the tests and curricula with some teachers highlighting the challenge of completing the curriculum in time for standardised testing during the summer term. Some asked for more flexibility regarding test administration protocols while others suggested that e-tests should be considered. The use of multiple forms to safeguard the reliability of scores was raised as was the value of administering the tests in autumn.
- 2. DEIS Specific Issues: Some teachers questioned the practice of comparing the standardised test results of students attending DEIS schools with those in more advantaged settings. The possibility of comparing 'like with like' was raised to facilitate intra-DEIS school scores comparison. Others wondered if alternative assessments specifically geared towards DEIS schools should be devised. Not all respondents, however, wanted special treatment for students attending DEIS schools.
- 3. EAL and the Language of the Tests: Specific concerns were raised regarding the appropriateness of current standardised tests for EAL pupils in particular and there was general consensus that pupils for whom English is not their mother tongue should be considered when standardised assessments are being designed, normed, administered and scored. There were various recommended changes, including differentiated assessments, rewording within tests, alternative administration protocols and some kind of "consideration when evaluating national results" of the achievements of pupils with EAL.
- 4. Professional Development: Where calls for CPD were made, they focused on requests for support for teachers to develop their understanding of how to administer and score standardised tests, interpret and report standardised test scores, prepare pupils appropriately for the tests and use the data to inform teaching.
- 5. SEN and the Allocation of Resources: The potentially adverse impact on vulnerable pupils of reducing resources on foot of reported improvements in their standardised scores was raised by many teachers, some of whom argued that this equated to 'penalising' hard work that resulted in positive outcomes. Some teachers pointed to the impact of changing resource allocations on established teaching practices in schools, such as team teaching and small group withdrawals. Some teachers lamented the negative impact of standardised tests on pupils with SEN, reiterating the need for alternative and/or differentiated assessments and flexible test administration practices. The timing of this study in May 2017 just prior to the introduction of a new allocation model in September 2017 is an important contextual issue to consider here in so far as teachers may not have been fully *au fait* with what *Circular 0013* (DES 2017) contained.
- 6. Standardised Test Results: Teachers' opinions were divided regarding the use and sharing of standardised test results. Some teachers were very exercised in relation to STen scores, highlighting their limitations, how they are interpreted/misinterpreted, and used for comparison purposes. Some expressed concern about pupils having access to them. It was evident from the commentary that some teachers associated their pupils' performance on standardised tests with how they are perceived as professionals. There was ready acknowledgement from some respondents that parents needed greater access to information regarding testing and guidance on how results should be interpreted.

- 7. Stress and Pressure on Pupils and Teachers: Many teachers spoke about the stress, anxiety and pressure induced by the tests. The practice of 'teaching to the test' was raised as were teachers' concerns that pupils' performance on standardised tests is an incomplete reflection of their learning. Teachers reflected on the potential long-term negative consequences of an over-emphasis on standardised tests, voicing specific concerns about the holistic development of the child, the adverse impact of media and the use of test scores as a barometer of success in school.
- 8. 'Teaching to the Test': Some teachers indicated that they were either aware of colleagues within their own schools who 'teach to the test' and/or know of other schools in which the practice occurs. Pressure felt by teachers themselves or through parent/pupil expectations as well as over-familiarity with the standardised tests currently in use were offered as underlying causes for why this practice happens. Advice included changing the content of tests routinely and/or use of a wider range of standardised assessments.

Conclusions and Policy Recommendations

The Role of Standardised Tests in Primary Education

Standardised tests bring value over and above other assessments in allowing the benchmarking of every individual pupil's performance against national norms. Such information is important in broadening the focus of desion-making about teaching and learning within classrooms and across schools. In addition, when achievement data from sample-based national assessments are not fine-grained enough for some policy decisions, aggregated data from standardised tests across a census of schools can be useful. However, experiences with standardised testing all over the world show that there is a very real danger of undermining the potential benefits of standardised tests when the stakes associated with them are raised.

The mandatory testing and reporting requirements introduced into Irish primary schools in 2012 has resulted in far greater attention being paid to the outcomes of standardised testing by teachers, principals, managers, parents, policy-makers and, as the data in this survey suggest, pupils. Data from this survey highlight the diversity of practices and opinions around standardised testing that exist among primary teachers and raise some concerns that the negative consequences associated with raised stakes may already be a reality in Irish primary schools. Moreover, there is evidence supporting the conclusion that the process of constructing standardised tests and the interpretation of norm scores is not well-understood by many teachers and this must be highlighted in a respectful but honest way. The lack of professional development in the area must be acknowledged and a plan put in place to address this and other assessment related literacy issues.

Policy recommendations offered here are designed to address some of the key issues raised by teachers in this survey and to ensure that the outcomes of standardised tests are used in a meaningful way in the service of high-quality teaching and learning. The following five principles should be stated, reiterated and/or highlighted in all policy documents:

- Standardised testing is as an integral part of the teaching and learning process and the outcomes
 of standardised tests can be used by various stakeholders (pupils, teachers, policy makers and
 others) to enhance learning.
- 2. Standardised testing is important but is not more important than the assessments teachers and their pupils use in the course of normal classroom activity.
- 3. Standardised tests in English reading and mathematics measure elements of literacy and numeracy but can never capture the full range of what achievement in both areas of learning means.
- 4. Single assessments are a poor basis for making important educational decisions and the results of standardised tests should never be used or reported in isolation.
- 5. Standardised tests are not designed to be measures of teacher effectiveness.

In addition, if standardised testing is set to continue in Irish primary schools, then measures must be put in place to ensure that problems associated with it in other jurisdictions and hinted at in this survey do not escalate in the future. Specifically:

- 1. Rigorous validity studies of all standardised tests in use in Irish primary schools should be carried out to ensure that the tests remain content and construct-relevant.
- 2. Rigorous validity studies examining the intended and unintended consequences of standardised testing on teaching, learning and national policy should be undertaken on a cyclical basis.
- 3. A programme of professional development should be put in place to address the fact that the process of constructing standardised tests and the interpretation of norm scores is not well understood by many teachers.

Additional recommendations now follow logically from these principles and measures.

The Timing of Standardised Testing

Consideration should be given to changing mandated testing from the summer term to the autumn term (or providing schools with this option). Testing in the autumn might alleviate the pressure/anxiety felt by teachers and pupils while increasing the possibility of test data being used for formative purposes throughout the school year. The timing would also make it possible for the results of standardised tests to be communicated and explained at parent/teacher meetings.

Written Communication of Standardised Test Results

Standardised test scores should be communicated in writing as part of a narrative text that describes pupil performance, interprets it in light of other assessments and acknowledges the imprecise nature of standardised test scores.

Updating of Standardised Tests

Irish standardised tests should be re-normed and updated more often than is currently the case. Moreover, Irish normed standardised tests of reading and mathematics achievement should be used in preference to those developed elsewhere as they are more likely to reflect what Irish primary pupils have had an opportunity to learn.

Standardised Testing in DEIS Schools and for Children with SEN/EAL

Some system of criterion-referenced in addition to norm-referenced interpretations should be considered for use in DEIS/EAL/SEN contexts. Reporting of individual pupil progress to parents could be done in this way with the percentages of students meeting particular benchmarked standards reported to BOMs and the DES. The system might help to identify and facilitate the measurement of appropriate learning goals, meet the differentiated needs of the pupils, be more reflective of teaching and learning practices in inclusive and disadvantaged settings, and affirm teacher effort and professionalism.

Using Standardised Test Results

Attention needs to be paid to how the outcomes of standardised testing are used for teaching and learning purposes within individual classrooms and for whole-school decision and policy making. Specifically, issues with respect to higher-order thinking skills, the selection for gifted and talented programmes and involving pupils in discussions about their performance (pupil voice) need to be addressed. Clear and detailed guidance on how standardised test results can be used for a list of specific teaching and learning purposes needs to be made available to schools as a matter of urgency and included as a core element when planning CPD. Above all, there is a need for a more joined-up approach to supports for schools in using standardised tests for various purposes.

Professional Development for Standardised Testing

A programme of professional development focused on improving teachers' assessment literacy more generally and with standardised testing as one linked component should be devised and made accessible to all teachers (including pre-service teachers). This could be achieved primarily using web-based video technology. The programme could be accessed by schools over a series of approximately five or six'Croke Park' type hours spread across one or two academic years. As requested by teachers, the content of the programme should be focused on three areas: (i) how standardised tests are constructed (to address issues pertaining to validity, the meaning of norm scores and measurement error); (ii) how standardised test scores should be interpreted and communicated; and (iii) how the results of standardised tests can be used to make valid decisions about teaching, learning and achievement.

Significance of the Study

This study, led by CARPE and the INTO, is the first large scale investigation of Irish primary teachers' practices, beliefs/attitudes, policy advice and professional development needs with respect to standardised testing in English reading and mathematics. The study findings are relevant insofar as they shed light on the diversity of opinions and concerns currently held by primary teachers and timely given the 12 years that have passed since the introduction of mandatory testing in 2007. Data from the survey provide a snapshot in time that highlight the increased status of standardised testing in the primary system. The findings give educators and policy makers much food for thought and, potentially, a basis for informing decision-making, planning and action. Our hope is that insights gained from this study will be used by policy makers and others for the benefit of Irish primary school pupils and their teachers.



1

A Brief History of Standardised Testing in Irish Primary Schools

A standardised test may be defined as one that is administered, scored and interpreted according to a consistent set of rules. The focus of this study is on norm-referenced standardised tests where individual performance is compared to the performance of a sample group representing some population of interest e.g. fourth class pupils nationally. The first Irish-normed group administered standardised tests to be used in Irish primary schools were those developed at the Educational Research Centre, Drumcondra in the early 1970s for use in a large-scale experimental study examining the impact of a standardised testing programme on school practices, teachers, pupils and parents (Kellaghan, Madaus, and Airasian, 1982). Despite their newness, a reference to standardised testing in reading appears in the Teachers' Handbook Part 1 of the Primary School Curriculum introduced in 1971: "Many teachers find it useful to administer standardised reading tests, particularly as a guide to individual attainment, and also as a pointer to average progress made by the class or by a group over a fixed period" (An Roinn Oideachais, 1971, p. 94). Throughout the 1970s and into the 1980s many teachers began to use standardised tests to assess reading and spelling predominantly, with the Irish normed Marino Spelling and Reading Assessments (Ó Súilleabháin, 1970) and various UK normed assessments such as the Schonell tests (Schonell and Goodacre, 1971) popular at the time. However, throughout the period and up to the introduction of the group administered Mary Immaculate College Reading Attainment Test (MICRA-T) in 1988, standardised tests were largely employed by remedial (learning support) teachers for the purpose of identifying and supporting children experiencing learning difficulties (Irish National Teachers' Organisation [INTO], 1994). The widespread availability of the MICRA-T and subsequent introduction of the Drumcondra Primary Reading Test in 1995, the Standardised Irish Graded Mathematics Attainment Test (SIGMA-T) in 1991 and the Drumcondra Primary Mathematics Test in 1997, led to much greater use of standardised testing in schools. Throughout the 1990s standardised tests continued to be used in a low-stakes way, with schools and teachers having discretion on how the test results were used and whether or not they were reported to parents/guardians. In addition, school policies varied with some schools testing all classes first to sixth every year and others testing less frequently or in fewer classes. In the Green Paper Education for a Changing World (Government of Ireland, 1992) and the National Education Convention (Coolahan, 1993) it was proposed that mandatory standardised testing be introduced at two points in primary education, however this proposal was later rejected following much debate and opposition from teachers (Hall, 2000; INTO, 2010). The introduction of the Education Act in 1998 (Government of Ireland, 1998) made it a statutory obligation for teachers to regularly assess their pupils and periodically report the results of the evaluation to the pupils and their parents. The mode of assessment was not stipulated in the Act. The importance of assessment was reiterated in the Revised Primary School Curriculum in 1999 but here its scope was broadened to include all areas of the curriculum, not just reading and mathematics. In this curriculum standardised tests were identified as one of a range of assessment tools teachers could use to integrate assessment with teaching and learning (National Council for Curriculum and Assessment, 1999). The growth in the use of standardised tests by the early 2000s was reflected in a

survey by the Department of Education and Skills (DES) which found that 98% of teachers reported using standardised tests regularly (DES, 2005). The early part of the new millennium also saw several other significant developments.

During the 2003/04 school year, the National Council for Curriculum and Assessment (NCCA) embarked on a review of the *Primary School Curriculum*, involving questionnaires and interviews with teachers, children, parents and principals in six case study schools. One of the main recommendations arising from this review was the need to develop an overarching statement on assessment, and a guide to using a range of assessment tools in the primary school curriculum (NCCA, 2005a). In July 2004, the Minister for Education and Science, Noel Dempsey TD, announced his intention to make the recording and reporting of standardised test results in first and sixth class mandatory with effect from the 2006/07 school year. The Minister stated that there was a need to have aggregated assessment data for decision-making, identifying progress and allocating resources. The INTO objected to the lack of consultation on the issue and stated that while teachers were not opposed to assessment, or to the use of standardised tests, they were opposed to the mandated national testing of primary school pupils because of what had been the consequences of such policies in other countries e.g. narrowing the focus of curriculum, distorting assessment purposes, etc. (INTO, 2010).

In 2005, the LANDS Report (Literacy and Numeracy in Disadvantaged Schools: Challenges for Teachers and Learners) suggested that on the basis of evaluations carried out by the Inspectorate, assessment policy and practice were aspects of provision that required significant attention and improvement (DES, 2005). The LANDS Report recommended that the DES, the NCCA and the support agencies should provide more coordinated guidance to schools in relation to standardised testing and assessment strategies and how these can impact on pupil achievement. As noted above, the NCCA were already in the process of developing such guidelines, however, both Minister Dempsey's announcement and the LANDS report resulted in more focus and attention being afforded to standardised testing in this process. Following a period of consultation with relevant stakeholders, the NCCA reviewed the use of standardised testing in primary schools and published policy advice as part of its Supporting Assessment in Schools (NCCA, 2005b). In the document a cautionary note was sounded about the mandatory use of standardised assessment, with an emphasis on the danger of creating an assessment hierarchy with standardised testing as the most important (see also, Looney, 2006).

In 2006, Circular 0138 (DES, 2006) was sent to all schools advising them that compulsory assessment of English reading and mathematics would be coming into effect from September 2007.² Schools were given the option of administering tests at the end of first or beginning of second class and the end of fourth or beginning of fifth class. It was also a matter for schools to decide which tests to administer provided that the tests chosen were normed for the Irish population and were consistent with the primary curriculum. The DES provided a grant to defray the cost of tests for the stipulated classes and a limited national professional development programme in standardised testing was made available to teachers by the PDST.

In 2007, the NCCA published a set of *Assessment Guidelines* for primary schools, in which standardised testing was presented as one of eight key methods to support teaching and learning (NCCA, 2007). These guidelines were disseminated to all primary schools in January/February 2008.

Despite the fact that there was no evidence that standards in reading literacy had changed at primary level, Ireland's perceived poor performance in the *Program for International Student Assessment* (PISA)³

² The abolition of the Primary Certificate Examination in 1968 was the last state mandated test in primary education until compulsory standardised testing was mandated in 2007 (Sheehan, 2016).

³ PISA is a triennial international comparative assessment of 15-year-olds' capabilities in reading literacy, mathematics literacy, and science literacy. It is managed by the OECD and involves 70+ countries and economies.

2009 heralded an increased focus on standardised testing, and set off a chain of educational reforms initiated by the publication of *Literacy and Numeracy for Learning and Life* (also known as the *Literacy and Numeracy Strategy*) (DES, 2011a) and the subsequent *Circular 0056* (DES, 2011b). The reforms included mandatory standardised testing of reading and mathematics in second, fourth and sixth class⁴ and Irish medium schools were required to implement standardised testing in Irish reading. Significantly, *Circular 0056* (DES, 2011b) also stated that schools were required to report aggregated standardised test scores in the form of STens⁵ to Boards of Management (BOM) and to the DES at the end of the school year – a practice that had never before been a feature of standardised test use in primary schools. The stated intention was to provide schools with a clearer understanding of 'trends in achievement and inform a school's planning, self-evaluation and external evaluation' (DES, 2011a, p.75), capture a national picture of how well pupils were acquiring literacy and numeracy skills and make local and national policy decisions, particularly with regards to the allocation of resources in special education and social disadvantage (DES, 2017a).

Since the publication of *Circular 0056* (DES, 2011b) schools are obliged to provide parents with the results of standardised tests on report cards, the templates for which have been prepared by the NCCA. The NCCA has also prepared guidelines for parents in understanding the results of standardised tests. Previously, *Circular 0138* (DES, 2006) had merely stated that the results of standardised tests were to be made available to parents and to other relevant personnel, such as members of the Inspectorate. In that context it is worth noting here that the guidelines for the *Drumcondra Tests*, the *MICRA-T* and the *SIGMA-T* recommend that these results should be given and explained at parent-teacher meetings to provide context and ensure clarity of interpretation.

In 2014, an additional policy in relation to the reporting of standardised test scores was introduced, namely the NCCA end-of-year sixth-class Report Card. The report card was developed to support the dual purpose of reporting to parents and transferring pupil information to post-primary schools as part of the 'Education Passport.' The standard report card requires schools to include children's STen scores for second, fourth and sixth class. On receipt of confirmation of enrolment, the primary school sends a copy of this report to the child's new post-primary school.

In 2017, another significant development occurred when a new policy was introduced whereby standardised test results returned to the DES were used in conjunction with other criteria for deciding the allocation of special educational teaching resources to schools (DES, 2017a). Finally, three recent developments are also worth noting. First, the *Action Plan for Education* has outlined the government's ambition to 'review the options for standardised testing so that clear information is provided to teachers and parents' (DES, 2018, p.75). Second, the Education Research Centre has published its revised primary-level reading and mathematics standardised tests as the current content and norms dated from 2007 and 2006 respectively. Revised versions of the *MICRA-T* and *SIGMA-T* are also expected in 2020 to replace current versions normed in early 2003 and 2007 respectively. Third, Irish-normed standardised achievement tests in reading and mathematics for second year post-primary pupils were made available in 2014, with an online version available from 2017. Tests of Irish reading for Second Year in Irish-medium schools (Gaelcholáistí) were developed in 2016 and will be available online from 2019.⁶

⁴ Pupils may be excluded from standardised testing if, in the view ofthe school principal, they have a learning or physical disability which would prevent them from attempting the tests or, in the case of migrant pupils, where the level of English required in the test would make attempting the test inappropriate.

⁵ STEN and STen are used interchangeably to denote the standard ten score.

⁶ A plan for mandatory standardised testing in Second Year was outlined in the *Literacy and Numeracy Strategy* in 2011 but, at the time of writing, has not been implemented.



2

Supports for the Use of Standardised Tests in Irish Primary Schools

Mandatory practice of standardised testing for second, fourth and sixth class pupils means that many teachers are likely to be familiar with the relevant procedures for these tests. While initial teacher education and professional development courses provide some guidance, day-to-day supports available to practising teachers on the use of standardised tests come from five key sources: DES Circulars, Test Manuals, the NCCA, the PDST and other online tools. These resources vary in terms of quality, content and accessibility.

2.1 Department of Education and Skills (DES) Circulars

DES circulars are an important resource for primary schools on this issue as they outline the requirements for teachers and schools in relation to standardised tests. While *Circular 0138* (DES, 2006) was the first to refer to compulsory standardised testing in English reading and mathematics, *Circular 0056* (DES, 2011b) provided an update on standardised testing procedures in primary schools as a result of the *National Literacy and Numeracy Strategy* (DES, 2011a). This circular directs all schools to administer standardised tests at three points in the primary cycle and sets out the school's responsibilities in relation to using the results and reporting them to parents and the DES. The circular highlights the importance of sharing results with other schools and advocates the use of aggregated results to inform school planning practices. Templates to record such data are included in this circular as are further resources from the NCCA. Subsequent circulars issued on an annual basis give more details about how schools can avail of the relevant purchasing grants as well as a list of online tools to support the communication of results to the DES and parents. While these circulars indicate what schools and teachers should do regarding standardised testing, they do not tell teachers how to implement such procedures. Instead they direct them to other resources and supports.

2.2 Test Manuals

Each level or cluster of levels of the *Drumcondra Primary Reading Test* (DPRT; ERC, 2006), the *Mary Immaculate College Reading Attainment Tests* (MICRA-T; Wall and Burke, 1987), the *Drumcondra Primary Mathematics Test* (DPMT; ERC, 2006) and the *Standardised Irish Graded Mathematics Attainment Tests* (SIGMA-T; Wall and Burke, 1991) has a corresponding manual. Each manual gives an overview of the test in question as well as clear guidelines on test administration. Teachers are given a script to read to ensure standardisation of instructions and they are told explicitly when to give reminders to their pupils regarding the amount of time left on the test. Answer keys are also provided. These sometimes include examples of answers which should not be accepted. The manuals also include tables that enable teachers to convert raw scores to standard scores, percentile ranks and STen scores. While the *DPRT* and the *DPMT* use class-based norms only, the *MICRA-T* and *SIGMA-T* calculate both the

class-based and age-based norms. The *MICRA-T* and *SIGMA-T* manuals assert that calculating both scores allow for a more balanced interpretation of student achievement. Every manual uses the same standard score groupings (e.g. 130+, 120-129, 110-119, etc.) but with slightly different descriptors to help teachers understand better and communicate student performance to relevant stakeholders. The second half of each manual provides technical information regarding the development of the test including details on the size of the norming groups used as well as statistics related to the reliability and validity of the tests. Information regarding the calculation of the Standard Error of Measurement is also included here.

The test manuals do not vary significantly in terms of layout or content. Some minor variations in terminology are present as demonstrated by the differences in standard score range descriptors. For example, the *DPMT* uses the term "well above average" to describe pupils who attain a standard score of 130 and above. The *SIGMA-T* uses the term "extremely high" to describe the same standard score range. It also appears that the *SIGMA-T* and *MICRA-T* manuals offer more guidance to teachers on interpreting and using test scores to inform teaching practice (e.g. explaining how to use standardised test scores to compare results from different tests) but the *DPMT* and *DPRT* manuals give more support on how to communicate results to parents as illustrated by their appendix comprising a two-page document that can be given to parents to explain these tests. Regardless of these differences, the manuals accompanying the different standardised tests in Ireland are remarkably similar.

The test manuals available offer concise guidelines regarding the administration and scoring of standardised tests in Irish primary schools. The test manuals are written in a direct and accessible style but some of the information related to the development of the test (e.g. the use of intra-class correlation in determining the size of the standardisation sample, etc.) is quite technical and requires some knowledge of statistics. However, useful insights into test development can be found amongst this content including the *MICRA-T*'s justification for using the *SEMAC* method of scoring (where semantically/syntactically acceptable equivalents of the target word are accepted). Every manual discusses the importance of communicating results to parents and how to interpret the results. However, depending on which manual is consulted, the prominence of these topics varies. Regardless, these manuals are an excellent resource for teachers to assist in the practical administration of standardised tests. However, they should be supplemented by other resources to ensure accurate interpretation, use and reporting.

2.3 National Council for Curriculum and Assessment (NCCA)

The NCCA have two key sources for teachers in relation to standardised testing – the 2007 Assessment Guidelines and their website (ncca.ie). As outlined previously, the 2007 Assessment Guidelines outline a broad spectrum of assessment methods, of which standardised testing is one. They include a section dedicated to the discussion of standardised tests, which offers clear definitions of key terms (p.61) and has sample activities for teachers to help them interpret a student's standardised test scores (p.62) as well as scenarios to demonstrate how to report certain results to parents (pp.64-65). These guidelines were distributed to all schools in the 2007/08 school year, and they remain available online for teachers to access, view and download. The guidelines are mentioned extensively in the previously discussed DES circulars to ensure that teachers are aware of their existence. They are written in an easy-to-read manner and offer a very good overview of the process and procedures that schools should follow when administering standardised tests.

The NCCA website also has ready-to-use resources to support teachers in their reporting of results to parents. For example, there are a number of information sheets for parents entitled *Your Child and Standardised Testing* that explain the meaning of standardised test scores and answer other frequently asked questions about standardised testing (e.g. meaning of STen scores, etc.) and are available in a range of languages (Polish, French, etc.). In addition, the website provides reporting templates that include a dedicated space for reporting the results of standardised tests. These resources appear to be very useful to teachers and schools as they offer practical support on the implementation of the reporting requirements set out in *Circular 0056* (DES, 2011b). The website also recommends consulting with the 2007 guidelines for further advice on standardised testing.

2.4 Professional Development Service for Teachers (PDST)

Resources to support the use of standardised testing in schools devised by the PDST tend to focus more on the aggregation of standardised test data. For example, the PDST has developed a series of easy-to-use Excel spreadsheets for schools to achieve this. They are available on their website (pdst.ie) and instructions as to how to use these forms are contained on the first sheet within each spreadsheet. The graphed scores promote discussion and analysis of the school's overall performance on standardised tests. These Excel spreadsheets allow a school to track the progress of a class or child over the course of their school lives, plotting their standardised scores in graph form against the national norms, so that the school can understand their performance better. This resource can be used to support school management's decisions about actions that may need to be taken to improve achievement levels in accordance with the process of School Self Evaluation (SSE). This tool automates the reporting and analysis procedures stated by *Circular 0056* (DES, 2011b).

One of the legacy websites of the PDST entitled the *Primary Professional Development Service* (ppds.ie), contains a large number of resources for teachers on standardised tests. These include previously-delivered professional development seminars on the topic as well as recording templates and questions teachers should ask themselves to support their interpretation of test scores.⁷

2.5 Other Resources

Understanding and Applying Assessment in Education (Murchan and Shiel, 2017) is a book written specifically with Irish teachers and student teachers in mind. The authors explain the fundamental theoretical concepts that underpin educational assessment and how they can be practically applied in schools. Of particular relevance is the chapter dedicated to standardised tests and examinations. This chapter provides useful information on the construction of standardised tests, offers explanations and definitions of key terms (e.g. standard error of measurement, norm-referenced frameworks, etc.) and gives practical guidelines on how to report assessment information to pupils and parents. The chapter also explains how standardised test scores can be used to improve teaching and learning.

⁷ Available at: www.pdst.ie/SSEResources#Excel%20Tool%20for%20Analysis%20of%20Standardised%20Tests

Online tools by private companies to support the use of standardised test results in primary schools also exist. These tools facilitate the scoring, storage and analysis of test scores as well as the tracking of student test scores. For example, software such as *Scorz* (Folens, 2018) and the *Drumcondra Primary Tests Scoring System* were designed to support schools and teachers in scoring and subsequently interpreting pupil performance. For standardised tests in mathematics, detailed analyses in relation to strand and strand-unit performance can be conducted with significant ease in both programmes. Other providers like *Aladdin* (2018), also include this as part of their Online Management Information System (MIS)/Student Information System (SIS) for primary schools. It is currently used in almost one-third of Irish primary schools (Aladdin, 2018). Management of standardised test scores is one feature of this software. Test scores for individual children, classes and the entire school can be recorded and compared from year to year and are easy for teachers to access. However, it is important to note that some of these resources (e.g. *Aladdin*) often come at an extra cost to schools and may not be available in every school setting, sometimes due to lack of adequate broadband access.

3

Key Findings from Research Literature on Standardised Testing

The role of standardised testing in Irish primary schools has been subject to debate over the past 30 years (e.g. Hall, 2000; Looney, 2006). As outlined above, decisions regarding the appropriate use of standardised tests were initially – and for many years – made predominantly by individual teachers and schools. However, the introduction of mandated testing in 2007, and subsequent increases in the frequency of same, along with additional reporting requirements introduced in 2012, served to formalise their use. As a result, the focus on these instruments has intensified in recent years. The decision to introduce mandated testing and reporting was taken for a number of important reasons. As outlined by the DES (2016a), standardised achievement testing provides accurate information⁸ on pupils' achievements in reading and mathematics. Teachers can use this information to track pupil progress, to inform teaching and learning and to identify pupils with learning difficulties. In addition, schools can use it to set and monitor targets for improvement as part of the School Self-Evaluation process, and the DES can use it to monitor national trends, and to identify schools that are performing above or below what is expected. As such, it is clear that there are many potential benefits associated with nationwide standardised testing.

The Irish education system was in fact much later than others in introducing prescriptive standardised testing regimes. In England and Wales, legislations were first outlined in the *Education Reform Act* of 1988 with mandated testing at Key Stages One, Two and Three established by 1994 (Regan-Stansfield, 2017). In the US, the practice dates back even further, with state-wide testing programmes already well established by that time (Barton and Coley, 1994). Consequently, a substantial body of literature exploring the impact of these initiatives has emerged in the intervening years, leaving educational policymakers in Ireland in a relatively fortunate position. These international experiences serve as a valuable resource as the country embarks on the practice of mandated standardised achievement testing.

It is important to distinguish between government-mandated testing and 'high-stakes' testing. Even mandated tests can be considered 'low-stakes' if the results are used purely for internal monitoring and decision-making with regard to teaching and learning. However, when policy dictates that these results have significant consequences – either for pupils (e.g. grade promotion), teachers (e.g. salary implications) or schools (e.g. funding allocation, league tables reported to the public), these tests come to be perceived as "high-stakes" (Madaus, 1988a). In many countries, standardised testing has become increasingly 'high-stakes' over the past two decades (Wiliam, 2010), and it follows that many of the effects reported in the literature are primarily a result of this "accountability movement" (Au, 2007, p.258). Standardised testing in Ireland, on the other hand, remains relatively low-stakes at present.

9

⁸ Although rigorous development and administration procedures ensure the accuracy of standardised test data to a certain extent, there is also a need to be cognizant of measurement error, and of the limited content covered by these tests. Both of these issues are revisited in detail at later points in the report.

However, recent changes – in particular the decision to use the test results, alongside various other factors, to determine the allocation of special educational teaching resources to schools (DES, 2017a) – could be interpreted as a move towards a higher-stakes model, and there is a need to be cognizant of the potential implications of such a move. Moreover, the literature also indicates that merely increasing the frequency of standardised testing, even in the absence of truly high stakes, can have unintended negative consequences (Abrams, Pedulla and Madaus, 2003).

It is imperative that educational policymakers in Ireland are aware of various problematic issues that have been associated with mandated standardised testing and the extent to which they are likely to materialise in this country in future years. This survey of Irish primary teachers' attitudes towards and practices in relation to standardised testing represents an important step to this end. Key themes from the international literature that informed the development of the instrument used in this study will now be considered.

3.1 The Illusion of Success

In Ireland, as has been the case internationally, the overarching purpose of mandated standardised testing is to raise educational standards. Indeed, Ireland's poor performance in PISA 2009 was the main driving factor in the introduction of the *National Literacy and Numeracy Strategy* (DES 2011a), of which mandated standardised testing is a key component (DES, 2017b). The act of outlining "demanding but realistic targets" (DES, 2011a, p.5) and monitoring yearly progress towards these targets sets an explicit focus for schools and for individual teachers. Moreover, if the test results are used alongside other sources of information to identify areas of strength and areas for improvement, to guide teaching and learning, and to keep parents informed of their children's progress – which, as Jacob (2005) pointed out, is precisely what advocates of standardised testing claim to be the case – it might well be expected that they will lead to authentic gains in student achievement.

In practice, findings suggest that many teachers respond to increases in the frequency of and stakes associated with standardised tests by spending a large proportion of class time engaged in specific test preparation activities with their pupils (e.g. Jones, Jones, Hardin, Chapman, Yarbrough and Davis, 1999). According to Hoffman, Assaf and Paris (2001), examples of such activities include focusing on content that appears on the standardised tests, fostering familiarity with the kinds of item formats that appear on the standardised tests, demonstrating how to mark answer sheets correctly, and facilitating test-taking practice using commercial test preparation materials and tests from previous years. As noted by Linn (2000, p.7), each of these practices "range from quite acceptable to quite unacceptable", depending on the extent to which they are carried out. For example, focusing on general concepts and skills found in the tests is justified on the premise that these concepts and skills represent desired pupil learning outcomes. However, when this focus narrows excessively, with teachers rehearsing isolated parts of the overall domain with the sole intention of improving test performance – a practice commonly referred to as 'teaching to the test' – the educational value becomes increasingly questionable (Haladyna, 2006). Collectively, these practices can have serious implications for the validity of subsequent judgements about pupil achievement based on standardised test scores. That is, increases in test scores over time may simply reflect an increased exposure to tests and test-related activities, as opposed to authentic learning gains (Haladyna, Nolen and Haas, 1991).

Aside from test preparation activities, which are often well-intentioned, other particularly unpalatable practices have also been reported. These range from overt cheating behaviours such as providing correct answers or changing incorrect answers in test booklets, which, according to Jacob and Levitt (2003), occur in a minimum of 4-5% classrooms annually, to more subtle 'gaming', such as selectively excluding certain pupils from testing' (Cullen and Reback, 2006) or affording pupils extra time to complete the tests. Activities such as these represent departures from the standardised administration procedures implemented during the norming of these tests, and, consequently, pose significant threats to validity.

Administration infringements and other forms of cheating are infrequently documented in the literature, though, as Wollack and Case (2016) pointed out, anecdotal evidence suggests that they occur. Information about teachers' individual practices is often gathered using self-report measures; as such, it is possible that tendencies towards socially desirable responding have masked the extent of the problem. Indeed, in one survey of elementary school teachers (n=168) conducted in North Carolina, 35% of respondents reported having witnessed some form of cheating in their schools, as opposed to having engaged in these behaviours themselves (Gay, 1990). As Haladyna (2006) pointed out, the fact that standardised test administration in schools is not typically monitored by external personnel may also have contributed to an underestimation of the extent to which cheating occurs.

Thus, increasing the focus on standardised tests may give rise to excessive test preparation activities, a culture of 'teaching to the test', and, in some cases, inappropriate and unethical behaviours. These issues can result in the artificial inflation of test scores over time (e.g. Klein, Hamilton, McCaffrey and Stecher, 2000), creating the illusion that policies emphasising standards and testing have been successful in raising educational standards, when in reality, this may not be the case. Discouragingly, evidence from studies tracking changes in educational standards using indicators other than scores from 'high-stakes' tests (e.g. Amrein and Berliner, 2002) has suggested that standards remain static – and in some cases even decline – following the implementation of these regimes. Ultimately, there may be some truth in Reay and Wiliam's (1999, p.353) assertion that "the more specific the government is about what it is that schools are to achieve, the more likely it is to get it, but the less likely it is to mean anything."

3.2 Narrowing of the Curriculum

Test score gains in the absence of any changes in pupil learning are undoubtedly problematic, but worse still is the possibility that 'high-stakes' tests may *inhibit* pupil learning. This is thought to occur indirectly. Many (e.g. Au, 2007; Berliner, 2011; Madaus, 1988b) have expressed concerns that 'high-stakes' testing can lead to a narrowing of the curriculum, which in turn has a negative impact on pupil learning.

In its simplest sense, narrowing of the curriculum can be understood as an inevitable consequence of 'teaching to the test'. That is, if teachers increase the amount of time spent on content areas that appear on the tests, this will automatically result in less time being spent on other non-tested content areas. The potential for this phenomenon was identified in the earliest days of "high-stakes testing" (Madaus, 1988b) and there is a wealth of evidence to suggest that it has taken hold. For instance, schools in US districts experiencing 'high-stakes' testing in English reading and mathematics have reported substantial reductions in instructional time in subjects such as social studies, science, physical education, art and music (Berliner, 2011).

⁹ The current guidelines (DES, 2011b) stipulate that some pupils may be excluded from testing if they have a learning/physical disability or level of English that would prevent them from even attempting the test, and the composition of the norming population reflects these guidelines. However, in the United States, Cullen and Reback (2006) draw attention to the fact that some teachers may misreport the disability status of some pupils, or even encourage certain pupils not to attend school on the day of testing.

Importantly, as Au (2007) pointed out, the term "curriculum" encompasses not only content to be learned, but also the manner in which that content is structured (*curricular form*) and communicated (*pedagogy*). In this sense, 'narrowing of the curriculum' can refer not only to a decreased emphasis on non-tested content, but also to the fragmentation of knowledge into discrete procedures and facts and the adoption of restrictive and teacher-centred pedagogies. These phenomena are somewhat nuanced; hence, they are arguably more difficult to measure than the issue of time spent on certain subject areas. Striking quotes and narratives from qualitative research, however, have attested their presence.

Focusing first on knowledge fragmentation, evidence again dates back to the advent of 'high-stakes' testing, Madaus (1988a, p.41) described how interviews with teachers and students in Boston public schools revealed how "much of the curriculum in reading could not qualify as reading at all ... worksheets, vocabulary drills and answering multiple-choice questions about short passages often took the place of real reading." In a survey by McMillan, Myran and Workman (1999), one teacher lamented that they were spending more time "teaching specific facts and having students recall them", whilst another stated "I fear that for my students to do well on the test I will have to forego teaching critical thinking processes." Interestingly, some conflicting evidence has also emerged. Koretz, Barron, Mitchell and Stecher (1996) found that the majority of teachers reported increasing the emphasis on skills such as problem-solving and writing in response to a 'high-stakes' state test. As Abrams et al. (2003) pointed out, however, this finding may reflect the fact that this particular test was portfolio-based – an atypical format where standardised tests are concerned. Furthermore, more recent literature (e.g. Berliner, 2011; Polesel, Rice and Dulfer, 2014) continues to draw attention to the ways in which 'high-stakes' testing promotes superficial learning at the expense of higher-order thinking and opportunities to apply learned skills in novel contexts, indicating that the problem has not abated in recent years. In fact, it is arguably of greater concern now than ever before, in view of the increasing value placed on these types of skills in contemporary society (Resnick, 2010). Indeed, complex cognitive and non-cognitive skills such as critical thinking, problem-solving, digital literacy, communication, collaboration and cultural sensitivity have come to be identified routinely as '21st century skills'. It is widely acknowledged that traditional assessment tools simply cannot capture these skills, and that, consequently, there is a great need to introduce new and innovative assessment methods (Geisinger, 2016; Griffith and Care, 2015).

With regard to pedagogy, there is evidence to suggest that 'high-stakes' testing discourages constructivist practices. One teacher surveyed by Clarke et al. (2003, p.53) claimed to have engaged in "a lot more direct teaching than... student-led learning" since the introduction of the tests; furthermore, in a discourse-analytic study examining the influence of 'high-stakes' tests on classroom talk about curricular literature, Anagnastopoulos (2007, p.60) described how the tests had "reinforced teachers' textual authority over the classroom text". Other studies have returned mixed results on this issue (e.g. McMillan et al., 1999; Stecher and Chun, 2001). In any case, it could be argued that the precise strategies in which teachers are engaging are of less concern than the fact that many teachers feel they can no longer implement the strategies which they themselves deem most appropriate. Indeed, 76% of those surveyed by Abrams et al. (2003) reported that state testing programmes had led them to teach in ways that contradicted their own understandings of sound educational practice. As Crocco and Costigan (2007, p.517) highlighted, teaching is "highly skilled work, worthy of being considered a profession", and the erosion of teachers' professional autonomy to this extent is both unnecessary and undesirable.

The question of how standardised testing regimes may affect the curriculum has received a great deal of attention in the international literature. The predominant theory is that testing leads to the narrowing of the curriculum, as manifest in the reduction of time spent on non-tested subjects, the fragmentation of knowledge, or the increased use of teacher-centred pedagogies. In a particularly comprehensive meta-synthesis of literature on the topic, Au (2007) found substantial, but not unanimous support for this contention. Indeed, the format of the test, the stakes with which it is associated, the socio-demographic profile of the pupils, and many other contextual idiosyncrasies are also likely to influence the extent to which test-induced curriculum narrowing occurs.

3.3 Pressure to Perform

When the stakes associated with standardised tests are high, or if they are merely perceived to be high, there is a risk that it will introduce 'pressure to perform' amongst teachers, pupils and parents. This theme is heavily related to each of those discussed above. Indeed, if teachers feel under great pressure to improve their pupils' standardised test scores, even those with the utmost integrity may inadvertently resort to practices such as 'teaching to the test'. To suggest otherwise would be, as Madaus (1988a, p.40) put it, a "staggeringly optimistic view of human nature". Furthermore, it is the pressure of accountability that often forces teachers to narrow the curriculum against their better judgement and this perceived loss of autonomy can undermine teachers' job satisfaction, ultimately contributing to attrition and turnover within the profession (Crocco and Costigan, 2007; Ingersoll, Merrill and May, 2016). Given that Ireland has typically enjoyed much lower levels of teacher attrition than other countries (Lysaght, O'Leary and Scully, 2017), it will be important to determine the extent to which Irish teachers are experiencing pressure to increase standardised test results, lest this situation begin to change in future years.

Pupils too experience test-induced pressure. Drawing on data from interviews with Year 6 (equivalent to fourth class) pupils in south London, Reay and Wiliam (1999, pp.346-347) documented how many children of this age were keenly aware of the accountability agenda ("if we don't know nothing then the teacher will get all the blame") and expressed substantial anxiety about the personal consequences of poor test results ("it means I might not have a good life in front of me"). Furthermore, observations of classroom interactions as the testing window neared revealed an increasingly competitive classroom dynamic, including instances of group hostility towards high-performing pupils.

A potential offshoot of test-induced pressure on pupils is an increase in the incidence of private tuition outside of formal schooling. So-called 'shadow education' has been common for many years in East Asia, and it is beginning to emerge in some western cultures (Bray, 2006). In Ireland, 'grinds' are mainly associated with upper secondary education and preparation for the state examinations (Smyth, 2009), but it is possible that mandated testing at primary level could yield an increase in younger pupils receiving tuition. Evidence from England suggests that 26% of pupils in Year 6 have been tutored at some point during their school career (Ireson and Rushforth, 2011), and although there are many possible reasons for this, Pearce, Power and Taylor (2018) draw attention to the fact these figures in Wales – where the SATS have been abolished – are considerably lower. Potential implications of private tuition at primary level include the exacerbation of existing social inequalities (Bray, 2011) and the "scholarisation of childhood" (Pearce et al., p.116). Currently, there is insufficient evidence to infer whether private tuition contributes to stress and anxiety in children (Chanfreau et al., 2016), but it remains a realistic concern.

There are some preventative steps that can be taken to diminish the sense of pressure to perform on standardised tests and the associated negative consequences. Of crucial importance is that teachers have a thorough understanding of the appropriate uses of standardised tests, and of concepts such as validity¹⁰ and measurement error¹¹ – and that they use this expertise to guide their interactions with both parents and pupils. By building awareness that standardised tests of literacy and numeracy represent a mere snapshot of pupil achievement and striving for a balance in terms of the emphasis placed on these versus on the multitude of other ways in which learning occurs and is assessed (see, O'Leary, 2006), some of the anxiety surrounding testing may be alleviated. Policy has an important role to play here, as an excessive emphasis on explicit standards, or the introduction of rewards or sanctions of any kind in response to standardised test results, is likely to have the opposite effect.

¹⁰ Validity is the degree to which all the accumulated theoretical and empirical evidence can be organised into a persuasive argument that inferences based on test scores are meaningful, appropriate and useful.

¹¹ Measurement error may be defined as the difference between the actual true value of a quantity such as reading, or mathematics achievement score and the value obtained by using a measurement instrument such as a reading or mathematics test.

4

Empirical Studies on Standardised Testing in Irish Primary Schools

Even though standardised tests have played a relatively peripheral role in Irish primary schools until recent years, educational researchers in Ireland have shown an awareness of the need to explore the potential effects of their use. Indeed, one of the earliest empirical studies on the effects of standardised testing was conducted in an Irish context in the mid-1970s (Kellaghan, et al., 1982). Ironically, considering the 'high-stakes' associated with standardised tests today, the fact that standardised testing was so rare in Irish schools at this time provided an ideal opportunity for these researchers to investigate the effects of testing in a particularly comprehensive manner, i.e. by using a true experimental design. The study included 155 Irish primary schools, randomly assigned to one of several treatment groups. Schools in the experimental group participated in a series of standardised tests of ability and achievement, with the results returned to teachers following testing. Schools in one control group also participated in testing, but no feedback on pupil performance was provided, whilst schools in a second control group did not participate in testing. In addition, teachers, principals, pupils and parents in all groups completed a range of questionnaires, and fieldworkers provided ratings of school and teacher cooperation and implementation of treatments.

Kellaghan et al.'s study sought to answer various questions about the effects of school-based standardised testing. To account for the fact that some effects may take some time to become apparent, the study was conducted over a four-year period (1973 to 1977). Although many aspects of the study and analyses were complex and intricate, overall, a clear message emerged: the standardised testing did not exhibit a pervasive influence on either teachers, schools, pupils or parents. For example, teachers, regardless of whether they had used the tests or not, continued to perceive themselves as being the most accurate judges of their pupils' ability and achievement, and those who received test results tended simply to assimilate these into the existing mass of information available to them through other means of assessments. 'Surprising' test results (i.e. those not in line with a teacher's prior perception of a given pupil's ability) were rare, and there was very limited evidence to suggest that these altered teachers' subsequent ratings of these pupils. As for the pupils themselves, they reacted positively to the tests, with the vast majority indicating that they did their best in the tests, that they enjoyed completing them and that they did not feel afraid or nervous about them (Kellaghan et al., 1982).

¹² Kellaghan et al.'s study consisted of eight different treatment groups in total, to facilitate the investigation of various issues such as the provision of diagnostic information to some teachers, and the use of criterion-referenced (as opposed to norm-referenced) tests. However, as these groups were less central to the overarching research question, and as the findings pertaining to these groups were not included in the major analyses, they are not discussed here.

Following on from Kellaghan et al.'s work, a smaller scale study (Archer, 1985) explored the issue of 'surprising' test results in greater detail. In this study, 30 primary school teachers were interviewed about their reactions to their pupils' standardised test results – including some surprising results, that differed, statistically speaking, from their own assessments of these pupils. On the basis of these interviews, it was concluded that teachers tended not to review their assessments of their pupils in response to these surprising results, either because they did not perceive there to be a discrepancy or, in a small number of cases, because they believed the test score to be 'wrong' (Archer, 1985).

The above studies are noteworthy as they represent some of the earliest discussions of standardised tests in the Irish education literature, and they demonstrate that an awareness of and interest in the potential effects of testing has existed for some time in this country. Of course, given that the context in which these studies were conducted differed greatly from the current situation in Irish education, it is clear that the findings cannot and should not be used to make any assertions about the possible effects of standardised testing in Irish schools today. However, a small number of other studies provide more up-to-date perspectives on a range of issues.

In 2016, the DES published a report based on a secondary analysis of the STen score data returned by schools for the 2011/12 and 2012/13 school years (n=3,113 and 3,119 schools, respectively). The aim of the report was to provide a national overview of the performance of Irish pupils on standardised tests. Notable findings included: performance in English reading and mathematics was found to be higher than expected given the theoretical normal distribution underlying the tests; the achievement of pupils in English reading in second class was higher than that of pupils in fourth and sixth class; achievement in mathematics was higher than in English reading despite the opposite being the case in national and international assessments; and patterns of achievement varied in both English reading and mathematics depending on the standardised test used.¹³

The DES (2016a) offered several possible explanations for the divergence between students' test scores and the normal distribution. They argued that while the discrepancy could represent a genuine improvement in the achievement of Irish pupils, other factors such as the age of the tests, student and teacher familiarity with the tests and non-standard administration practices could also be influential. However, no research was cited to support these claims.

The DES (2016a) recommended, as a matter of priority, that standardised tests for English reading and mathematics be revised as soon as possible and that these updates include both norm-referenced and criterion-referenced standards. The inclusion of criterion-referenced standards in this recommendation would allow standardised tests to be used for formative and summative assessment purposes in schools. It also appears to be in line with an earlier policy decision set out in the 2011 *Literacy and Numeracy Strategy*, namely, a move towards outcomes-based curriculum specifications. In an outcomes-based curriculum, targets relating pupils' achievement of specific learning outcomes are set by teachers or schools. The achievement of cohorts of students in relation to these outcomes can then be monitored using standardised tests. Indeed, moves towards an outcomes-based model continue to feature in NCCA curriculum development literature.

¹³The report also contains findings regarding the performance of students across school types (DEIS status, gender composition, medium of instruction) and on the Drumcondra Irish reading tests normed for use in English medium schools and normed for use in Irish medium schools.

Other recommendations from the DES (2016a) study related to ensuring more consistent administration practices within and between schools and the possibility of a move to Computer-based Adaptive Testing (CAT). Given the variation in patterns of achievement across the two sets of testing instruments, the report contained the suggestion that one set of normed tests, one for English reading and one for mathematics, might be desirable. Guidelines regarding the frequency of standardised testing were also considered in this document with a suggestion that, to avoid assessment fatigue, the mandatory administration of standardised assessments should occur twice in primary school rather than the current requirement of three. Continuing professional development for teachers regarding the use and administration of standardised tests was also advocated.

Corcoran (2017) argued that the increased use of testing in recent years has created an atmosphere of intense pressure in Irish primary schools, characterised by "chants, special snacks, letters to parents, and over-emphasis on test preparation time" (http://bit.ly/CorcoranLab, par. 3), and highlighted a need for interventions to help both teachers and pupils to manage their emotions surrounding the tests. MacRuairc's (2009) research was principally concerned with test validity. On the basis of a series of focus groups with children from various backgrounds, he concluded that there is a marked discontinuity between the linguistic register of the standardised tests, and the linguistic repertoire of working-class children. This, he argued may be partially responsible for the lower test results typically observed in disadvantaged schools.

McNamara (2010) investigated a number of the issues related to standardised testing in the Irish context in a small-scale survey of primary teachers (n=30). His findings revealed that these teachers had an appreciation of the potential benefits of standardised tests, and an awareness of their limitations and appropriate uses. However, the majority also experienced the pressure of 'accountability' from a range of sources, and approximately one-third reported engaging in test preparation activities during class time. Recognising the limitations of his study, McNamara (2010, p.96) called for a "more expansive research project in relation to teachers' attitudes towards standardised testing" encompassing "a larger variety of geographical areas and school sizes." This survey is one response to that call.

¹⁴In adaptive testing, the difficulty level of each question administered to a pupil gets harder or easier following a correct or incorrect answer respectively. Adaptive tests are usually administered on a computer, hence the term Computer Adaptive Testing (CAT). The DES (2016a) notes that current ICT infrastructure in primary schools makes the move to CAT unlikely in the short to medium term.

5

The Current Study

A wealth of research (both local and international), has drawn attention to the fact that standardised testing can be associated with a range of both positive and negative consequences. As emphasized above, the stakes attached to standardised testing in Irish primary education remain relatively low; as such, there is hope that pressure to perform and the associated negative consequences seen in more 'high-stakes' cultures will not take hold in this country. In the wake of recent changes in government policy surrounding standardised testing of reading and mathematics, this study aims to gather important information about the attitudes and practices of Irish primary teachers with respect to this issue.

5.1 Study Context and Research Questions

In recent years, and in particular since the implementation of the *National Literacy and Numeracy Strategy* (DES, 2011a), the role of standardised testing in Irish primary schools has become increasingly prominent. All schools are now required to administer standardised tests in English reading and mathematics in second, fourth and sixth classes, and to report the aggregated results to their Boards of Management (BOM) and the Department of Education and Skills (DES). Since September 2017, the results are being used at national level to determine partially the allocation of special educational teaching resources to schools (DES, 2017a). Schools are also expected to draw on standardised test scores in the context of whole-school self-evaluation. These developments are intended to improve educational standards, as the process of outlining and monitoring yearly progress towards targets is thought to set an explicit focus for schools and teachers. Furthermore, schools are currently required to share the results with parents at the three mandatory testing points and to do this in written format (end-of-year school reports). Finally, and perhaps most importantly, it is also possible to use data from standardised tests for formative purposes to guide teaching and learning (see, Educational Research Centre [ERC], 1998, pp.22-25) and to keep parents/guardians informed of their children's progress, including their areas of strength and areas for improvement.

Of concern, however, are various problematic issues that have been associated with standardised testing in other jurisdictions over the past 20 to 30 years. The international literature suggests that when test scores are shared widely and used for purposes beyond internal planning, the associated sense of accountability can lead to a culture of "teaching to the test" (Abrams et al., 2003), with teachers spending excessive amounts of class time engaged in test preparation activities, and in more extreme cases, engaging in unethical behaviours in an attempt to raise test scores. This undermines the validity of any decisions made about pupils on the basis of the test scores and hence, the overarching purpose of assessment practice (Haladyna, et al., 1991). There are also concerns that a heightened focus on testing may inhibit pupil learning through 'narrowing of the curriculum' – a phenomenon that encompasses classroom practices such as a reduction in the amount of time spent on non-tested content, the fragmentation of knowledge into discrete facts, and the increased use of teacher-centred pedagogies (Au, 2007).

Although the 'stakes' attached to standardised testing in Irish primary education remain relatively low in comparison to some other countries, recent policy changes have undoubtedly increased the focus on these instruments. In the wake of these changes, this survey of Irish primary teachers was conducted. A collaborative effort by the Centre for Assessment Research, Policy and Practice in Education (CARPE) and the Irish National Teachers' Organisation (INTO), this research aimed to gather information about the attitudes and practices of Irish primary teachers with respect to standardised testing, and ultimately, to inform policy making in relation to same. The specific research questions addressed were as follows:

- 1. How are teachers using standardised tests in English reading and mathematics in Irish primary schools?
- 2. What are teachers' perceptions about the impact of standardised testing on their professional practice and on pupil learning?
- 3. What are the professional development needs of teachers with respect to standardised testing?
- 4. What are teachers' beliefs about and attitudes towards standardised testing?
- 5. What advice, if any, would teachers offer to Irish educational policy makers about the practice of standardised testing in English reading and mathematics in Irish primary schools?

5.2 Survey Instrument

Development of the survey instrument was guided by (i) the research questions, (ii) the literature on standardised testing, (iii) analysis of existing instruments designed to measure teachers' attitudes and practices in relation to standardised testing, (iv) consultation with a steering committee made up of practising teachers¹⁵ and (v) the results of a series of pilot administrations. The first two pilots of the hard-copy instrument were conducted with the seven members of the steering committee in January and February of 2017. A revised hard copy of the instrument was then sent to the members of the INTO's Central Executive Committee and national committees in March 2017. Feedback was received from 42 respondents, with the issue of the length of time the instrument took to complete being highlighted by many. Following further revisions to individual questions and the manner in which the questionnaire was structured; an online version of the questionnaire was created using eSurveyCreator. A simple random sample of 400 INTO members was then selected, with 200 randomly assigned to complete the hard-copy version and 200 to complete the online version in April 2017. A total of 99 teachers completed the pilot questionnaire, representing a response rate of close to 25%, with marginally more (52%) completing the hard-copy version. Relatively minor changes were made to the instrument following this pilot study so a decision was made to proceed to the main study.

 $^{^{15}}$ The members of the steering committee are listed in the Acknowledgements section of this report.

The final instrument was divided into three parts and contained a mix of closed and open-ended questions in addition to Likert-type scales (see, Appendix 1). Part 1 consisted of twelve questions designed to gather data on the respondents themselves, their schools, the standardised tests they used and the time of year at which they administered them. The fourteen questions in Part 2 of the instrument were focused on respondents' classroom practices around standardised testing, their attitudes and beliefs, as well as their advice for policy makers (research questions 1, 2 and 5). Due to the length of the questionnaire, respondents were given the option of completing Parts 1 and 2 only. That in mind, Part 3 was included to gather data on respondents' professional development needs in relation to standardised testing and some additional opinions about standardised testing more generally (research questions 3 and 4).

5.3 Sampling and Implementation

According to statistics for the 2016/17 academic year, there are 3,115 mainstream schools and 135 special schools - a total of 3,250 primary schools - in the Republic of Ireland (ROI). The total number of primary teachers is 35,669 (DES, 2017c). The INTO database of member teachers was used as a sampling frame for the study. In 2017 this database consisted of an up-to-date list of all registered members of the INTO, including mainstream classroom teachers, teachers working in special classes, Learning Support (LS) and English as an Additional Language (EAL) teachers, as well as principals and deputy principals. The INTO estimated that the database covered approximately 98% of all teachers working in the ROI in 2017. Despite the 25% response rate in the pilot, experience of recent INTO surveys suggested that the response rate was likely to be about 20% and, with that in mind, the INTO database was used to draw a simple random sample of 5,000 teachers with the aim of achieving 1,000 responses in total. 16 The questionnaire was administered in May 2017 – a decision made on the basis of the fact that most teachers administer standardised tests at this time during the school year, and therefore the detail of how they conducted the testing would be fresh in their minds. Half of the sample was randomly selected to receive a hard copy of the questionnaire using the mailing addresses in the database. The other half was sent a link to the online copy using email addresses in the database. 17 Those receiving hard-copy questionnaires were also given the option of completing the questionnaire online.

5.4 Data Handling and Analysis

Hard-copy questionnaires were scanned, and the quantitative data added to those already in digital form from the online questionnaires. All quantitative data were entered into Statistical Package for Social Science (SPSS) and checked for errors using frequency tables to identify out-of-range values, etc. Once cleaned, frequency data (percentages) for the sample as a whole were generated and used to report the findings. In a small number of cases chi-square tests were run to determine if sub-group differences were statistically significantly different, although the bulk of this work is being reserved for later publications. Factor analysis was applied to Likert Scale data to assist in decision-making about how best to group statements from the attitudinal/belief scales.

All teachers' responses to open-ended questions were transcribed from hard copy questionnaires into an Excel file. Responses from online questionnaires were downloaded directly and added to a separate Excel file. Following a process of iterative content analysis of all the data in both files, a framework consisting of eight themes was developed to capture teachers' responses to the fifth research question.

¹⁶ Stratified sampling was considered but the INTO database did not contain the appropriate categorical variables e.g. age, years' experience, classes taught, etc.

¹⁷ A small percentage (<5%) of emails bounced back as invalid.



Respondents' Profile

A total of 1,564 questionnaires were returned – a response rate of 31% which can be considered very acceptable given experiences with previous surveys circulated by the INTO and in light of studies conducted on the response rates from Member Surveys (5-40%). A total of 1,282 respondents completed all three parts of the questionnaire, with 282 taking the option of returning the questionnaire once they had completed Sections 1 and 2. The number of questionnaires completed online (52%; n=814) was slightly higher than the number completed in hard copy (48%; n=750) but this may have resulted from the fact that those receiving hard copies had the option of completing the online version. Based on random sampling assumptions, the 95% confidence interval for a random sample size of 1,564 is approximately $\pm 2.5\%$. A total of 1,062 respondents (599 in hard-copy and 463 online) provided at least one piece of advice in response to the open-ended question (research question 5).

Table 1 provides statistics relating to some of the key background characteristics of the sample and, where available, the equivalent population parameters. Reflecting the overall population of primary teachers, most of the respondents were female (85%). Just 3% of the respondents were in the first year of their careers, with a further 12% at an early stage (2-5 years). The level of teaching experience amongst the remainder of the sample was distributed evenly across categories representing 6-10 years (26%), 11-20 years (28%) and more than 20 years (31%). Mainstream class teachers, which represent 62% of the national teaching population, were somewhat under-represented in the sample at 54%. In contrast, Learning Support, Resource and EAL teachers were over-represented (sample: 31%; population: ~25%). A small percentage of teachers currently working in special classes also responded to the questionnaire (3%). As demonstrated by Table 1, approximately equal percentages of respondents were teaching across the different class levels in May 2017.

Table 2 illustrates the profile of schools where respondents worked. Again, the sample was, for the most part, representative of the population, based on the national statistics available. Most of the teachers who responded to the survey worked in mixed (84%), urban schools (63%) with vertical structures (85%) following a denominational ethos (77%). However, it should be noted that urban/suburban schools²⁰ and schools with a DEIS Urban 1 status were over-represented in the sample. Furthermore, schools with 200 pupils or fewer were under-represented in the sample (sample: 40%; population: 66%) while schools with more than 200 pupils were over-represented (sample: 61%; population: 24%). These discrepancies in terms of the location, type and size of respondents' schools should be considered when interpreting the results.

¹⁸ See, for example, https://cirt.gcu.edu/research/developmentresources/research_ready/designing_surveys/response_rates.

¹⁹ The margin of error refers to sampling error and it does not account for other sources of error, such as non-response error.

²⁰ Schools categorised as rural in the DES database (e.g. some schools in Dublin 15) may have been categorised as suburban by some respondents in this survey so the exact nature of the under/over-representation is difficult to quantify.

Table 1. Respondents' demographics*

		Sample	Population
		%	%
Gender ²¹	Male	15	15
	Female	85	85
Total Years Teaching	0-1	3	
	2-5	12	
	6-10	26	
	11-20	28	
	>20	31	
Role	Teaching Principal	8	
	Administrative Principal	6	
	Mainstream Class	54	~62
	Special Class	3	
	LS/Resource/EAL	31	~25
Current Class(es)	Infants ²²	19	
	First	16	
	Second	16	
	Third	17	
	Fourth	18	
	Fifth	17	
	Sixth	16	
	LS/Resource/EAL	31	

^{*}Percentages are rounded to the nearest whole number

²¹ National figures obtained from the 2016/17 Teacher Payroll Statistics (DES, 2017c.) ²² Group administered standardised tests are not usually administered in Junior or Senior Infants classes.

Table 2. Profile of respondents' schools*

		Sample %	Population %
School Location ²³	Urban/Suburban	63	62
	Rural	37	38
School Type ²⁴	Junior	6	3
	Senior	9	5
	Full Stream (vertical)	85	92
Disadvantage Status ²⁵	DEIS Urban 1	19	6
	DEIS Urban 2	7	5
	DEIS Rural	8	11
	Non-Disadvantaged	67 ²⁶	78
Gender of Pupils ²⁷	Female	7	3
	Male	9	6
	Mixed	84	91
School Size ²⁸	<50	6	19
	51-100	13	22
	101-200	21	25
	201-400	35	17
	401-500	13	13
	>500	13	4
School Category ²⁷	Denominational	77	96
	Non-Denominational	3	6
	Multi-Denominational	11	4
	Gaelscoil	6	5
	Gaeltacht	2	4
	Special	3	4

^{*}Percentages are rounded to the nearest whole number

 $^{^{\}rm 23}$ Population figures were obtained during a telephone conversation with a DES representative.

²⁴ Data available from www.education.ie/en/Publications/Statistics/Key-Statistics/.

²⁵ National figures obtained from the Report on the Review of DEIS (DES, 2016).

²⁶ This percentage is ex-disadvantaged and non-disadvantaged combined. 9% of teachers indicated they worked in ex-disadvantaged schools.

²⁷ National figures obtained from Primary School List for the academic year 2017/18 (DES, 2017d).

²⁸ National figures obtained from Key Statistics 2015/16 and 2016/17 (DES, 2017b).



7

Findings

At the outset, two issues with respect to the way in which the findings from the survey are analysed and presented need to be highlighted. Firstly, due to the extensive nature of the dataset, a decision was made to present the outcomes for the sample as a whole in this report. While some analyses by sub-sample (e.g. DEIS/Non-DEIS) are highlighted from time to time throughout the report, a fuller set of sub-sample analyses will follow in individual papers at a later stage. Secondly, while fully acknowledging some of the sampling limitations, for the sake of syntactic convenience the terms teachers, Irish teachers, respondents and sample are used interchangeably throughout the text.

7.1 How are Teachers Using Standardised Tests in Irish Primary Schools? (Research Question 1)

7.1.1 Choice of Tests and Timing

Respondents were asked to indicate which of the Irish-normed tests they used and when they administered them (Table 3). To avoid confusion due to different practices by teachers within the same schools, respondents were asked to provide data pertaining to the class(es) they were teaching in 2017 rather than their school as a whole. In addition, a *Not Administered* option was provided in the questionnaire for those who were administrative principals, teaching infant classes and/or working in learning support/special classes.

Table 3. Irish-normed standardised tests used by respondents and time of year when administered*29

Test Name	%**	Testing Time	%
Provider A Reading Test	58	Autumn	4
		Summer	92
		Both times	4
Provider B Reading Test	47	Autumn	7
		Summer	87
		Both times	6
Provider A Mathematics Test	39	Autumn	3
		Summer	93
		Both times	4
Provider B Mathematics Test	63	Autumn	4
		Summer	90
		Both times	6

^{*}Percentages are rounded to the nearest whole number

^{**}Cumulative percentage of teachers indicating using a particular test at any time of the year

²⁹ The data in this table are commercially sensitive, hence the use of the terms, Publisher A and Publisher B as per the DES (2016a) report on standardised tests (see www.education.ie/en/Publications/Policy-Reports/Standardised-Achievement-Tests-An-analysis-of-the-results-at-Primary-school-level-for-2011-12-and-2012-13.pdf).

For reading, 58% of respondents indicated that they used the Provider A Reading Test, whilst the equivalent figure for Provider B was 47%. For mathematics, the Provider B was used by more respondents (63%) than Provider A (39%). Similar findings were contained in the DES study of standardised test results submitted by schools for the 2011/12 and 2012/13 school years (DES, 2016a). The fact that the percentages in this study total to more than 100%, suggests that a small number of respondents (<5%) may be using both reading and/or both mathematics tests – perhaps with different classes and/or at different times of the year. Of note is that Publisher A's tests are currently in the process of being re-normed and converted to computer-based formats (optional), which may have an impact on these figures in the coming years. The overwhelming majority of teachers (approximately 87%+) tended to administer their chosen tests in the summer term, as opposed to during the autumn term, or at both times. Douglas et al. (2012) note that when properly analysed by teachers at school level, test results can be used to identify strengths and areas for improvement in pupils' learning. However, the success of such an approach is highly dependent on when and how often such data are collected. In the US, Hart et al. (2015) note that the majority of state assessments occur too late in the school year to be used for instructional purposes. Certainly, a testing timetable that has the majority of testing occurring in May/June is incongruent with Douglas et al.'s (2012) recommendations.

7.1.2 Staff Involved in Administration

Respondents were asked which staff member(s) typically conducted the main administration of the standardised tests in their schools. Responses revealed that it is the class teacher who is most often responsible for the administration of the tests, followed by the learning support teacher (Table 4).

Table 4. Percentages of respondents indicating which staff members typically administer standardised tests in their schools*

Role	Class Teacher	Class Teacher Learning Support Teacher		Another Teacher	Principal	
%	82	10	17	4	2	

^{*}Percentages are rounded to the nearest whole number.

Open-ended responses clarified that in many cases, both the class teacher and LS teacher were present for test administration, and that class teachers often 'swap' classes in order to administer the tests. A very small minority of respondents (2%) indicated that the principal is involved in the administration of standardised tests in their school.

While approximately one in five of those who indicated that class teachers were not involved in administering the tests, two thirds of those (n=291) indicated that this practice had been in place for five years or more (Table 5).

Table 5. Number of years in which a person other than the pupil's own class teacher administers standardised tests in schools (where respondents indicated that this practice was in place; n=291)*

No. years	%	
1 Year	12	
2 Years	8	
3 Years	11	
4 Years	4	
5+ Years	66	

^{*}Percentages are rounded to the nearest whole number.

Asked why this decision had been taken, 70% indicated that it was to ensure all testing guidelines were followed correctly – a finding relevant in the context of the DES (2016a) report that identified a lack of consistency in following administration guidelines as a possible factor contributing to the higher than expected pupil performance on standardised tests.

7.1.3 Communicating Results to Parents

Respondents were asked how they communicate the results of standardised tests to the parents/guardians of their pupils (Table 6). It is clear that reporting STen scores on summer report cards is the most widely-used approach to communicate the outcomes of both reading (65%) and mathematics (77%), followed by reporting standard scores on summer report cards (approximately one in four do this for both reading and mathematics). This is unsurprising, given that these approaches are in line with the recommendations set out in *Circular 0056* (DES, 2011b). Approximately one in five report percentile ranks on summer report cards.

Table 6. Percentages of respondents indicating use of various methods of communicating standardised test results to parents*

English Reading								
				Age Based				
	Standard Scores	STEN Scores	Percentile Ranks	Standard Scores	STEN Scores	Percentile Ranks		
Summer Reports	27	65	19	20	38	16		
P/T Meetings	13	22	13	13	17	12		
Winter Reports	1	1	<1	<1	1	<1		
Separate Letter	1	1	<1	<1	1	<1		

Mathematics						
	Standard Scores	STEN Scores	Percentile Ranks			
Summer Reports	25	77	20			
P/T Meetings	11	25	14			
Winter Reports	<1	1	1			
Separate Letter	<1	1	<1			

^{*}Percentages are rounded to the nearest whole number

Interestingly, just one in four respondents indicated that they reported STen scores at parent-teacher meetings. This might be considered a relatively low figure in an educational context where many parents want to know about their children's performance on standardised tests. However, as discussed previously, most standardised tests are administered in the summer term, and yearly parent-teacher meetings tend to be held towards the end of the autumn term. Thus, most teachers do not engage in face-to-face conversations with parents about standardised tests, and those who do are likely to be discussing the results of the previous years' tests, as data to be discussed later would suggest. A very small proportion of teachers (1%) indicated that they communicate test outcomes to parents/guardians in a separate letter.

The percentages related to the reporting of class-based and age-based reading scores on report cards and at parent-teacher meetings are worth noting. It is clear that class-based scores are more prevalent despite age being an important variable to consider, particularly for pupils who have been identified as having reading difficulties. Indeed, guidelines from the National Educational and Psychological Service (NEPS, 2012, p.8) point out that class-based STen or standardised scores "may not be best suited to reporting progress to parents", and suggest the use of ratio gains (progress made by a pupil in reading age, divided by the duration of a particular intervention) instead.³⁰

Finally, the issue of 'measurement error', defined as the difference between the actual true value of a quantity such as reading or mathematics achievement and the value obtained by a measurement instrument such as a test, is an important one for all test users to understand. The Standard Error of Measurement (SEM) for a test provides a way of estimating the interval within which a test taker's true score is likely to lie. Guidance on the use of the SEM is provided in the test manuals. However, just 28% of teachers agreed that it was common practice in their schools to explain the error associated with test scores when communicating with parents/guardians about their children's standardised test results. This low figure may be explained by the fact that, currently, most teachers communicate the results through written school reports. The issue of how measurement error might be included in written reports in the future is an issue that will be addressed in the concluding section of this report.

7.1.4 Using Standardised Test Results

Standardised tests have been conceptualised on the far end of a continuum of assessment methods used in Irish primary schools (see NCCA, 2007), representing a predominantly teacher-led format that is typically associated with *Assessment of Learning* (AoL) rather than *Assessment for Learning* (AfL).³¹ We know from this study that the vast majority of standardised testing in reading and mathematics in Irish primary schools is done at the end of the school year, with results being sent to parents on summer report cards and STen scores returned by BOMs to the DES for processing. However, as outlined previously, data from standardised tests can also be used for formative purposes. This practice represents an example of "data-driven decision-making" (McLeod, 2005).

Regrettably, available literature from other countries suggests that most teachers do not analyse the data from standardised tests frequently enough or in sufficient depth to avail of their formative potential, and that "much of the information that could be used to support student learning ... is left untapped" (Hoover and Abrams, 2013, p.227). With this in mind, this study also gathered information on the extent to which data from Irish standardised tests were being used for various purposes by individual teachers and at the whole school level. This information is provided in Tables 7 and 8. Note that, in each of these tables, the statements have been rank-ordered (high to low), such that the purposes for which standardised test data are most commonly used appear towards the top.

To aid identification and interpretation, statements in Table 7 are numbered and practices grouped into themes focused on (i) improving future teaching and learning (shaded light blue), (ii) reporting and communicating with others (shaded orange) and (iii) evaluation purposes (shaded grey).

³⁰ Gerry Shiel (personal communication, 7 December 2018) has observed that there is strong opposition in the literature to the use of reading ages. They don't increase developmentally in the same way as chronological age; reading ages are typically extrapolated once you move away from the centre of a distribution, and there are insufficient numbers of pupils to calculate accurate reading ages.

³¹ It is acknowledged that the formative use of standardised test data is discussed in the NCCA Assessment guidelines (see, for example, NCCA, 2007, p.61).

Table 7. Individual respondents' use of standardised test results in a typical school year*

		Once	Twice	3 times or more	Cumulative	Never
		%	%	%	%	%
1.	Identify individual pupil strengths and weaknesses	44	24	24	92	8
2.	Inform other teachers about pupil performance and/or progress	51	18	22	91	9
3.	Have a discussion with parents about pupil performance and/or progress	59	21	10	90	11
4.	Critically review your pupils' standardised test scores in reading and maths from the previous school year	63	15	9	87	13
5.	Evaluate pupil progress	47	20	20	87	13
6.	Inform the preparation of Individual Education Plans	44	24	17	85	14
7.	Inform (in whole or in part) your grades (ratings) for reading and maths on your pupils' report cards	74	4	3	81	19
8.	Group pupils within your class	38	16	23	77	23
9.	Adjust your planning	36	16	22	74	27
10.	Evaluate your teaching effectiveness	40	14	16	70	30
11.	Select teaching materials	24	11	17	52	49
12.	Provide written feedback (not just scores) to parents	42	5	4	51	50
13.	Have a discussion with pupils about their performance/progress	22	8	10	40	60

^{*}Percentages are rounded to the nearest whole number.

With respect to the future teaching and learning, it is encouraging that the majority of Irish primary teachers report that they use standardised test results to identify pupils' strengths and weaknesses (#1), inform the preparation of IEPs (#6), group pupils within their classes (#8) and make general adjustments to their planning (#9). That said, it is also clear that these practices are likely to occur just once or twice a year, and some teachers (up to a quarter) never use standardised tests for these purposes. Only about half the respondents indicated that they used standardised test results for selecting teaching materials (#11).

It should be appreciated that it is not possible to glean from the above responses the depth at which teachers analyse test data for formative purposes. On this note, it is important to consider the extent to which the results of Irish standardised tests are detailed enough to inform teaching and learning. The MICRA-T, for example, provides only a global indicator of reading achievement, whilst the DPRT

facilitates the disaggregation of vocabulary and comprehension subscales. With regard to mathematics, both the *DPMT* and the *SIGMA-T* tests offer subscales pertaining to different strands (e.g. measures, data, number) and skills (e.g. problem solving, recall). This information may be helpful for teaching and learning, but as Hoover and Abrams (2013) pointed out, there is a difference between merely "identifying areas of weakness" and "examining conceptual understanding".

With regard to communicating with others, it is clear that teachers are much more likely to discusss standardised test results with other teachers (#2) or with parents (#3) than with pupils (#13). Indeed, over 90% indicated that they discussed results with other teachers and parents, compared with just 40% who reported involving pupils in such a discussion. This is in line with previous findings from reports on both the 2009 and 2014 National Assessments of English Reading and Mathematics (Eivers, Close, Shiel, Millar, Clerkin, Gilleece and Kiniry, 2010; Kavanagh, Shiel, Gilleece, and Kiniry, 2015). Kavanagh et al. (2015, p.48) suggested that this may reflect "a concern among schools to downplay the results of standardised tests", particularly where younger children were concerned. However, given research supporting the benefits of incorporating pupil voice in teaching, learning and decisionmaking (e.g. Flutter, 2007), it is worth considering whether teachers should be encouraged to discuss test results with their pupils to a greater extent. The data with respect to statements #3 and #12 are interesting and somewhat difficult to interpret considering other findings in the study. As mentioned above, 90% of respondents indicated that they have a discussion with parents about pupil progress/performance at least once a year. The point has been made earlier that this may well be in relation to the previous years' standardised test results. However, the finding that 50% say they provide written feedback, not just test scores, to parents, is not consistent with the data in Table 6 where percentages relating to the communication of test results at parent/teacher meetings or by separate letter are much smaller. It may well be that some respondents misinterpreted statement #12 in Table 7 and were referring to written feedback more generally, not just written feedback on standardised test performance.

Summative evaluative uses of standardised data e.g. critically reviewing the previous years' results (#4), evaluating pupil progress (#5) and informing grades for report cards (#7) were relatively common practices for more than 80% of the respondents, but, as might be expected, tended to happen just once a year for the most part. Significantly, and somewhat surprisingly, 70% of the teachers indicated that they used standardised test data for the purpose of evaluating their own teaching effectiveness (#10). In that context it is worth pointing out the need to be wary of using data for purposes that are either inappropriate and/or unintended. For example, using standardised test data, which provide a snapshot in time of student performance in reading and/or mathematics, as a proxy for teacher effectiveness, stretches the dependability of the data far beyond that originally intended.

One other point worth noting about Table 7 is the data on frequency of use. It can be seen that, in response to many of the statements in the table, up to a quarter of respondents indicated that they were using standardised test results for a variety of reasons three times or more during the school year e.g. statements #1, 2, 5, 8, 9. It is worth highlighting here that the general thrust of these findings is in line with those presented in inspectors' reports (e.g. see, DES, 2016a, p.50) and with national data on primary teachers' use of formative assessment, where classroom practices were found to be emerging rather than embedded (see, Lysaght and O'Leary, 2013; 2017).

Turning now to Table 8 which contains responses pertaining to the use of standardised test data on a whole school basis. In the recent past, concerns have been raised by the DES (2016a) about this issue. It is evident that the overwhelming majority of teachers (>90%) indicated that principals/staff in their schools use the results of standardised tests to select pupils for learning support (#1) and for broad whole-school evaluation purposes (#2,3). This is probably to be expected, as these are aligned with

specific stipulations from the DES. On this note, it is interesting to observe the discrepancy that exists between the frequency with which schools use test data to select pupils for learning support (98%) as against gifted/talented programmes (57%), as the former has received a lot more focus in government policy. The fact that about one in four respondents said that comparing school performance to national performance was something that never happened in their school is also significant in terms of poor policy implementation (#7). It is also worth noting that almost half the respondents (48%) said checking that teachers are emphasising skills highlighted as areas of weakness in a previous year's test (#12) never happens in their schools. Conversely, 14% of respondents said that this happened three times or more during the school year. As stated previously, it is undesirable when test scores are linked to teacher effectiveness (the 'accountability' issue) or when they lead to regular practice of test-taking strategies and skills (the 'coaching' or 'teaching to the test' issue). With this in mind, it is worth noting that one in four respondents here indicated that their schools provided support to help individual teachers improve test scores (#13) and provided materials to give pupils practice in test-taking skills (#14). Nine percent claimed this happened three times or more during the school year. These issues will be addressed more fully in the next section of this study.

Table 8. Use of standardised test data by principals and/or staff in respondents' schools*

		Once	Twice	3 times or more	Cumulative	Never
		%	%	%	%	%
1.	Select pupils for learning support/resource	33	24	41	98	2
2.	Monitor school progress from year to year	46	19	27	92	7
3.	Identify aspects of the curriculum that need to be addressed on a whole school basis	42	18	30	90	9
4.	Discuss ways to strengthen teaching in the specific areas where test scores indicate weaknesses	38	19	27	84	17
5.	Introduce/discuss important new teaching ideas	25	15	44	84	16
6.	Discuss ways to improve pupils' attitudes/interest in learning	26	15	37	78	22
7.	Compare school performance to national performance	54	13	11	78	23
8.	Hold meetings to review test scores	51	17	9	77	23
9.	Discuss ways to improve test scores	36	18	20	74	26
10.	Discuss ways to improve the teaching of higher order thinking skills	31	18	27	76	24
11.	Select pupils for gifted and talented programmes	39	9	9	57	44
12.	Check to see that teachers are emphasising skills which showed weakness from past test results	27	11	14	52	48
13.	Provide support to help individual teachers improve test scores	12	5	9	26	75
14.	Provide materials to give pupils practice in test-taking skills	11	5	9	25	75

^{*}Percentages are rounded to the nearest whole number.

The statements shaded in grey pertain to discussions/meetings between staff members about various ways in which standardised test results can be used. A large percentage of respondents (74%+) said that the following activities occurred at least once a year: discussed ways to improve teaching (#4 and #5), discussed ways to improve pupil's attitudes to learning (#6) and discussed ways to review and improve test scores (#8 and #9). Significantly, 76% of respondents said the school reviewed test scores with a view to improving high-order thinking (#10). In light of Hoover and Abrams' (2013, p.229) assertion that "assessment data is (sic) better examined in a collaborative culture," it is worth noting again some of the high percentages across the table as a whole relating to activities respondents said happened three or more times in their schools during the year e.g. statements #1 and #5. That said, the data also provide evidence supporting the DES (2016a) contention that the potential of standardised tests for "promoting improvement within schools is not being fully realised" (p.46).

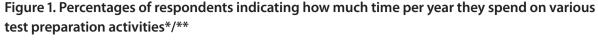
A final point worth noting relates to the various ways in which standardised test results are used differently depending on school or job context. A detailed discussion of these issues is beyond the scope of this preliminary report; however, some illustrative examples are worth briefly considering. With respect to different types of schools, additional analyses revealed that individual teachers working in DEIS schools were statistically significantly more likely than those in non-DEIS schools to spend more time teaching strategies for coping with test anxiety and using test results to adjust their planning and inform their IEPs. In addition, staff in DEIS schools were more likely than those in non-DEIS schools to engage in frequent progress monitoring and collaborative discussion on the basis of standardised test results – a finding that may be attributed to more opportunities to engage in CPD³² and the obligation for DEIS schools to have very specific targets in relation to literacy and numeracy attainment (DES, 2005).

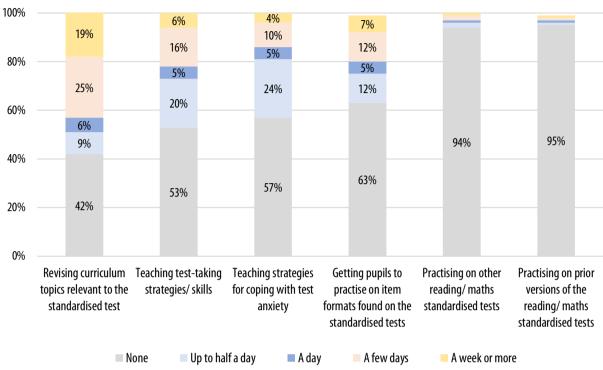
7.2 What are Teachers' Perceptions About the Impact of Standardised Testing on (a) Their Professional Practice and (b) on Pupil Learning? (Research Question 2)

7.2.1 Impact on Professional Practice (Research Question 2a)

International research (e.g. Abrams et al., 2003) has indicated that, once there are significant consequences associated with standardised testing beyond the use of the test data for local teaching and learning purposes, there is a danger that teachers may change the way they teach and engage in a number of test preparation practices, often collectively referred to as 'teaching to the test'. This is concerning, as 'teaching to the test' can undermine the validity of the decisions that are made on the basis of the test results on an ongoing basis (e.g. decisions about teaching and learning, as discussed in the previous section). With this in mind, teachers were asked to report how much time per year they spent engaged in test preparation activities that have been identified in the research literature. Figure 1 contains the data on their responses. It should be noted that the statements have been ordered such that the activities taking up the most time (roughly) as judged by these teachers are located towards the left-hand side of the graph.

³² In the past, teachers in DEIS schools tended to receive more CPD than teachers in non-DEIS schools as part of efforts to raise achievement in DEIS schools. While this CPD was not focused on standardised testing per se, assessment was a thread running through it and teachers' attention would have been focused on the outcomes of standardised tests as one element in planning and target setting for pupils.





^{*}Percentages are rounded to the nearest whole number.

A perusal of these data reveals some interesting findings. It is probably no surprise to see that revising topics relevant to the test was the most common activity reported. Indeed, as Linn (2000, p.7) pointed out, on the premise that the content of the standardised tests encompasses important learning objectives, this could be considered 'acceptable, even desirable practice' although the 19% who indicated that they spent a week or more on this activity and the 42% who spent no time are worth highlighting in terms of the differences that exists between teachers. Similarly, while 47% of the teachers surveyed reported that they spent some time teaching test-taking strategies or skills, 53% claimed they spent none. In terms of these instances, both can be assumed to fall within what is described in the literature as 'teaching for the test' rather than 'teaching to the test' and are acceptable for the most part. Indeed, what is most surprising about them is the relatively high percentages of teachers reportedly spending no time at all on these activities. The fact that more than 40% of teachers spend up to half a day – at a minimum – teaching strategies for coping with test anxiety is particularly striking. This provides some indication that these tests are now having an impact that would have been difficult to imagine in the recent past. It is also striking that just one in three teachers (37%) spend time getting pupils to practise on item formats found in standardised tests, an activity that may have taken up more time in the past when standardised tests were less ubiquitous than they are now. Finally, the practice of using other standardised tests or prior versions of current tests seems to be a very rare in Irish schools.

Given the fact that some test preparation and administration practices are ethically questionable and may be classified as 'gaming' or even cheating (e.g. practising with actual test items or helping pupils during testing), these issues are likely to be sensitive for some teachers. For this reason, a decision was made to ask teachers not just about their own practices, but also about their awareness of the practices occurring in their schools – using a simple yes or no option (Table 9). It was hoped that this strategy would encourage respondents to be as truthful as possible.

^{**}Data labels for percentages of less than 4% have not been included.

Table 9. Percentages of respondents reporting awareness of various test preparation and administration practices occurring in their schools*

Test Preparation Practices	Yes %	Test Administration	n Practices	Yes %
Teachers focusing pupils' attention on content that is on the standardised tests	27	Teachers/SNAs givin allowed time	g pupils more time than the	17
Teachers focusing their teaching on content that is on the standardised tests	25	Teachers/SNAs reph	rasing questions	12
Teachers getting pupils to complete worksheets on content that is on the standardised tests ³³	16	Potentially helpful n	naterials on view during testing	9
Pupils receiving grinds prior to testing	7	Teachers/SNAs givin	g pupils hints about answers	6
Teachers getting pupils to practise on actual questions from the standardised tests	5	Teachers/SNAs provi support during the t	ding inappropriate teaching est	5
Parents/guardians using copies of the standardised test to prepare their children	4	Teachers/SNAs chan pupil booklets	ging or editing answers on	2
Teachers telling pupils that certain content is not on the standardised tests	3	l am aware of some other schools	of these activities happening in	27
Teachers encouraging pupils not to attend school on the day when standardised tests are being administered	1			

^{*}Percentages are rounded to the nearest whole number.

The data in Table 9 reveal that the majority of teachers are unaware of questionable test preparation and administration practices occurring in their schools. About one in four indicated that they were aware of what might be described as 'low-level teaching to the test', such as focusing teaching and pupils' attention on content that was on the standardised tests, which, as discussed earlier, can be regarded as an acceptable practice, as long as it does not occur excessively, or at the expense of non-tested content. There is also evidence, however, of some of the more serious consequences associated with standardised testing: according to 7% of respondents, pupils receiving grinds prior to standardised testing is a reality at the present time.³⁴ Of concern also are the percentages reporting knowledge about questionable practices during the administration of standardised tests. Respondents said that they were aware that, in their schools, pupils were given more time than allowed (17%), had questions rephrased for them (12%) or had access to potentially helpful materials during testing (9%). The survey also provides evidence of awareness about inappropriate support for pupils during testing by up to 6% of respondents e.g. giving hints about answers. These data will be important considering the concerns expressed by the DES in their 2016 report about inconsistencies across schools in the application of guidelines for administering standardised tests.

³³ In relation to this statement, Gerry Shiel (personal communication, Dec 7, 2018) offers the following critique: Since the mathematics test is based on the curriculum, it might be argued that completion of any worksheet linked to the curriculum also constitutes preparation for the test. It might have been useful to make a distinction between reading (a generalised skill) and mathematics (one more dependent on instruction) in setting these questions.

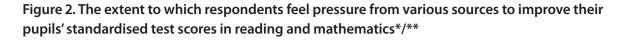
³⁴ The way in which this statement is phrased, could be interpreted by some teachers as referring to grinds associated with improving proficiency more generally. However, responding to the statement, some pupils in my class are getting grinds focused on improving their standardised test score administered as part of a scale administered later in the questionnaire, 7% agreed and 3% strongly agreed. The $\pm 2.5\%$ margin of error means that the total here in this case (10%) is not statistically significantly different from the 7% figure. Note that these data cannot be used to determine the percentage of pupils receiving grinds.

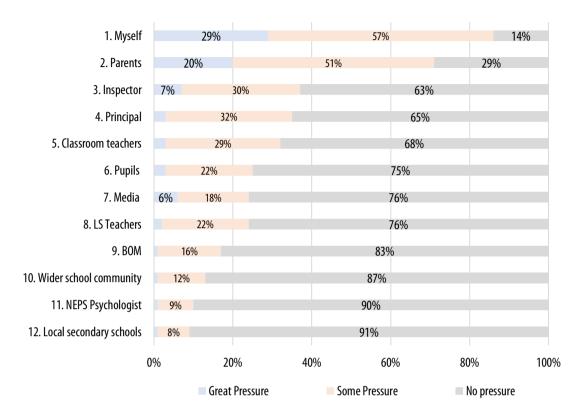
While these problems should not be ignored, it must be acknowledged that the findings with respect to most teachers are reassuring and indicate that 'teaching to the test' and 'gaming' are not occurring in Irish primary classrooms to the same extent as has been reported in other countries. This can probably be explained by the fact that the stakes associated with standardised testing in Ireland – although rising – remain much lower than those elsewhere (for example, test results in Ireland do not have salary implications for teachers or are not used for ranking schools). That said, a number of teachers did report questionable practices occurring during the administration of standardised testing in their schools, and this should not be ignored. For example, 17% said that they were aware of instances in their schools whereby pupils had been given extra time to complete the tests, whilst approximately one in ten were aware of instances whereby pupils had questions rephrased for them or had access to potentially helpful materials during testing.

Just over one in four (27%) respondents indicated that they were aware of some questionable activities occurring in schools other than their own. In theory, it is possible that the unethical practices of a minority of teachers could become known, and that multiple teachers could report being aware of the same incidents, creating the impression that questionable practices are more widespread than is really the case. Interestingly, however, analysis revealed that the proportion of respondents answering 'yes' to at least one of the preceding questions about test administration practices was also 25%. This provides some confidence in the accuracy of this figure.

It can be assumed that teachers who teach in ways at odds with what they believe to be educationally sound or resort to ethically-questionable practices in response to standardised testing regimes do so because they feel under pressure to improve their pupils' test scores for some reason. Often, it is because there are significant consequences associated with the test results. However, this need not even be the case. Indeed, as Madaus (1988b) pointed out, "the power of tests and examinations to affect individuals ... is a perceptual phenomenon; if students, teachers or administrators believe that the results of an examination are important, it matters very little whether this is really true or false – the effect is produced by what individuals perceive to be the case" (Madaus 1988b, p.88). With this in mind, teachers were asked to indicate the extent to which they felt pressure from various sources to improve pupils' standardised tests scores. Their responses are shown in Figure 2.

While the percentage of teachers reporting feeling either some or great pressure from parents to improve their pupils' standardised test result was high (71%), the data show that it was from themselves that most (86%) believe the pressure to improve emanates. Around a third indicated that they felt under at least some pressure from inspectors (#3), their principals (#4), or their teaching colleagues (#5), and one in four said they felt under pressure from the pupils themselves (#6). It is interesting that one in four Irish primary teachers indicated that they felt under pressure from the media (#7) to raise standardised test scores, despite the fact that test scores or 'league tables' based on performance in standardised tests at primary level are not published in this country. Just under a quarter reported to feeling under pressure from learning support colleagues (#8) while fewer felt pressure from the BOM (#9), wider school community (#10) and NEPS psychologists (#11). Given the mandatory reporting requirements now in place for pupils transferring from primary to post-primary, it is good to see that just 9% of respondents in this survey said they felt under any pressure from personnel in secondary schools (#12). The related figure for those teaching sixth class at the time of the survey was only marginally higher at 11.6%.





^{*}Percentages are rounded to the nearest whole number.

Some difference between DEIS and non-DEIS contexts are interesting to note here. Teachers working in DEIS schools were statistically significantly more likely to feel great pressure from themselves and from learning support teachers than were teachers in non-DEIS schools. The opposite finding applied in the case of feeling great pressure from parents.

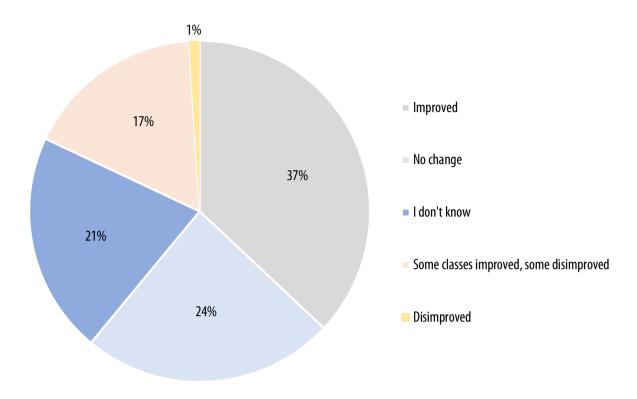
From the data presented in this section, it can be concluded that at this point in time, many of the problems that have been associated with standardised testing in other countries are not especially pronounced in Irish primary classrooms. That said, data here suggest that some questionable practices are a reality in Irish primary schools – most notably in relation to the administration of the tests – and the concern is that, for some pupils at least, test scores may be a poor reflection of what they know and can do, and consequently may lead to poor decisions being made about them. Furthermore, given that many teachers feel under pressure, self-imposed and from parents in particular, to improve their pupils' test scores, we need to be mindful of the possibility that problematic practices could become more frequent over time.

7.2.2 Impact on Learning (Research Question 2b)

Standardised tests are used, in conjunction with various other forms of assessment, with the overarching goal of enhancing pupil learning outcomes. The issue of whether or not a school's performance on standardised tests improves or not over time is an important one to consider (Figure 3).

^{**}Data labels for percentages of less than 4% have not been included

Figure 3. Respondents' perceptions of how their school's performance on standardised tests of reading and mathematics has changed over the last three years*



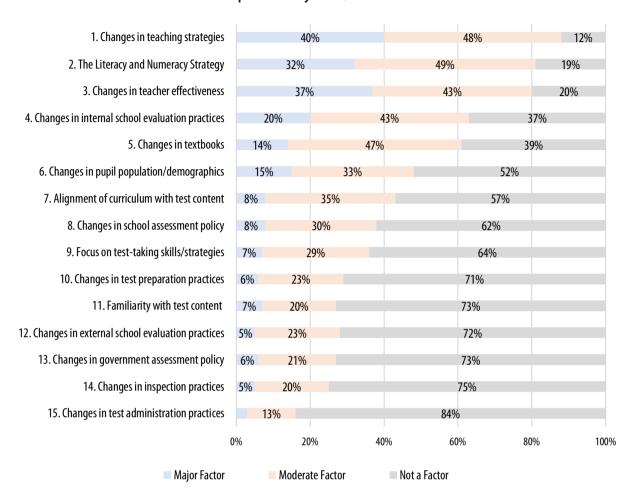
^{*}Percentages are rounded to the nearest whole number.

With that in mind, Figure 3, which shows teachers' responses to the question "how has your school's performance on standardised tests of reading and mathematics changed over the last three years?" may, at a cursory glance, seem promising. The majority of teachers indicated that scores have either improved or remained constant (61% in total), whilst just 1% indicated that scores have dis-improved. Another 17% indicated that progress was uneven, with some classes improving and some dis-improving. There are two things to take into account when interpreting Figure 3. First, it should be emphasised that these data represent teachers' perceptions of how scores have changed, as opposed to actual school records; therefore, they may not be entirely accurate. Second, the percentage of respondents who indicated that they did not know if their school's performance had changed in the past three years is relatively high at 21%. Indeed, if don't knows are excluded from the analysis, then the relative percentages for the improved category rises to 47%³⁵ and could be interpreted as a sign of authentic learning gains in half of the respondents' schools. It is worth noting briefly here that a statistically significantly larger percentage of respondents in DEIS schools than non-DEIS schools said their schools' scores had improved over the past three years (42.5% v 31.7%). That said, we know from the international literature that increases in test scores may also reflect an increased exposure to tests and test-related activities (Haladyna, Nolen and Haas, 1991), and that it is important to track changes using indicators other than test scores alone (Amrein and Berliner, 2002).³⁶ In any case, these data do not provide sufficient information for inferences to be made about the potential causes of test score changes. However, those who reported changes (circa half the sample) were also asked to what they attributed these changes (see, Figure 4).

³⁵ The percentages for the other categories are: No change (31%), Some classes improved/disimproved (22%) and disimproved (1%).

³⁶ Incidentally, if these trends represent genuine improvements in educational standards, it indicates a need for the tests to be re-normed. As mentioned previously, this is currently in process.

Figure 4. Respondents' beliefs about the extent to which various factors could explain changes in their schools' test scores over the past three years*/**



^{*}Percentages are rounded to the nearest whole number and are calculated excluding those relating to the 'unsure' option

As is clear from the Figure 4, changes in teaching strategies (#1) were identified as the most dominant factor contributing to test score changes. This finding is worth considering carefully, as it could be interpreted in a several ways. In one sense, it could be taken to mean that either the practice of target-setting, or the formative use of test data has helped teachers to adopt more effective teaching strategies that are leading to real gains in children's achievement. On the other hand, the belief that changes in teaching strategies have significantly contributed to test score changes could simply indicate that an element of curriculum narrowing has occurred. As outlined in Chapter 2, 'curriculum' refers not just to the content to be learned, but also how that content is communicated, and evidence from other jurisdictions (e.g. Anagnastopoulos, 2005) has suggested that standardised testing regimes can result in the adoption of more restrictive and teacher-centred pedagogies. This represents a potentially significant – and not especially desirable – impact on children's day-to-day experiences of school. Clearly, which of these two interpretations is the case cannot be gleaned from quantitative data alone, however, the fact that changes in teacher effectiveness (#3) were also viewed as a dominant factor tentatively suggests that the more positive interpretation could be the case.

^{**}Data labels for percentages of less than 4% have not been included

Moving down the table, the *Literacy and Numeracy Strategy* (#2) was also identified as a particularly dominant factor contributing to test score changes, being endorsed by 81% of respondents.³⁷ A majority (63%) also saw changes in internal school evaluation practices (#4) as a factor, but far fewer identified changes in external evaluation practices (#12) or changes in inspection practices (#14) as factors. Likewise, changes in school assessment policy (#8) were identified by more respondents than changes in government assessment policy (#13).

The relationship between the content of textbooks and standardised tests is an interesting one that has been explored by a number of commentators and researchers. In the US, Jobrack (2012) observed that textbooks often contain practice questions, writing prompts, vocabulary, and information that are targeted to state standardised tests. In Ireland, the promotional material for activity books associated with the *Planet Maths* textbook series (Folens, 2011) assert that revision sections reflect content in standardised tests (Schoolbooks.ie, 2018) while a recently released series of English textbooks for third to sixth class contain the kind of cloze procedures in every unit of work that are in some Irish standardised tests (Gill Education, 2017). In that light, it is significant that the data from this survey show that 61% of teachers felt that changes in textbooks (#5) was a factor perceived to be associated with changes in performance, while 43% identified alignment of curriculum with test content (#7) as something else to consider.

Overall, respondents were roughly divided on whether changes in population demographics (#6) was a factor although further analyses revealed that respondents in DEIS schools were up to three times more likely to choose this factor than their counterparts in non-DEIS schools.

The data on the four statements pertaining to the validity of test scores (#9, 10, 12 and 15) are interesting and suggest that while two-thirds of the respondents or more felt they were not factors to consider in any test score changes in their schools, a sizeable minority saw issues such as a focus on test-taking skills (36%), changes in test preparation activities (29%) as well as familiarity with test content (27%) as relevant. Concern about familiarity with test content was also raised by the DES in its 2016 report as a possible explanation for a proportion of pupils performing better than expected on the standardised achievement tests in both English reading and mathematics (see, for example, p.47). These figures present a complex message, but taking an overall view, the sense is that most respondents viewed the test score improvements in their schools at least partially as a reflection of true learning gains resulting from improvements in teaching and educational policies at school and governmental levels. However, the potential for socially desirable responses in research studies, and more generally, the limitations of self-report data with respect to such complex issues should also be borne in mind when drawing conclusions from these data.

³⁷ Gerry Shiel (personal communication, Dec 7, 2018) makes the point that increases in instructional time could have been listed as a separate variable despite the fact that it was at the heart of *the Literacy and Numeracy Strategy*.

7.3 What are the Professional Development Needs of Teachers with Respect to Standardised Testing? (Research Question 3)

7.3.1 Sources of Professional Development

Respondents³⁸ were asked to estimate the amount of time they had spent to date on professional development (CPD) relating to standardised testing and where such CPD had occurred (Table 10).

Table 10. Estimated time spent on professional development focused on standardised testing*

	1-5 hours	6-10 hours	11-20 hours	20 hours +	Cumulative	None
	%	%	%	%	%	%
Croke Park Hours	40	10	3	9	62	38
Pre-service e.g. B.Ed courses	28	5	3	8	44	56
In-service e.g. summer courses	12	4	3	9	28	71
Induction	21	2	1	4	28	72

^{*}Percentages are rounded to the nearest whole number.

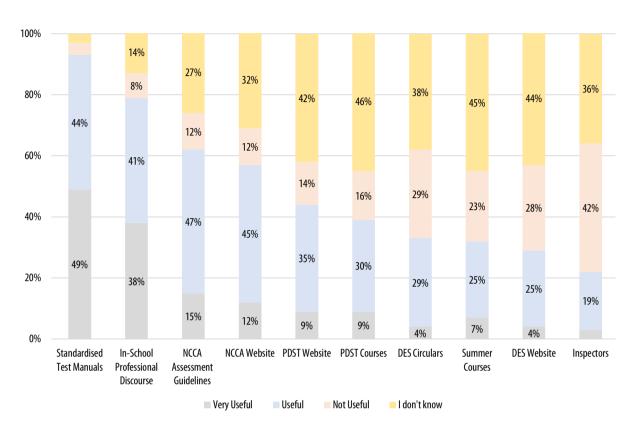
These findings present a stark picture of the extent of teachers' exposure to CPD regarding standardised testing across their careers. Almost three quarters of respondents (72%) claimed to have had no CPD in relation to standardised testing during induction, with a similar percentage (71%) stating that they had not engaged with the topic during in-service. Approximately 56% of the sample reported no engagement with this material at pre-service level (e.g. as part of the B. Ed programme) although it is possible that recent changes in the content and duration of pre-service training courses may impact on this figure in the future. The greatest opportunities for CPD in issues relating to standardised testing appear to come through 'Croke Park hours'. Forty percent of teachers claimed to have spent between one and five 'Croke Park hours' engaging in CPD in relation to standardised testing and a further 22% indicated that they had spent six hours or more on the subject. The high percentages of teachers claiming to have had no exposure to CPD in this area at pre-service, induction or in-service levels is consistent with literature worldwide. For example, in the United States, Mandinach and Gummer (2016) noted that there is a lack of capacity among teachers to use assessment results to inform teaching because of few CPD opportunities and minimal attention to assessment (including standardised testing) in teacher preparation programmes. It appears that Irish teachers are also in need of CPD on standardised testing to ensure that they can understand, use and report these assessments correctly.

7.3.2 Use of Resources

In the absence of CPD, it could be expected that many teachers would look elsewhere for guidance on improving their understanding and use of standardised tests. Therefore, respondents were asked in the survey to rate the usefulness of some of the different resources available to them, including those highlighted earlier in this report. Resources included formal ones such as standardised test manuals, DES circulars, courses run by the PDST, and more informal sources such as in-school professional discourse (see, Figure 5).

³⁸ As part 3 of the survey was optional, the number of teachers providing data on their professional development needs was slightly smaller (n=1,282) than those responding to earlier sections of the instrument (n=1,564).





^{*}Percentages are rounded to the nearest whole number.

It is probably not surprising given the detail they contain that a large percentage of the respondents highlighted the value of the test manuals with 44% and 49% respectively rating them as useful or very useful. Indeed, the very small percentage of respondents (3%) claiming that they didn't know about the manuals suggests that this resource could be key to ensuring that standardised tests and how they can be used to support teaching and learning are well understood by teachers. However, questions about the extent to which teachers use the manuals or follow guidance contained within them is unclear and should be explored in another study. Also of significance for teachers was in-school professional discourse which was considered to be "very useful" or "useful" by 79% and suggests that a 'learning on the job' approach might be in place in schools in relation to this issue. On that note, it is apparent that 84% of respondents acknowledged in a separate section of the survey that there was a well-informed 'go-to' person in their school to whom staff went for information or advice about standardised tests. While the NCCA Assessment Guidelines and website were also identified as being either "very useful" or "useful" by close to 60% of respondents respectively, it is noteworthy that just over one quarter of respondents did not know about these resources (or perhaps knew about them but didn't use them). Relatively large percentages (circa 40%) also responded I don't know regarding the PDST website/courses, summer courses and DES circulars/website. A relatively small percentage of respondents (22%) indicated that contact with inspectors was useful as an information source on standardised tests.

^{**}Data labels for percentages of less than 4% have not been included.

7.3.3 Professional Development Priorities

As noted by the DES (2016a), the Chief Inspector's Report 2010/12 highlighted the need for CPD that would provide teachers with "guidance on the administration of standardised tests, interpretation of the results, and use of the results to inform teaching and learning" (p.50). Respondents in this survey were asked to indicate how important it would be for them to receive CPD in relation to these three topics and other aspects of standardised testing. Considering the findings just discussed, it is perhaps unsurprising that there was very strong desire amongst those surveyed for CPD across many of these. The statements in Table 11 are numbered and ranked in descending order to display the CPD options teachers consider most and least important to them respectively. The table is also colour-coded to demonstrate three broad categories of need: using test data (light blue), reporting to stakeholders (orange), and the mechanics and operations of standardised testing (grey). High on the list of priorities with 81% rating it as important was guidance regarding how to use standardised test scores to make decisions about children with special needs (#1). This is likely to reflect the revised model for allocating special education teaching resources in Circular 0013 (DES, 2017a). Under this new model, standardised test results are now being used to compile school profiles based on recommendations from the National Council for Special Education (NCSE, 2014, p.8) which state that data from these tests show evidence of "the learning needs of the pupils in that school, as evidenced by attainment levels in literacy and numeracy." The circular (DES, 2017a, p.9) explains that "the number of pupils in the lower standardised test grades indicates the extent of learning needs in the school" and that the "teacher allocation which is being made to the school recognises this."

Teachers also placed a very high value on accessing CPD in the instructional uses of standardised tests. For example, 81% of teachers prioritised guidance on using standardised tests as an *Assessment for Learning* (AfL) tool (#3) and 80% felt CPD focused on using the results for planning and teaching purposes was important (#4). This is interesting in light of findings discussed earlier which suggested that although Irish primary teachers are using standardised tests for these purposes, they are doing so infrequently, and perhaps in insufficient depth, akin to their US counterparts (Hoover and Abrams, 2013). A relatively high percentage of respondents (65%) also stated that they would appreciate CPD to help them understand how to contextualise better Irish and international research on standardised testing (#11). This finding in particular may well be evidence that many Irish teachers are looking to increase their understanding and use standardised test scores to directly influence their classroom practice.

Just over four in five teachers (81%) also prioritised receiving CPD to help them to communicate standardised test results to parents and guardians in a more effective manner (#2). This makes sense given that many teachers, as discussed previously, feel under pressure from parents to improve test results. Indeed, some may consider that if parents had a greater understanding of standardised tests, in particular the fact that the results represented just one piece of information about their child's achievement among many others, and that there is a margin of error associated with test scores, some of this pressure may abate. CPD focused on issues relating to the communication of standardised test results to the BOM, the DES and to pupils themselves was regarded as important by over 60% of the sample. It will be recalled from the discussion around the data in Table 7 that 60% of respondents also indicated that they did not discuss standardised test performance with their pupils. In this table just 18% of teachers said that CPD on this issue was unimportant to them.

Table 11. Professional development priorities*

		Important**	Undecided	Unimportant***
		%	%	%
1.	Using standardised test scores to make judgements about special needs	81	9	10
2.	Communicating standardised results to parents/guardians	81	9	10
3.	Using standardised tests as assessments for learning (AfL)	81	11	8
4.	Using standardised test results to guide planning and teaching	80	10	11
5.	The meaning of STEN scores	76	6	19
6.	The validity of standardised test content	76	10	14
7.	The meaning of Percentile Ranks	75	6	19
8.	The meaning of Standard Scores	74	8	18
9.	The validity and reliability of standardised test norms	73	12	15
10.	Applying the Standard Error of Measurement when interpreting test scores	70	17	13
11.	Irish and international research on standardised testing	65	21	14
12.	Providing pupils with feedback on their standardised test results	62	20	18
13.	Administering standardised tests	61	7	32
14.	The implications of reporting aggregated standardised test results to the BOM/DES	61	23	17
15.	Preparing pupils to take standardised tests	59	14	27
16.	How standardised tests are constructed	54	15	32

^{*}Percentages are rounded to the nearest whole number.

In relation to what may be termed the mechanics of standardised testing, between 70-76% of teachers indicated a need for CPD in areas such as the meaning of STen scores and applying the Standard Error of Measurement (SEM) when interpreting test scores (see statements #5 to #10). While 59% identified CPD in how to prepare pupils to take standardised tests as an important topic for them, 27% held the opposite view. The area of least interest to teachers relates to how standardised tests are constructed (#16) with 32% indicating that CPD in this area is 'unimportant'. In that context, a strong argument could be made that without an understanding of how standardised tests are constructed, teachers are at a disadvantage in terms of being able to fully understand how to use standardised tests scores.

Finally, it is interesting to note that additional analyses showed that teachers tended to answer the above questions slightly differently depending on their level of experience. For example, CPD on the use of standardised test results to guide planning and teaching became more important to teachers who had spent more time in the profession, with 36% of teachers with more than 10 years' experience considering such CPD to be 'extremely important' compared with only 25% of teachers with less than five years' experience (which may reflect increased treatment given to the topic on more recent pre-service courses).

^{**}Combined percentage: Extremely Important and Important.

^{***}Combined percentage: Relatively Unimportant and Not Important at all.

7.4 What Are Teachers' Beliefs About and Attitudes Towards Standardised Testing? (Research Question 4)

In two separate sections of the questionnaire, respondents were invited to indicate the extent to which they agreed or disagreed with various statements about standardised tests (see, Appendix 1, questions 13 and 19). Outcomes with respect to each are now presented together in Table 12.³⁹ It should be noted that although respondents used a five-point likert scale to rate these statements, responses have been collapsed into three categories. In addition, the statements have been ranked in descending order by percentage agreement, numbered to facilitate identification and colour coded according to different themes. The statements in (i) light blue pertain to validity issues in standardised testing, those in (ii) orange to the communication and reporting of standardised test results, those in (iii) grey to the potentially positive effects of standardised testing and those in (iv) gold to potentially negative effects.

Focusing first on validity, the majority of participants agreed that some pupils in their class were not capable of taking standardised tests due to learning difficulties (#1) and that performance differences in standardised tests reflected differences in the characteristics of pupils as opposed to differences in teacher effectiveness (#3). The majority (68%) also held the belief that standardised test scores were not an accurate measure of EAL pupils achievements (#26). While there are no specific guidelines concerning the EAL issue, current policy in Ireland is that teachers may exempt certain pupils from sitting the tests on the basis of a learning difficulty and this aligns well with the views expressed in this study. That said, the data here also indicate that there seems to be a distinct lack of consensus amongst Irish primary school teachers with respect to other important validity issues. For example, while 49% of respondents agreed that high standardised test scores represented high levels of achievement in reading and mathematics in their schools, 28% disagreed and a further 24% were unsure (#8). The lack of consensus is also evident in statements about basic skills (#9) and those specifically focused on reading (#12) and mathematics (#16). Indeed, it is significant that the percentages of teachers in the study signifying that reading (#12) and mathematics (#16) standardised tests captured the entirety of pupil learning in their classrooms was relatively low (41% and 29% respectively). It is also interesting that while 21% of the respondents felt that there was no difference between what should be taught and what the standardised tests emphasised, over half took the opposite point of view and a quarter were unsure (#19). These issues warrant further enquiry and future studies of the reasons that different teachers hold these contrasting beliefs would be valuable.

As with the validity, there are conflicting opinions in the data on the communication and reporting of standardised test outcomes. It is significant that despite many teachers having reservations about the meaning of standardised test scores, a clear majority (65%) agreed that standardised test scores should be included on summer report cards (#4). However, teachers held divided opinions on the use of standardised testing for school accountability (#7) and educational policy-making (#13) purposes. While 51% agreed with the accountability statement, the others either disagreed or were unsure. Respondents were evenly divided on whether or not reporting STen scores to the DES supported good policy-making, with almost identical percentages taking opposite points of view. In terms of the specifics of reporting to the DES, 57% felt that age-based rather than grade-based scores can be more appropriate (#5). A majority disagreed that parents had a good understanding of how to interpret standardised test scores (#21) and that standardised tests results helped prospective parents evaluate a school (#25) – 68% and 72% respectively.

³⁹ Data from statements that appeared in the original questionnaire as 13h and 13k (see Appendix 1) are analysed in sections 7.1.3 and 7.2.1 respectively and are omitted from the discussion of data presented in Table 12.

Table 12. Respondents' beliefs about and attitudes to standardised testing*

		Agree**	Undecided	Disagree***
		%	%	%
1.	Some pupils in my class are not capable of taking standardised tests in reading and mathematics due to learning difficulties.	76	6	19
2.	Some pupils in my class are extremely anxious about taking standardised tests.	76	6	18
3.	Performance differences in pupil achievement on standardised tests in my school reflect differences in the characteristics of pupils rather than teacher effectiveness.	70	21	9
4.	Standardised test scores in reading and maths should be included on my pupils' summer report cards.	65	13	22
5.	A pupil's age-based STEN score can be a more valid reflection of achievement than the class-based STEN score I am required to report to the BOM and DES.	57	32	11
6.	Parents of pupils in my class take the results of standardised tests in reading and maths too seriously.	55	22	24
7.	Standardised testing in reading and maths has made my school more accountable.	51	23	26
8.	High scores on standardised tests represent high levels of achievement in reading and maths in my school.	49	24	28
9.	Standardised test scores accurately reflect my pupils' mastery of basic skills ⁴⁰ in reading and maths.	42	23	35
10.	Standardised testing focuses my attention on higher-order thinking and problem-solving skills in reading and maths.	41	18	40
11.	Standardised tests focus my attention on basic skills in reading and maths.	41	16	43
12.	Standardised tests are a good measure of what my pupils learn in reading.	41	24	36
13.	The requirement to report STEN Scores in reading and maths to the DES supports good educational policy making.	37	28	35
14.	Standardised tests help me to clarify which learning goals are the most important in reading and maths.	31	22	47
15.	Standardised testing is an appropriate way of encouraging teachers to focus on the impact of their teaching on children's achievement in maths and reading.	31	28	41
16.	Standardised tests are a good measure of what my pupils learn in maths in my class. R	29	23	48
17.	The importance placed on standardised test results encourages teachers in my school to teach to the test.	26	22	52
18.	The quality of teaching and learning in reading and maths has improved in my school because of the use of standardised testing.	24	35	41
19.	There's no difference between what I think should be taught and what the reading and maths tests emphasise.	21	26	53
20.	Standardised testing challenges weaker teachers to do a better job.	21	23	56
21.	Parents of pupils in my class have a good understanding of how Standard Scores, STEN scores and Percentile Ranks in reading and maths should be interpreted. ^R	19	14	68
22.	Standardised testing in reading and maths has helped me to be a better teacher.	18	21	61
23.	Standardised testing improves my pupils' learning in reading and maths. ⁴¹	14	28	58
24.	My school is more interested in increasing standardised test scores in reading and maths than in improving overall pupil learning.	14	12	74
25.	The standardised test results in my school are a good way of helping prospective parents to understand how good the school is.	14	15	72
26.	The standardised test scores in my school are an accurate measure of what EAL pupils know/can do in reading and maths. ^R	5	27	68

*Percentages are rounded to the nearest whole number. **Combined percentage: Strongly Agree and Agree. ***Combined percentage: Strongly Disagree and Disagree. RTo avoid response sets, some statements were negatively worded in the questionnaire. For ease of interpretation, each have been positively worded in this table, with percentages 'agreeing' and 'disagreeing' recoded accordingly.

⁴⁰ In relation to statement # 9 and #11, Gerry Shiel notes that teachers may hold varying views on what is meant by basic skills (personal communication, 7 December 2018).

⁴¹ While Gerry Shiel's critique (personal communication, 7 December 2018) that it is not testing that brings about improvement, but the uses made of test scores is accepted, the use of the phrase *standardised testing* in the statement rather than *standardised tests* is intended to capture this nuance.

With regard to the potential value of standardised tests, the spread of opinion is also notable. For example, 41% of teachers agreed that standardised testing had focused their attention on higher-order thinking and problem-solving skills in reading and mathematics, while 40% held the opposite view (#10). Nearly identical percentages applied to the issue of basic skills (#11). Divided opinion is also evident with respect to whether or not respondents felt standardised testing had helped them clarify which learning goals are important (#14), was an appropriate way of focusing teachers' attention on the impact of teaching on pupils' achievement (#15), and had improved the quality of teaching and learning in their schools (#18). While about one in five agreed that standardised testing challenged weaker teachers to do a better job (#20) and had led to improvements in their own teaching (#22), more than half disagreed in both cases. The statement 'Standardised testing improves my pupils' learning in reading and maths' (#23) had just 14% respondents in agreement, with 58% disagreeing and a further 28% undecided. Again, there is a need to analyse all these findings in greater detail in future studies.

There is greater consistency in teachers' responses to statements focused on the more potentially negative effects of standardised testing. Three out of every four respondents agreed that some pupils in their classes were extremely anxious about taking standardised tests (#2) but disagreed that their school was more interested in increasing standardised test scores than in improving overall pupil learning (#24). That said, it is noticeable that teachers were more divided on the issue of whether or not parents took the results of standardised results too seriously (#6). Finally, and in a context where the stakes associated with standardised testing in Irish primary schools have risen in recent years, an argument could be made that the data on whether or not respondents felt that this encouraged 'teaching to the test' are some of the most important to consider in this study (#17). Here we see that one in four (26%) believe this to be the case in their schools (with 10% strongly agreeing – see, Appendix 1). Just over half (52%) disagree, with 22% disagreeing strongly. A further 22% indicated that they were undecided on the issue.

Once again, some differences between the responses of teachers working in different contexts are worth highlighting here. For example, teachers in DEIS schools were more likely to agree that some of their pupils were not capable of taking standardised tests (#1) and more likely to disagree that standardised tests accurately reflected their pupils' mastery of basic skills (#9) than their counterparts in non-DEIS schools. Teachers in DEIS schools were also more likely to agree with statements #4 and 13 and disagree with statements #2, 6, 8, 21, 24, 25 and 26. The nature of teachers' reservations about the use of standardised tests in DEIS schools is one of the issues raised in the following section.

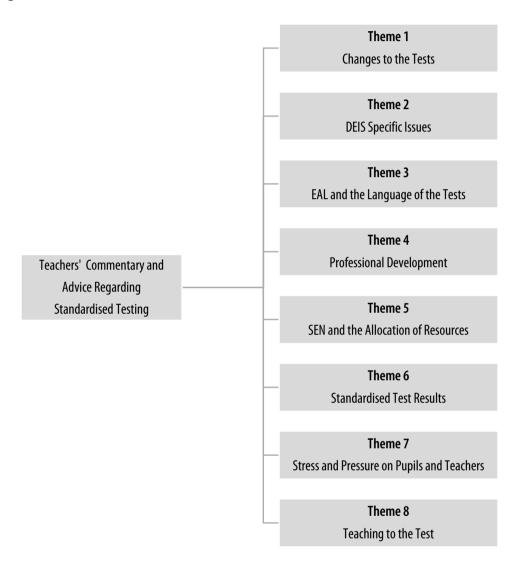
7.5 Teachers' Commentary and Advice Regarding Standardised Testing (Research Question 5)

At the end of Section 2 of the questionnaire, teachers were asked to respond to the following open-ended question: "What two pieces of advice would you offer to Irish educational policy makers about the practice of standardised testing in English reading and mathematics in Irish primary schools?"

A total of 1,062 respondents (599 in hard copy and 463 online) each provided at least one piece of advice. The hard copy responses were transcribed verbatim into an Excel file; the digital data from SurveyMonkey were downloaded into a second Excel file. Following a process of iterative content analysis of all the data in both files using a replicable "technique for making inferences by objectively and systematically identifying specified characteristics of messages" (Holsti, 1969, p.14), data 'codes' were identified linked to the results of text search queries. Further comparative review, involving the

research team and members of the steering committee, enabled clustering of the codes thematically as is recommended by, for example, Saldana (2010). In the final analysis, 24 initial themes were collapsed into eight which provided the framework for the presentation of teachers' responses to the fifth research question – see Figure 6.

Figure 6. Thematic framework of teachers' commentary and advice regarding standardised testing



Teachers' responses to Research Question 5 constituted detailed commentary – rather than policy advice *per se* – in relation to the practice of standardised testing in reading and mathematics in Irish primary schools. This commentary provided rich insights into teachers' attitudes to standardised testing and served to contextualise the specific advice they offered. Hence, in presenting each of the eight themes listed in Figure 6, 'Indicative commentary' from teachers is offered initially followed by 'Corresponding advice', using direct quotations in all cases, and the following coding protocol:

- W Q = questionnaire
- xxx = row number in the Excel data file
- W OL = Excel file with data from questionnaires completed online
- # HC = Excel file with data from questionnaires completed in hard copy

For example, the code Q123OL means questionnaire number 123 in the online file.

Where a teacher's comment and/or advice spanned a number of themes (e.g. Theme 1: Changes to the Test and Theme 3: EAL and the Language of the Tests), the quotation in question was included in discussion of one theme only, based on the extent to which it elucidated the key messages conveyed by teachers in relation to that specific theme.

Consideration was given to *quantitising* these qualitative data and triangulating them with the quantitative data reported previously in this report. However, given the exploratory nature of the research and the volume of teacher responses received, it was deemed more appropriate to use simple measures of word and phrase frequencies to determine the relative weightings and representativeness of emerging themes. This was achieved by including indicative counts of references to categories within the original coding frames to inform the creation and revision of each theme (information that is being used to guide secondary data analysis for related publications). Further, based on the principle that frequency does not necessarily determine value in thematic analysis (Pyett, 2003), the decision was taken to present the themes alphabetically, punctuated by a narrative from the authors that is intended to bring to the fore teachers' voices and capture the essence of what they were saying.

7.5.1 Theme: Changes to the Tests

Teachers repeatedly called for standardised tests to be revised, replaced and/or changed and for review of this kind to occur regularly. While some commentary suggested the need for cosmetic changes (e.g. to the overall appearance and/or layout of tests), more substantive change was also sought in relation to test content. Given the breadth of responses that informed this theme, indicative commentary and corresponding advice has been loosely organised according to three sub-themes relating to test layout and content, test administration, and alignment between curricula and standardised tests, respectively. Inevitably, there is some overlap between the views reported in this and other themes within the report (notably Themes 5 and 8), which should be borne in mind when reading.

Regarding test layout and content, teachers offered a range of suggestions for change, some of which related specifically to the reading or mathematics test, and others which were of a more general nature, requesting that tests be more child-friendly, for example.

Indicative commentary

I do think it is important to have standardised testing in these areas. However, tests need to be revised and updated (Q565HC). Modernise some of the standardised tests, for example many of the comprehensions and topics are extremely alien to children from certain backgrounds (Q631OL). Update the norms for tests used. Some reflect an older Ireland with a different demographic (Q343OL).

Corresponding advice

Update the appearance of the tests and the language used in the tests (Q695HC). Ensure the script looks colourful/bright/puzzle-like for children ... not a 'frightening' looking test/exam (Q122OL). ... With visuals for example (Q108HC). Focus the tests on present day interests and activities of children (Q679OL).

The English test needs to incorporate a full English assessment, not just reading/vocabulary (Q324OL). Topics and some language used (in English) are dated (Q565HC). Update the comprehensions to more modern/child friendly topics (Q695HC). Small section of reading and questions then more reading and questions of large page of reading (Q161HC).

Give a much more differentiated test in English (Q811OL). Improve layout of standardised reading tests to encourage weaker readers to have a go/try their best rather than discourage them (Q161HC). Make a useful EAL standardised test or update the one already in use (Q352HC).

Sections within tests where pupils could record how they approached problems in mathematics, for example, were requested because of the concern that " ... some pupils simply rush to the answer without doing any calculations on paper" (Q724OL).

Corresponding advice

Problem-solving questions should be updated to provide relatable and relevant contexts for pupils as is practical and applicable to everyday life (Q94HC). In maths, I'd like to see a section beside each question that indicates a space specifically for 'rough work' (Q724OL). Standardised tests should acknowledge process as well as product or if the child has the correct strategy/method they should get a partial score (Q148OL). Children should be allowed to do samples ... (Q197OL). Different testing forms would be helpful (Q804OL).

Concerns and recommendations regarding test administration were broad-ranging, with some teachers appealing for more flexibility regarding test administration protocols, while other teachers suggested consideration of e-tests.

Indicative commentary

The tests in their current form need to be updated (Q776OL). I think the tests can be quite long. In first class I can see my students getting tired towards the end of a test. I think it would reflect their ability more if the test was administrated over two separate days (Q307OL). Everyone has good and bad days (Q265OL). Children often succumb to stress and do not show what they are capable of in standardised tests (Q278OL).

Corresponding advice

Do not test all the same day. It is too intense, especially for younger children. Allow us to break the test up onto a few sessions for children with learning difficulties who find it hard to keep concentrating (Q548OL). Two separate tests could be carried out over a morning of one given week and an afternoon of a different week to get a more accurate score for each individual child (Q265OL). Maybe a split test that could be covered over the course of two days rather than one lengthy test that some pupils find overwhelming (Q459OL).

Show teachers how to prepare children emotionally as well as academically for them (Q278OL). Example tests should be distributed to all schools so children can practice and experience what their standardised test will be like when they come to do the real test (Q763OL).

Surely there is a more efficient way of correcting the tests. Online perhaps? (Q405OL). Computerisation/digitising of the testing system is needed to ensure that tests can be random (not just Form A and B), administered easily – done online with results calculated accurately and quickly and reported easily (Q776OL).

Over-familiarity with tests in use was raised as a potential threat to their integrity (see also Theme 8). There were attendant calls to update and review standardised tests and undertake re-norming in light of changed demographics. Notwithstanding the funding implications of their advice, teachers called for tests to be "... revised regularly to maintain their integrity" (Q600OL).

Corresponding advice

Standardised tests should be updated, and different forms/papers of the test should be available (rolling over a period of three years) to lessen the likelihood of memorising what comes up in the test each year (Q723HC). Update the tests and change more often to stop a) exact coaching b) questions being out of date and not understood by children ... (Q544HC).

In some instances, the call for text revisions was viewed as a means of addressing inflated scores, which some teachers associated with 'teaching to the test' (see also, Theme 8).

Indicative commentary

Repeating the same tests year on year is not good practice as the teachers know the layout and what is expected too well (Q586OL). We are very conscious of not 'teaching to the test' in our school. Yet many of our children are now consistently achieving scores that would previously have indicated exceptional ability (Q670OL).

Corresponding advice

The ... tests need to be updated in my view (Q670OL). If possible, new formats should be given each year from the Department – like Junior/Leaving Certificate. I believe this would allow for a true result (Q586OL). Also, a variety of tests so a different set would be given every second or third year, thus avoiding 'teaching to the test' (Q565HC).

The issue of test administration engendered considerable debate about who should conduct the testing in schools. There were repeated calls for distance between those who typically administered the tests and those involved in the marking and, the use of multiple forms to underscore the reliability of the scores was raised. In many cases, the learning support and/or resource teacher (or a qualified other) was identified as the most appropriate person to undertake the standardised testing to ensure equity and transparency of administration and avoid any kind of prompting/coaching during testing.

Indicative commentary

No teacher should give standardised tests to their own pupils at the end of the year, this only encourages them to teach to the test. Could be seen as a reflection on what the teacher did during the year (Q366HC).

Corresponding advice

Children should be given the chance to carry out the test in suitable setting... (Q429OL). Designated person in each school who has completed the SEN course to be responsible for assessment in every school. This person is not always the LS teacher in schools currently (Q657HC).

Independent invigilation or correcting? (Q550OL). Mandate that a different teacher administer the test (Q543OL). Testing should always be administered and marked by a teacher other than the class teacher (Q703OL).

In addition to calling for independent test administration, some teachers argued that standardised testing should be undertaken in autumn, in the first couple of months of a new school year, so that the results could be used to inform teaching and learning and decouple scores from judgements regarding individual teachers' performance. It was rationalised that this presents "...the only way to take the pressure out of the system, as then teachers aren't directly compared, and the year is not spent preparing for these totally artificial 'productivity targets" (Q612OL).

Corresponding advice

Many schools do these tests months apart ranging from April to June (Q467HC). Testing, if it must be done, should be in the autumn early in the first term (Q403OL). Testing in autumn should be compulsory not the summer (Q229OL). Only twice (or three times maximum) in the students' life time in primary school (Q612OL). Within a shorter time-frame for every school in the country (Q467HC).

Would be better to do the tests in October so that the teacher who has the class at the time can use the results to help them to plan for the academic year ... (Q552OL). Give ... parents an input on what needs more work for the year ahead with the children (Q229OL).

Changes to administration to cater for those children with SEN were called for (as a consequence of which test norms would not apply) (see also, Theme 5). Teachers called for alternative tests and arrangements for these pupils in relation to the issue of standardised tests, despite the fact that, as detailed elsewhere (see, Theme 5), the DES supports exempting children under certain circumstance. The need to develop assessments for older pupils with SEN also arose, something that would be the responsibility of NEPS. In this context, consideration of the need to educate teachers in the development and use of complementary diagnostic assessments, in concert with the work of NEPS, was sought.

Indicative commentary

Standardised tests do not apply to children with SEN and this is very, very, unfair (Q410OL). Children with dyslexia, specific learning difficulties – these tests are not fair to them and their results often times will never reflect their true potential ... (Q166OL). The English paper tests only reading comprehension and determining importance. What about the auditory and visual learners? What about the highly intelligent dyslexic learners who come out with drastically low results because they can't read the comprehensions or the tricky vocab in section A? The tests can give a poor reflection of what many children can do (Q671OL). Students have access to additional support in secondary school. It seems unfair that these students are left alone to complete standardised tests in primary (Q364OL).

... Most standardised tests are not appropriate for older students with learning disabilities (Q208OL).

The new model needs to educate, inform and empower teachers to conduct and administer assessments in lieu of NEPS. While NEPS certainly have their place there are a large percentage of batteries and assessments that they use that could equally be used by teachers (Q696OL).

Corresponding advice

Special accommodations for students with SEN need to be introduced (Q364OL). Only use tests selectively with children who have problems. Let them be done in a non-formal way to avoid the huge stresses on children (Q464OL). Children who have a specific learning difficulty/special education need should be given extra time to complete the tests, especially the reading test (Q361OL). In state exams, students with dyslexia and other needs are allocated a scribe to read and write for them. That may be worth considering in the senior end of primary as well (Q671OL).

Tests which incorporate these children as part of the national standard need to be developed (Q410OL). Can aural/oral elements be included in these tests? (Q166OL).

Please research and publish a reliable and valid assessment to assess students with learning disabilities up to the age of 18 years as most standardised tests are not appropriate for older students with learning disabilities (Q208OL).

More funding NEEDS to be provided for diagnostic tests and assessments. Provide SETs with training (substitute-able) on diagnostic testing and provide schools with the money to purchase them (Q696OL).

There were calls for greater alignment between tests and curricula signalling, perhaps, a greater concern for children's curriculum-based learning rather than their ability to transfer knowledge to novel challenges and contexts. There was specific reference *inter alia* to curriculum overload, the challenge of completing the curriculum in time for standardised testing in the summer term, and misconceptions regarding the use of standardised tests.

Indicative commentary

Standardised tests need updating at this point in line with the curriculum (Q706OL). Curriculum needs to be looked at because there's a gap (Q200OL).

Corresponding advice

Make the tests reflect what the children are learning and doing (Q292OL). Make it more curriculum-based. Children should not be faced with material not on their yearly maths curriculum (Q526OL).

7.5.2 Theme: DEIS Specific Issues

Given the disproportionately high percentage of schools with DEIS status who participated in this survey, it isperhaps unsurprising that there were many references to the challenges that standardised testing presents for students and teachers in these settings. Teachers' commentary and advice signalled their concern that standardised testing in DEIS schools presents certain challenges, particularly for children.

Indicative commentary

Children from DEIS schools are at a huge disadvantage in regard to these standardised tests due to the language and vocabulary used in them (Q279HC). The formal structure, time constraints and setting of the tests impacts negatively on some of our weaker DEIS pupils i.e. lack of sleep, tests too long, poor nutrition, etc. (Q388HC).

As a teacher in an urban DEIS band 1 junior school, I feel standardised English and maths tests do not serve the very low achievers. In our school these children receive reading recovery and maths recovery support, making huge progress but this progress does not register on the STEN scores (Q185OL).

For children in DEIS 1 schools STEN scores simply highlight the differences or gaps [are] between achievements from children from different socio-economic backgrounds (O546HC).

Schools in DEIS 1 areas are likely to be at a disadvantage in standardised testing as this 10% is bound to be a lot higher in DEIS 1 area due to low education and literacy levels in adults (Q211HC).

Asking DEIS schools to constantly improve their scores in standardised tests is unrealistic. Sometimes, maintenance of a fair standard requires immense effort. Things cannot keep improving indefinitely (Q690OL).

Corresponding advice

Policy makers need to think about this cohort and how to measure their progress (Q185OL). Take into account social and economic context of school (Q497OL).

A better system of assessment is needed particularly in areas of social disadvantage in order to promote learning and not impede it (Q1710L). Time could be better spent than testing (Q546HC).

Although addressed comprehensively in the *Education Act* (Government of Ireland, 1998, Sec. 53), the potential impact of league tables was raised also with the remark that standardised test scores highlight the disproportionate under-performance of students in deprived areas. Some teachers questioned the practice of comparing the standardised test results of students attending DEIS schools with those in more advantaged settings. The possibility of comparing 'like with like' was raised to facilitate intra-DEIS school scores comparison. Others wondered if alternative assessments specifically geared towards DEIS schools should be devised and how the challenges facing Gaelscoileanna with DEIS status might be addressed. Not all respondents, however, wanted special treatment for students attending DEIS schools, as teachers' comments suggested.

Indicative commentary

It is difficult in a disadvantaged school when the STEN scores are compared nationally against all other schools (Q48HC). League tables based on standardised scores will effectively erase any progress that has been made in education, especially DEIS schools (Q214OL).

Corresponding advice

Ban the publication of standardised scores (Q214OL).

Standardised tests should not be compulsory for DEIS schools. An alternate should be in place for weaker pupils (Q68HC).

Would it not be more effective to make a comparison between all DEIS schools ... ? (Q48HC).

Develop a culture of pupils aspiring to do their very best and using the available time productively in standardised tests, especially among pupils, parents and teachers in DEIS schools (Q431HC).

7.5.3 Theme: EAL and the Language of the Tests

In addition to the general commentary about the need to revise some of the language used, and the manner in which information is conveyed in standardised tests, the appropriateness of these tests for EAL pupils, in particular, was highlighted. In addition to reiterated calls for test revision and updating, there was consensus that testing of pupils for whom English is not their mother tongue should be given attention when standardised assessments are being designed, normed, administrated and marked. Some advice signalled that teachers value standardised testing for these children, albeit they recommend revisions to content and presentation considering changing demographics and evolving needs. Other comments were more critical, with teachers highlighting the distinct disadvantage EAL pupils face when taking standardised tests and the distorting impact this can have on how these pupils perform.

Indicative commentary

Standardised testing is essential (Q149HC) but children with EAL ... May not understand the question therefore will receive a lower score than they may be capable of (Q392HC).

Corresponding advice

EAL children need to be taken into consideration (Q392HC). They should be offered help or the test should be read for them (Q392HC).

... Also some tests need to be updated to reflect modern society (Q2010L). ... And broadened to include EAL children (Q149HC).

Standardised mathematics tests received specific mention, with teachers stating that they present problems for EAL students.

Indicative commentary

The maths test requires good literacy skills to do well ... is affecting the true measurement of mathematical ability by those children who have dyslexia and other reading difficulties/EAL (Q369HC).

Maths is not just a maths-based test; it is very heavy on English as well. My class might not have a huge contingency of EAL learners, but out of approximately 350 pupils in our school, over 80 are newcomer children. They are usually very good at maths but score incredibly low as a result of not being able to understand the English on the paper (Q671OL).

Corresponding advice

I think a provision needs to be made for such children (Q369HC). Ensure that content language reflects language in school books, particularly mathematical language (Q410L). ... Maybe ... reduce the amount of language in questions? (Q3820L). Perhaps, having the maths test accessible in their first language if deemed necessary by their EAL teacher, and leave testing their English comprehension to the English test (Q6710L).

Differences in 'social capital' of schools and the disproportionate numbers of recent immigrants and EAL students in some schools was also raised. There were calls for more resources, the reinstatement of EAL teachers and exemptions from testing, if required, something that is permitted if a pupil has less than one-year instruction in the language of the test.

Indicative commentary

The EAL students are at an unfair disadvantage in that no matter how hard they work (Q720HC). EAL ... children often struggle with these tests; this can skew the results of an entire school where there are high proportions of these students (Q612HC).

These tests do not take into account the social capital available to children and their journey as a learner. For example, a STEN of three, reads as a very poor score however it does not tell you that the child who scored a three arrived in Ireland six months ago, fleeing conflict in their home country and did not speak English when they arrived, nor do their parents. With this information, a three reads very differently. This is an issue we encounter in our school on a daily basis with 98% EAL learners. We see dramatic developments from children in a short space of time due to excellent teaching and support despite limited resources provided by government (Q717OL).

There were various recommended changes, including differentiated assessments, rewording within tests, alternative administration protocols and some kind of 'consideration when evaluating national results' of the achievements of pupils with EAL. The advice offered, however, was very varied.

Corresponding advice

Governments need to recognise that reliance on these tests for statistics gives a far too simplistic view of Irish education, teaching and learning (Q717OL).

A clear directive should be issued regarding this (Q612HC). ... Possible alternative paper or rewording of sections to allow for EAL students (Q153HC). Would suggest that it be marked on the results form if a pupil is an EAL student (Q720HC).

7.5.4 Theme: Professional Development

In comparison to the comments and recommendations made in respect of other issues raised in the survey (e.g. 'teaching to the test', pressure and stress, linking schools' standardised test scores with special educational needs resource allocation, etc.), relatively few statements were made regarding teachers' professional development needs. Where calls for CPD were made, they included, for example, requests for support for teachers to develop their understanding of how to administer and mark standardised tests, guidelines and training for teachers to interpret and report appropriately and, indeed, on how to prepare pupils appropriately for the tests. Further, teachers identified the need for enhanced professional development in summative assessment to commence at undergraduate level and span teaching careers because, as one teacher commented "it is very hard for young teachers – most end up asking a mature member of staff for help" (Q342HC). In the context of CPD focused on standardised testing, teachers also raised a concern for what they saw as a diminution of the importance of teacher judgment and professionalism.

Indicative commentary

Teacher judgement on what are appropriate material and strategies to use with specific children, in specific contexts is essential. For teachers to use wise judgements they need to do more than 'implement' programmes such as First Steps or follow directives. A focus on outcomes and raising 'narrow' standards in literacy and maths is making teacher judgements redundant. If children are to develop critical thinking skills, teachers need to develop these skills too. Standardising education and measurement of outcomes does not leave room for judgement if schools are evaluated on tests results as this affects teachers' thinking (Q404OL).

Corresponding advice

Put money and time into CPD (Q564HC). Provide effective CPD ... in the wider area of standardised testing – its role, implementation and understanding the results and outcomes (Q405HC). Teachers should be educated on the purpose of the tests (Q803OL). Directions should be given regarding administration of these tests to LS and SEN pupils, fairness in admin and correction practices etc. (Q320HC), ... training in administration for consistency (Q467HC) and ... on how to interpret the STEN and percentile (Q117OL). Staff and schools need ... training on making better use of scores to plan for future learning (Q395HC), and ... to implement plans for improvements following test results (Q42HC). Give teachers CPD on *AfL* and *AoL* so that teachers can see the small place standardised testing has in the overall big picture of assessing the child (Q473HC). I think this training should be compulsory (Q342HC). PLEASE, PLEASE, include some instruction re. statistics and test interpretation in pre and post service courses for teachers and in particular for principals. I would love to see PDST rolling out courses on Measurement and Evaluation (Q524OL).

There were specific calls from teachers for support regarding how to guide pupils appropriately to take the tests so that the results they would receive would reflect the pupils' knowledge and, in turn, aid them in using the data to inform their teaching subsequently.

Corresponding advice

Professional development in relation to preparing children for them in terms of diluting anxiety and in terms of the teaching of higher order thinking skills and also perhaps practice in test-taking skills may be beneficial and worthwhile as a way forward (Q5HC). Pre-test \rightarrow test \rightarrow feedback and provide training as appropriate. Pre-testing to include teaching strategies to enable children to better cope with and perform during testing (Q138HC).

7.5.5 Theme: SEN and the Allocation of Resources

The volume and vehemence of teachers' commentary vis-à-vis the perceived conflation and proposed use of the standardised test scores of pupils with SEN by the DES to inform resource allocation to schools are very strong indicators of teachers' sense of grievance and concern. Although improved standardised test scores, based on a three-year rolling average, are just one of several indicators used to determine the allocation of resource personnel in schools, some teachers were vociferous in their calls for results and resources to be decoupled.

Indicative commentary

Do not use improvements in literacy and numeracy test scores to penalise us in our SEN allocations (Q256OL). Please do not use such a crude measure to decide a school's resources e.g. new SEN model in two years (Q72HC). We gave our scores to the DES in good faith, not to have them used to reduce our GAM as a result of doing an excellent job (Q605OL).

Further, although variations in scores across classes typically average out over time, the implications for rural schools of the tendency for classes to "... vary significantly in ability from year to year" (Q752OL) was raised.

Corresponding advice

Results should not be used as criteria for the allocation of resources under the new SEN model (Q571HC) or ... to determine levels of support teaching required (Q359OL). Pressure should not be on teachers to consistently improve standardised testing results ... results shouldn't be used solely in determining support hours as in rural schools (Q752OL). The DES needs to provide a level playing field to all schools especially those that do not enjoy the luxury of DEIS status. Small rural schools such as ours are being squeezed of resources (Q272OL).

Despite the DES encouragement of schools to exempt pupils, if required, and report such exemptions in reports to them, the potentially negative impact on schools' mean scores of the inclusion of the standardised scores of pupils with SEN was also raised. The timing of this study in May 2017, just prior to the introduction of a new allocation model in September 2017, is an important contextual issue to consider here insofar as teachers may not have been fully *au fait* with what the *Circular 0013* (DES, 2017) contained.

Indicative commentary

Standardised tests are only one part of how students are assessed in a continuum of assessment methods; the number of students with SEN in mainstream schools continues to increase – incorporating these students into assessment processes impacts on validity and fairness (Q682OL).

Corresponding advice

Children with SEN/EAL should be exempt from taking tests – unfair on them as they are unable to complete it, unfair on school as it brings down results overall (Q43HC).

It is clear from the teachers' commentary on this theme that they have very specific concerns about the potentially adverse impact on vulnerable pupils of reduced resources following improvements in standardised test results. Some contended that this equated to 'penalising' hard work that resulted in positive outcomes. In light of their concerns that pupils with SEN could regress in the absence of ongoing support, teachers pointed to the impact of changing resource allocations on established teaching practices in schools, such as team teaching and small group withdrawals.

Indicative commentary

Allowing standardised test results to play a role in future allocation of SEN teachers in schools, in my view, punishes schools for having high standards and forces schools into nearly wanting to see lower grades. For example, I would fear that if at the moment a school decides to let a fourth class child with Down syndrome who falls in the borderline/mild range of intellectual ability and works on second class maths curriculum,

complete a level 2 SIGMA-T, that in the future these schools will feel they should let that child sit their actual class level in the test, thus achieving a low STEN which will add to the numbers which qualify for a new teacher for SEN. Also this issue of allocating resources according to test results may call in to question the integrity of administration of tests in the future – for example schools may see no issue in administering a test on a Friday afternoon because if scores are poor, it will add to the school's case for an extra support teacher (Q443OL).

Our school has worked very hard to ensure that we distribute our support staff throughout the school to assist teachers in all areas of literacy/numeracy. Our one fear is that obtaining good results will be seen as proof that the children are more able and therefore the resources would be taken away and used elsewhere. This would be a major mistake as the results obtained are due to effective teacher placement and interventions in the school (Q385OL).

My school's scores have improved over recent years because of the level of support the teachers have been able to provide, through team teaching, small group withdrawals, etc. We feel we will be a victim of our own success and if we lose teachers, we will not be able to sustain these scores (Q806OL).

Often these improvements come because of the increased input of SEN teams and schools should not be victims of their own success (Q5450L). ... Once it is taken away they are more than likely going to underachieve again (Q1180L).

Standardised testing of young pupils in our junior school forms just one part of a pupils' assessment (Q571HC). Some children do ok but teacher observation would determine that support is needed despite this (Q359OL).

Corresponding advice

Do not use test results to allocate teachers (Q806OL). Don't use good results in these tests against the schools by taking away the supports in place such as resource/learning support teachers (Q385OL).

Improved results in standardised tests should not mean that a school is punished by losing its SEN allocation (Q256OL). Learning support should not be withdrawn from the child if they go over the cut-off percentile (Q118OL).

Some teachers lamented the negative impact of standardised tests on pupils with SEN, reiterating the need for alternative and/or differentiated assessments, and flexible test administration practices. Although there are clear guidelines regarding potential exemptions from standardised testing (*Circular 0013*, DES 2017), teachers raised concerns about the decisions that must be taken at local school level regarding standardised testing and pupils with SEN, leading to the suggestion by one respondent that no child with SEN should sit these tests. Given the range, complexity, severity and, in cases, co-morbidity of SEN, perhaps this recommendation signals an overarching sense that this aspect of standardised testing requires focused attention in the immediate term.

Indicative commentary

I have asked the questions many times – is it necessary or fair to force children with SEN to take standardised tests which they will repeatedly fail? (Q168HC).

Cannot emphasise strongly enough that standardised test scores should not be used for the purpose of determining allocations (new model). In our school the reason many children are performing so well is because of the LS intervention that they have received and continue to receive (Q112HC).

... Many children with SEN are unable to access the maths/language curriculum for their class level and so will work on a lower class curriculum, thus schools are forced to decide whether to put the child through the process of completing the test level coinciding with their class level (which they will undoubtedly struggle through and which can have an extremely negative impact on their self-esteem) or whether to test using the level at which they are working at in reality on a day-to-day basis e.g. a child in sixth class with ASD completing a Level 2 Drumcondra reading but completing a Level 4 SIGMA-T. Indeed, many parents can have difficulty accepting the notion that their child is unable to work at their own class level and may be quite upset over scores which are perhaps for a younger class level and still poor.

In some cases, the sheer nature of the test (i.e. demands on concentration, the lack of visually appealing material compared to children's workbooks, the length of the tests and even the layout – comprehension on right hand page of the test booklet and question on the next page, so on the back of the comprehension which requires the pupil to keep track of where they are on a page etc. can be difficult for a pupil with concentration issues, ASD, emotional issues, issues with coping skills, hearing difficulties, speech and language issues, Down syndrome, borderline/mild/ moderate learning difficulties, children with a SLD. Our schools feature all of these SENs and our teaching methods and classroom practices cater for these children, yet the testing procedures have not. It is an extremely challenging task to watch these children complete these tests. I do not claim to have all the solutions or know all the suitable alternative options for testing such children in a standardised way due to the unique nature of every child with SEN but in our schools the vast majority of these children are expected to sit and be tested like every other child when every other aspect of their day is differentiated (Q443OL).

I feel many children do not achieve an accurate result due to time constraints and inability to focus for long periods of time (Q66HC).

Corresponding advice

Take into consideration SEN (Q280HC). ... More flexibility and consideration shown to children with special educational needs when it comes to administration of standardised tests and their overall layout (Q4430L). It would be great to allow SEN children extra time for these tests or shorter periods of activity (Q66HC). We need to have alternative assessments to meet the needs of children with dyslexia, autism, dyspraxia and many other needs. I suggest that children who have SEN should be relieved of the necessity to take part in standardised tests (Q168HC).

... It is important to have a focus on inclusivity in assessment so that the learning needs of all pupils can be identified and addressed – the competency of teachers in relation to assessment practices is where the focus should be as teachers have a significant influence in their daily interactions with students; we do not need the tail wagging the dog in primary schools as is happening at second level (Q682OL).

7.5.6 Theme: Standardised Test Results

As the commentary and recommendations reported in this section attest, teachers' opinions' were very divided regarding how standardised test results should be used, in tandem with other forms of assessment, to inform teaching and learning. Views differed too regarding how, when, where and with whom standardised test results should be shared.

Indicative commentary

Test results that are used to screen pupils who need extra, specific help in schools, have a value but are limited. In my school we use standardised test results to screen the pupils at the beginning of the year and hopefully show the gains made over the year by summer. This information is passed on to the parents after the scores have been explained. It can happen that pupils work solidly through the year, yet the end of year scores can be lower than the previous year. Scores are weighted against their chronological age. It is expected that the improvement in a pupil's performance would show a straight and un-interrupted curve indicating the child's steady progress. There are myriad reasons why some of our parents are in a better position to follow school advice and help their children at home while other parents don't engage in this process or are not in a practical position to help. Children can perform badly on the day. That is not an indication of their intelligence. Progress in school can be reflected in improved scores in standardised scores but that isn't always the case (Q5130L).

Sending test scores home on report cards is done in a vacuum and most parents do not understand how to correctly interpret them ... The scores probably need to be more easily explained to parents (Q596OL).

Corresponding advice

Schools should be encouraged to carry out more effective testing methods that inform teaching in a more focused way (Q753OL). Find a better way to integrate the results from these into teacher planning, remembering the amount of time a teacher has available to plan/correct/assess, etc. etc. etc. (Q17OL) ... They should be used effectively in planning for the future – A for L not A of L – ... but they should not drive the school, the teachers or the children (Q625OL).

Fundamentally, teachers were divided about whether scores should be shared at all.

Indicative commentary

It should not be required that schools report the results to parents, the Department or the BOM (Q723OL). Stop making test scores available to parents [and by default to pupils] (Q306OL). Do not give to parents in report cards as it is made into a competition (Q698OL).

While they are a useful tool for teachers to establish some aspects of students' learning in core curriculum areas, I feel that they are just a snapshot of one moment in time ...

(Q196OL) ... Better examples of a child struggling exists than using STen, percentile, etc. (Q50OL) ... Parents do not understand STen scores and therefore can be very critical of teachers as a result. Children as young as second class are being told their STen scores by their parents and this has added pressure on the children (Q769OL).

Giving parents a number scale for STen of 1-10 is erroneous. All parents want their child to get a 10. They assume that is the best. This is incorrect. After 30 years teaching for the complete development of the pupils, I would be happy with a seven in reading and maths, plus good mental emotional spiritual and social development. Someone with a score of 10 may not have the people skills to lead a team working in a tech company. We are giving too much credence to that which is easily measured rather than that which is essential for long-term quality of life (Q007OL).

Others were more equivocal, signalling occasions when it is appropriate to share results with parents, for example.

Indicative commentary

In truth I think they are stressful for the children and don't offer a fair reflection of a child's work. This also should be communicated better to parents (Q655OL).

Indicative advice

Parents don't need to know about it unless their child needs help (Q500L) ... Should not be reported to parents unless parents specifically ask (Q1960L). STen should not be reported to parents unless there is an issue with the child's learning (Q7690L).

Informing parents of test scores should be done at parent-teacher meetings where scores can be talked through and explained so that the scores are understood ... (Q596OL).

Concern was repeatedly expressed regarding what teachers perceive as parents' lack of understanding of standardised testing in general and scores in particular. It is evident from the commentary that some teachers associate student performance on standardised tests and parental expectations for same with how they are perceived as professionals.

Indicative commentary

Many teachers feel under pressure to ensure that their students achieve high marks in standardised testing ... Children sometimes become very anxious and overwhelmed in the lead up to testing. The children sometimes feel if they do not do well in the test that this can be a barrier to them achieving their full potential when attending secondary school. Their self-esteem can be undermined by their results too ('why did I only get a STen five and others got seven?'). Very few parents understand standardised testing and become anxious themselves about how their children are performing in the tests. They feel their children are under-performing if they score low. There is too much emphasis on standardised testing, and this affects the whole school community in a negative manner (Q309OL).

... Remember that as teachers we don't have control over our raw materials and that the STen score of three achieved by one pupil in my class this year is much more reflective of the quality of my teaching, and gave me more satisfaction than the score of 10 achieved by another because the bright child would learn in spite of me but the STen score of three is the result of a huge effort on behalf of the learning support teacher, class teacher, pupil and parents (Q240OL).

Corresponding advice

The focus must be on the children's learning and not measuring how much they've learnt, not preparing for tests but engaging the children to enjoy their learning and to have a more positive approach when it comes to learning (Q309OL). Reduce the significance of standardised testing ... (Q309OL).

Teachers were very exercised in relation to STen scores, highlighting their limitations, how they are interpreted/misinterpreted and used for comparison purposes. Some expressed concern about pupils having access to them. In addition, although the curriculum for Irish primary schools is organised by class level (or adjacent class levels), some teachers found this problematic for a variety of reasons.

Indicative commentary

A STen score is too vague, and although a percentile score is a more accurate reflection of the child's performance, this is probably too exact, as parents may panic at a child dropping a few percentile points. Parents should receive feedback including a score which is in between the vague nature of the STen and the exact nature of the percentile; and it should also be accompanied by a mandatory comment from the class/support teacher on the standard of the child's work in class throughout the year, as this can vary hugely from STen scores. Perhaps a sample of a class test would be a useful item to give parents, since many of them ask for material which they can use with their children to improve their maths/test-taking skills (Q810OL).

Corresponding advice

Results relayed to parents should be more streamlined (Q810OL). Require scoring and reporting using standardised scores based on age not nonsensical class-based or spurious STen scores. Do not report 'reading ages' to parents. Provide parents with a graphic representation of results (Q796OL). Reporting STen scores or standardised scores to parents should not be mandatory. I believe a percentage score would be better (Q582HC).

Despite reluctance and disagreement, in some cases, with the practice of sharing standardised test results with parents, there was ready acknowledgement that parents need greater access to information regarding testing and guidance on how results should be interpreted.

Indicative commentary

Parents in my school do not understand how or why standardised testing is carried out. They will often ask how their child is scoring in comparison to other students in the class ... They often do not understand why accommodations can't be made for their child, when accommodations are made in state exams, for example (Q290OL).

Corresponding advice

Reconsider the way in which scores are reported to parents (Q615OL). The results should be explained clearly ... and there should be very careful media management of the issue of test scores (Q617HC).

If there was a simpler method of explaining their child's performance it may work better (Q492OL). Information needs to be more comprehensive for parents if the scores are to be reported home. More support for those children as well who are below average but above tenth percentile and not entitled to learning support (Q590HC). Parents should be informed as to the thinking and meaning of the tests rather than just getting a number attached on to the summer report which they then use to judge their own child and compare to other children (Q408OL).

Teachers called for specific kinds of information to be made available although detailed information of this kind is available currently both on the NCCA website and in the standardised test manuals.

Indicative commentary

More information needs to be given to parents explaining key terminology around testing (Q493OL); ... A more concise breakdown of the test areas where improvement is warranted so teachers can make available to parents and some strategy suggestions that may help (Q550OL). Parents need to be aware of their child's ability before they can interpret standardised test results ... (Q388OL).

Corresponding advice

Keep encouraging teachers to give the explanation sheet about scores to parents so they may refer to them annually (Q530HC). A 'standardised' letter, if you will, in plain English with a short, simple description of the what, why and how the tests are standardised (Q290OL). Prepare a more detailed leaflet for parents explaining the margin of error and the screener/snapshot aspect of the assessment (Q466HC).

As STen scores are required by law to be reported to parents a prepared information sheet explaining the results (expected margin of error, possible reasons for a lower result than expected and what parents are to do to help if help is needed) should be available to schools (Q599HC). Consider an awareness campaign for parents about how to interpret these scores (Q408HC).

Non-reading ability standardised tests such as NRIT might give parents a more realistic expectation – many children are performing above their ability when given the adequate support in school (Q388OL).

7.5.7 Theme: Stress and Pressure on Pupils and Teachers

Many respondents spoke about the stress, anxiety and pressure induced by the tests. Teachers' concerns were broad-ranging. Some participants pointed to differences in children's learning styles, their observations of pupils' performance in class and how these may relate to test-taking and achievement. Others focused on issues relating to labelling and categorisation and how this impacts pupils, teachers and parents.

Indicative commentary

I believe that standardised testing sets children up to fail. If they score poorly, it labels them which in turn limits their expectations of themselves (Q1710L).

I feel that sometimes these tests do not take into account how a child learns, what is happening in their life; it tests their ability to take a test, to function well under pressure and quite often a child who has great ability does not shine (Q223HC). The pressure they feel can have an impact on how they maintain focus during the test (Q410HC).

Do children need to be put in categories at such a young age? They all develop at different rates and to know and feel that you are not up to standard at an early age could not be of benefit to any child (Q259OL).

Children are under unnecessary pressure from themselves, parents and their peers to attain the ideal STen, it has created a labelling system in our school community - parents and children comparing STen scores (Q2910L). The children in older classes know their STEN scores and it causes a lot of anxiety and pressure (unnecessary) (Q1000L). It leads to categorisation of children at a very young age and can lead to poor self-perception particularly in the area of maths (Q398HC).

I don't think parents need to receive standardised test scores for children in primary school. It brings unnecessary pressure on everybody involved: 1. teachers, because they feel they need to keep scores up as parents will be comparing from year to year; 2. parents, because they want their children to do as well as others in 'an official test'; 3. the children themselves, as they put pressure on themselves to do well. (Q395OL).

Corresponding advice

Do not put too much emphasis on standardised test scores (Q318HC). Remove pressure from principals by outlining the value of standardised testing (Q665HC). Give support to teachers who feel judged by the results of these tests (Q278OL). Testing skills need to be discussed and practised and talk on prevention of anxiety given to parents (Q813OL). It would be brilliant if there was a policy in place where parents don't need to know STen scores unless it is a STen score of four or below (Q483OL).

... The results should be kept within the school so that pupils can enjoy their time in primary school without the added pressure of the results of these standardised tests (Q541OL). By all means do the standardised tests and, as a school, debate and discuss how the children are getting on/what needs to improve, etc. In my opinion each teacher should do their own class-based tests and let these results go home if the school want them to (Q395OL).

Some issues, alluded to in other themes (Themes 1 and 8), emerged here also. Specifically, the practice of 'teaching to the test' was raised, linked, in this case, to teachers' concern that pupil performance on standardised tests is a crude and incomplete reflection of learning, particularly when the curriculum has not been 'covered' comprehensively in advance of testing.

Indicative commentary

Content needs to be evenly spread between third and fourth and also between fifth and sixth (Q590HC). Too much focus is put on standardised testing with undue pressure being put on teachers and pupils. A lot of teachers are teaching to test instead of being more creative with their English and maths programmes to make them more active and relevant to their lives. It is only a snapshot of their learning throughout the whole year and it often does not reflect their ability (Q753OL).

The test reflects one day in a child's performance. It should not be the only factor taken into account (Q259OL). Teachers are under pressure to get the maths curriculum fully taught before tests need to be done as scores must be reported on end of year reports. No time for general revision as a result. I do not teach to the test, but revision would be nice! (Q225OL).

The test is a snapshot on one particular day of a child's performance. It is not necessarily reflective of the ability of the child. External factors such as Communions, nervousness and disruption can affect a child's performance on the test. Parents can sometimes find it difficult to understand standard score, STen, percentile, etc. (Q492OL).

Teachers reflected on the potential long-term negative consequences of an over-emphasis on standardised tests, voicing specific concern about the holistic development of the child, the adverse impact of media and the use of test scores as a barometer of success in school.

Indicative commentary

Segregation of subjects for testing undermines the holistic approach to primary teaching which is why our sector has been so successful and this is in danger of being strangled by over-emphasizing the importance of certain areas of the curriculum deemed to be more important than others (Q638OL).

The media attention on standardised testing has added a stress to the use of the tests and the outcomes of the tests really do depend on the student population and the level of support available (Q222OL).

I would hate to see the children in my school become very aware of the results of their standardised tests and start to put pressure on themselves and their peers to perform well. I would also hate to see schools base their success on their standardised tests scores (Q605HC).

Corresponding advice

Tests should be changed, formalised on a yearly basis and should be based on the curriculum being taught (Q92HC). Prepare anxious children for the assessment (Q410HC). It should not be the only factor taken into account (Q259OL).

7.5.8 Theme: Teaching to the Test

From the comments received, it is apparent that some teachers are either aware of colleagues within their own schools who 'teach to the test' and/or believe that this occurs in other schools. Teachers identified a range of issues that, in their opinion, encourages this practice, including pressure felt by teachers themselves and parent and/or pupil expectations. Reference was made to 'anecdotal' evidence of 'teaching to the test' – 'subconsciously' or 'inadvertently' – due to teachers' over-familiarity with the standardised tests currently in use. In turn, teachers expressed concern about attendant 'grade inflation', narrowing of the curriculum and student labelling. Suggested advice included changing the content of tests routinely (which raises the issue of computer-based testing) and/or use of a wider range of standardised assessments.

Indicative commentary

An over-emphasis on accountability measures and standardised testing leads to simulacra, distortion and fabrication; it can limit what is on the curriculum and encourage 'teaching to the test'; grade inflation undermines confidence in the examination process, it can lead to student labelling and influence teacher expectations in negative ways. They do not take socio-economic status into account; they do not provide information on what a student has learned – only how they stand in relation to others (Q682OL).

Nowadays with social media/parent competitiveness, there is a problem ... bragging about results. My child got a STen of 10, etc. It's akin to the problem of the Leaving Certificate being all about points. Not sure if I trust all teachers not to interfere with result (Q559HC).

Due to the ease of manipulation of test outcomes by 'teaching to the test' and spending far too much time on the test content, grade inflation and grade competition are inevitable. The subjects that lose out are SPHE and SESE and Art and PE. We are introducing children who can read and do maths exceptionally well, but can they write creatively? (Q612OL).

When teachers are in the same class for a few years it's likely they can teach to the test, even subconsciously (Q307OL); too much focus is put on standardised testing with undue pressure being put on teachers and pupils ... Teachers are teaching to test instead of being more creative with their English and maths programmes to make them more active and relevant to their lives. It is only a snapshot of their learning throughout the whole year and it often doesn't reflect their ability (Q753OL).

... In our school we try to be meticulous in ensuring that every pupil gets the same experience each year when it comes to standardised tests. This is especially important for newly appointed teachers and substitute teachers. Our principal and SEN teachers play a large role in ensuring that there is no specific preparation carried out in advance, that each test is administered properly and that the tests are corrected accurately. It is then galling to hear of schools where scores are artificially inflated ... (Q309OL).

I revise the curriculum in maths, all area covered during the year using the children's maths assessment tests, look back chapters and shadow book. I do not teach any sums that come up in the test and I think there are some difficult sums which really test the child's maths ability but in my opinion that gives a true reflection of their maths ability if they are able to figure them out. I hope that others do too but can't be sure as recently in my class I was amazed when a child knew how to do a 'multiplying bigger numbers' problem that we were covering. He told me that his teacher previously had showed them one just to let them see some of the third-class sums. Granted he is a gifted child so he remembered and perhaps there was nothing in this, but I did wonder (Q538OL).

Corresponding advice

What can we do about it, I'm not sure? Certainly, schools that have a large majority of children above the bell curve should be put under further scrutiny (Q112OL).

The content of standardised tests should be changed every year or two to avoid teachers inadvertently 'teaching to the test' (Q703OL) and ... teachers and parents prepping children (Q542HC). The focus must be on the children's learning and not measuring how much they've learnt, not preparing for tests but engaging the children to enjoy their learning and to have a more positive approach when it comes to learning (Q309OL). I think it would not be hard to have 3 or 4 standardised tests that could be rotated each year (Q307OL). Tests should only have content from the curriculum of the year it's pitched for ... (Q127OL). Tests need to be based on what has been learned/taught and not reported to parents as results are misunderstood (Q610OL).

Teachers also highlighted the different ways in which schools organise standardised testing and suggested that the seriousness with which schools view these tests influences both how and when tests are scheduled and administered. Concern was expressed too regarding the competition that standardised tests can engender in pupils and parents. The possibility that league tables would be introduced into Ireland was also raised (despite the fact that Section 53 of the *Education Act* [Government of Ireland, 1998] prohibits this).

Indicative commentary

There is too much discrepancy between how different schools approach this. In other words, it is not standardised. My school left maths to today, 31 May – the last possible day where the tests could be done – and all senior classes have been 'cramming' maths for the last number of weeks – leading to massive grade inflation due to pressures from home and other teachers (a teacher who decides not to do this is going to compare badly to a teacher who does it). In my children's school, maths was done more than three weeks ago, with no cramming and no warning. How are the two approaches standardised? (Q612OL).

Please do not follow England with league tables, etc. We are following all these things, when we actually have a very good educational system with generally happy and well-educated children and good enough morale from staff. I have friends teaching in England and they say that their opportunity and scope to teach in creative and fun ways is so badly impacted by having to teach to the test. Staff burnout is shocking, with a huge amount [sic] of teachers only lasting a short number of years before they can't take it any longer. They have dropped many subjects and focus mainly on 'teaching to the test' and bumping up the scores in order to perform and achieve high scores because these will be shared with the public and parents will choose schools based on these test results (Q678OL).

Corresponding advice

The structure and approach needs to be looked at to reduce the 'pressure cooker' environment that drives some schools, leading to 'teaching to the test' and competition between teachers to achieve falsely (Q612OL).

We need to value and educate each child as a whole person i.e. all his/her strengths to be acknowledged and developed and needs to be met in a holistic manner. A person's ability in just two areas (i.e. maths and reading) shouldn't define him or her as a person – over-focusing on/publicising/analysing/comparing test results runs a huge risk of giving an incorrect and unhealthy message to children, their parents and society of what education is. Education should never be a factory process run by teachers forced to act like robotic clones delivering a rigid test-based curriculum – this would be completely counterproductive. (Q732OL).

We need to look at and learn from the mistakes made by other countries especially the UK (Q732OL). Follow Finland's example – they barely even give homework, and their children and teachers are happy, and the children are consistently learning and achieving great results without these pressures and 'teaching to the test' – they are able to engage in meaningful and beneficial learning (Q678OL).

While some teachers recognised the value of standardised testing, this was balanced with expressed concern that the scores achieved did not reflect accurately the ability of some pupils.

Indicative commentary

Standardised tests are invaluable in letting me know where my class is in relation to others in their age range across the wider community. I might think they're doing fantastically well whereupon the standardised test results are a reality check. No teacher should ever test their own class, unfortunately bias would prevail. The historic memories of 'Payment by results' should be enough to soften anyone's cough in that regard (Q316OL).

This method of testing is dated and unfair to the children as they can have an off day and be judged based on this ... (Q610OL). All too often test scores do not reflect the strengths of a child. The teacher is much better placed to assess how a child is doing than a once off 'fill in the blank' test (particularly in English). Parents love the tangible nature of a test score and become fixated on this, often to the detriment of real constructive learning (Q243OL).

Corresponding advice

Very difficult to give advice on what should be done ... I think it would be helpful if guidelines clarified exactly what one is allowed say during a test i.e. no clarification of concepts, etc. (Q316OL). I think teachers need clarification as to what is acceptable and not acceptable preparation for a test as there seems to be confusion (Q538OL). Teacher autonomy and professionalism must be respected ... We need to turn this trend around and refocus on what is really important in education (Q243OL).

Summary of Findings

8.1 Teachers' Use of Standardised Tests (Research Question 1)

Despite official policy requiring standardised testing at the end of second, fourth and sixth classes only, most teachers across all class levels (infants excepted) in this survey indicated that they used standardised tests of English reading and mathematics once a year during the summer term. 6% or less indicated that they tested during the autumn term or at both times of the school year. One in five respondents indicated that someone other than the class teacher administered standardised tests in their school (mainly the learning support teacher or the resource teacher). Of those, approximately two-thirds said the practice had been in place for five years or more and had been implemented to ensure that all testing guidelines were followed correctly. The most widely-used approach for communicating the outcomes of standardised tests in both reading (65%) and mathematics (77%) to parents/guardians was class-based STen scores on summer report cards. Just one in four indicated that it was common practice to explain the measurement error associated with standardised test scores when communicating the results.

In terms of individual use, most teachers indicated that they used standardised test results to identify pupils' strengths and weaknesses (92%), inform the preparation of IEPs (85%), group pupils within their classes (77%) and make general adjustments to their planning (74%). These practices were likely to occur once a year with up to a quarter of respondents indicating that they never use standardised tests for these purposes. Respondents were much more likely to discuss standardised test results with other teachers (91%) or with parents (90%) than with pupils (40%). A majority (60%) claimed that they never discussed results with their pupils. Large percentages of respondents reported that they used standardised test results at least once a year to evaluate pupil progress (87%), to inform the process of arriving at a grade for summer reports (81%) and to evaluate their own teaching effectiveness (70%).

The overwhelming majority of teachers indicated that in their schools standardised tests results were used to select pupils for learning support (98%) and for broad whole-school evaluation purposes (90%+). A high percentage (78%) also said school performance was compared to national norms. Fewer reported that their schools used test data to select pupils for gifted/talented programmes (57%) and for checking that teachers were emphasising skills requiring attention on the basis of past test results (52%). Approximately three out of every four respondents said that standardised test results were used at least once in the school year to generate discussion among staff about how to strengthen teaching and improve test scores.

With respect to different types of schools, additional analyses revealed that individuals working in DEIS schools were significantly more likely than those in non-DEIS schools to spend time teaching strategies for coping with test anxiety and using test results to adjust their planning and inform their IEPs. In addition, staff in DEIS schools were more likely than those in non-DEIS schools to engage in frequent progress monitoring and collaborative discussion on the basis of standardised test results, a finding that may be attributed in part to the fact that teachers in DEIS schools have more opportunities to engage in CPD than their non-DEIS counterparts.

8.2 Teachers' Perceptions About the Impact of Standardised Testing on Their Professional Practice (Research Question 2a)

Overall, 44% of respondents indicated that they spent either a few days or a week or more per year revising curriculum topics relevant to the standardised test. The same percentage said they devoted no time to this activity. Teachers were also roughly equally divided between those who said they spent up to half a day or more per year teaching standardised test-taking strategies or skills (47%) and those who said they did not do this (53%). Similar percentages were observed in relation to teaching strategies for coping with test anxiety – 43% said they spent up to half a day at least on this activity per year. While about one third of respondents maintained that they spent some time each year getting pupils to practise on item formats found in the standardised tests, the vast majority said they devoted no time to having their pupils practise on alternative reading/mathematics standardised tests or prior versions of the Irish tests.

Most teachers maintained that they were unaware of questionable test preparation and administration practices occurring in their own school. About one in four indicated that they were aware of what might be described as low-level 'teaching to the test' in their school, such as focusing teaching and pupils' attention on content that was on the standardised tests. 7% of respondents said they were aware that some pupils in their school were receiving grinds prior to standardised testing.

Also of interest were the percentages reporting knowledge about questionable practices during the administration of standardised tests. Teachers said that they were aware that, in their schools, pupils were given more time than allowed (17%), had questions rephrased for them (12%), had access to potentially helpful materials during testing (9%) or were given inappropriate support e.g. hints during testing (6%). Just over one in four (27%) respondents indicated that they were aware of some questionable test administration activities occurring in schools other than their own.

86% of teachers indicated that they felt pressure from within themselves to improve their pupils' standardised test scores. They also reported feeling either some (51%) or great pressure (20%) from parents. Around a third indicated that they felt at least some pressure from inspectors, their principals, or their teaching colleagues. One in four said they felt under pressure from the pupils themselves and from the media. Teachers working in DEIS schools were statistically significantly more likely to put themselves under great pressure or feel it from learning support teachers than were teachers in non-DEIS schools. However, teachers in DEIS schools did not feel the same pressure from parents.

8.3 Teachers' Perceptions About the Impact of Standardised Testing on Pupil Learning (Research Question 2b)

Most teachers (61%) noted that, over the preceding three years, standardised test scores had either improved or remained constant whilst just 1% indicated that scores had dis-improved. Another 17% indicated that progress was uneven, with some classes improving and some dis-improving. A statistically significantly larger percentage of teachers in DEIS schools than non-DEIS schools said their schools' scores had improved (42.5% v 31.7%). Factors mentioned as influences (either major or moderate) on their schools' test scores in the previous three years by most respondents included changes in teaching strategies (89%), the *Literacy and Numeracy Strategy* (81%), and changes in teacher effectiveness (80%). Other factors deemed to be relevant included changes in internal evaluation practices (63%), changes in textbooks (61%), changes in pupil demographics (48%) and alignment of curriculum with test content (43%). Smaller percentages endorsed the following as factors: a focus on test-taking skills (36%), familiarity with test content (27%), changes in test preparation practices (29%) and changes in administration practices (16%).

8.4 Teachers' Professional Development Needs (Research Question 3)

While about two-thirds of respondents indicated that they engaged in CPD focused on standardised testing for at least 1-5 hours during 'Croke Park hours', almost three quarters indicated that they had not engaged with the area during in-service or induction, with 56% reporting no input on the topic during their pre-service teacher education programmes. Resources chosen as very useful or useful for improving their understanding and use of standardised tests included the test manuals (93%) and in-school professional discourse (79%). Significantly, 84% of teachers indicated that there was a 'go-to' person on the staff of their school who was considered highly knowledgeable about standardised testing. While 62% said they found the National Council for Curriculum and Assessment (NCCA) Assessment Guidelines useful or very useful, almost 27% indicated that they did not know about them. The percentages not knowing about resources on the NCCA website (32%) and the PDST website (42%) were also relatively high. Responses regarding PDST courses, summer courses, DES circulars/website and inspectors' input were diverse with many teachers unaware of them or divided on the extent to which they found them useful.

Teachers expressed a very strong desire for CPD in the area of standardised testing. Priorities for over 80% of them were guidance on how to use results to make decisions about children with special educational needs, how they could be used to guide planning, teaching and learning and how to communicate the results to parents. Professional development on the more technical aspects of standardised testing such as the meaning of different standardised scores, validity and the application of the Standard Error of Measurement (SEM) was also considered important for at least 70% of respondents. The area of least interest to teachers was how standardised tests are constructed with 32% indicating that CPD in this area was "unimportant" to them. Some variation in terms of CPD needs was observed in the data for teachers with different levels of experience.

8.5 Teachers' Beliefs and Attitudes (Research Question 4)

Discussion of the data on teachers' beliefs about and attitudes to standardised tests is organised around four themes: validity, communication/reporting, positive effects and negative effects.

With respect to the validity of outcomes from standardised tests, the majority of teachers agreed that some pupils in their class were not capable of taking standardised tests due to learning difficulties (76%) and that performance differences in standardised tests reflected differences in the characteristics of pupils as opposed to differences in teacher effectiveness (70%). The majority also held the belief that standardised test scores were not an accurate measure of EAL pupils' achievements (68%). While 42% of respondents agreed that standardised test scores were an accurate reflection of their pupils' mastery of basic skills in reading and mathematics, 35% disagreed and a further 23% were unsure. The lack of consensus was also evident in responses to statements focusing specifically on whether scores on standardised tests accurately reflected different levels of achievement in reading and mathematics. In addition, while about half the teachers felt that there was a difference between what should be taught and what the standardised tests emphasised, others were either unsure (26%) or took the opposite point of view (21%).

On the issue of teachers' beliefs and attitudes about communicating and reporting standardised testing outcomes, 65% agreed that standardised test scores should be included on summer report cards, with 22% disagreeing. A further 13% were undecided. A majority disagreed that parents had a good understanding of how to interpret standardised test scores (68%) and that standardised tests results helped prospective parents evaluate a school (72%). However, teachers held divided opinions on the use of standardised testing for school accountability purposes (51% agreeing and 26% disagreeing) and for educational policy making purposes (37% agreeing and 35% disagreeing). In both instances, approximately one in four of the respondents expressed uncertainty.

Regarding the potential value of standardised tests, the spread of opinion was also notable. While about 40% of respondents agreed that standardised tests had focused their attention on both basic and higher-order skills in reading and mathematics, an equal percentage took the opposite view. Divided opinion was also evident with respect to teachers' beliefs on whether or not standardised testing: (i) had helped them clarify which learning goals were important, (ii) was an appropriate way of focusing attention on the impact of teaching on pupil achievement and (iii) had improved the quality of teaching and learning in their schools. While approximately one in five agreed that standardised tests challenged weaker teachers to do a better job and had led to improvements in their own teaching, more than half disagreed in both cases. The statement 'Standardised testing improves my pupils' learning in reading and mathematics' had just 14% of teachers in agreement, with 58% disagreeing and a further 28% undecided.

There was greater consistency in responses to statements focused on the more potentially negative effects of standardised testing. Three out of every four teachers agreed that some pupils in their classes were extremely anxious about taking standardised tests and about half felt that the parents took the results of standardised tests too seriously. Almost three quarters (74%) disagreed that their school was more interested in increasing standardised test scores than in improving overall pupil learning. The one issue that divided opinion in relation to the possible negative consequences of standardised testing was whether or not it encourages 'teaching to the test': 26% believed this to be the case in their schools with 52% disagreeing and a further 22% undecided.

Once again, some differences were found to exist between the responses of teachers working in different contexts. For example, teachers in DEIS schools were more likely to agree that some of their pupils were not capable of taking standardised tests and more likely to disagree that standardised tests accurately reflected their pupils' mastery of basic skills than their counterparts in non-DEIS schools. Many teachers elaborated on these issues when responding to the question asking what advice they would give to policy makers.

8.6 Teachers' Commentary and Advice Regarding Standardised Testing (Research Question 5)

Thematic analysis resulted in teachers' comments and advice being organised around eight themes presented here in alphabetical order:

Theme - Changes to the Tests: Teachers repeatedly called for standardised tests to be revised, replaced and/or changed and for review of this kind to occur regularly. Regarding test layout and content, teachers offered a range of suggestions for change, some of which related specifically to the reading or mathematics test, others which were of a general nature, requesting that tests be more child-friendly and for sections within tests where pupils could record how they approached problems, in mathematics, for example. Concerns and recommendations regarding test administration were broad-ranging, with some teachers appealing for more flexibility regarding test administration protocols while other teachers suggested that e-tests should be considered. In some instances, the call for text revisions was viewed as a way to address inflated scores and 'teaching to the test'. The use of multiple forms to safeguard the reliability of scores was raised as was the value of administering the tests in autumn so as to inform subsequent teaching and decouple scores from judgements regarding individual teachers' performance. The need to develop alternative tests and arrangements for pupils with SEN as well as the need to educate teachers in the development and use of complementary diagnostic assessments, in concert with the work of NEPS were also mentioned. There were calls for greater alignment between the tests and curricula with some teachers highlighting the challenge of completing the curriculum in time for standardised testing during the summer term.

Theme – DEIS-Specific Issues: Many teachers' comments and recommendations signalled some frustration with the use of standardised tests in DEIS settings for a variety of reasons. Although addressed comprehensively in the *Education Act* (Government of Ireland, 1998, Sec. 53), the potential impact of league tables was raised also with the remark that standardised test scores highlight the disproportionate under-performance of students in deprived areas. Some teachers questioned the practice of comparing the standardised test results of students attending DEIS schools with those in more advantaged settings. The possibility of comparing 'like with like' was raised to facilitate intra-DEIS school scores comparison. Others wondered if alternative assessments specifically geared towards DEIS schools should be devised and how the challenges facing Gaelscoileanna with DEIS status might be addressed. Not all respondents, however, wanted special treatment for students attending DEIS schools.

Theme – EAL and the Language of the Tests: Specific concerns were raised regarding the appropriateness of current standardised tests for EAL pupils. In addition to the reiterated calls for test revision and updating of the tests, there was consensus that pupils for whom English is not their mother tongue should be considered when standardised assessments are being designed, normed, administered and marked. Some advice signalled that teachers valued standardised testing for these children, albeit they recommend revisions to content and presentation in light of changing demographics and evolving needs. Other comments were more critical, with teachers highlighting the distinct disadvantage EAL pupils face when taking standardised tests and the distorting impact this can have on how these pupils perform.

Standardised mathematics tests received specific mention with teachers opining that they present particular problems for EAL pupils. Differences in 'social capital' of schools and the disproportionate numbers of recent immigrants and EAL students in some schools were also raised. There were calls for more resources, the reinstatement of EAL teachers and exemptions from testing, if required, something that is permitted if a pupil has less than one-year instruction in the language of the test. There were various recommended changes, including differentiated assessments, rewording within tests, alternative administration protocols and some kind of 'consideration when evaluating national results' of the achievements of pupils with EAL.

Theme – Professional Development: Despite quantitative data indicating teachers' strong desire for professional development, relatively few comments about the issue were contained in the qualitative data. Where calls for CPD were made they included, for example, requests for support for teachers to develop their understanding of how to administer and mark standardised tests, guidelines and training for teachers to interpret and report appropriately and, indeed, on how to prepare pupils appropriately for the tests. Further, teachers identified the need for enhanced professional development in summative assessment that would commence at undergraduate level and span teaching careers. In the context of CPD focused on standardised testing, some teachers expressed a concern regarding what they perceived as the diminution of teacher judgment and professionalism. There were specific calls from teachers for support regarding how to guide pupils appropriately to take the tests so that the results would reflect the pupils' knowledge and, in turn, aid them in using the data to inform their teaching subsequently.

Theme – SEN and the Allocation of Resources: The volume and vehemence of commentary vis-à-vis the proposed use of the standardised test scores by the DES to inform resource allocation to schools suggest strongly that teachers are both aggrieved and concerned. Despite the fact that in the Circular 0013 (DES, 2017a) there are clear guidelines in relation to exemptions from standardised testing and how trends in standardised test scores should be mapped on a three-year cycle, teachers raised concerns about the decisions that have to be taken at local school level regarding standardised testing and pupils with SEN. The timing of this study in May 2017 just prior to the introduction of a new allocation model in September 2017 is an important contextual issue to consider here insofar as teachers may not have been fully au fait with the contents of Circular 0013 (DES, 2017a). The potentially adverse impact on vulnerable pupils of reducing resources as a result of reported improvements in their standardised scores was raised by many teachers, some of whom argued that this equated to 'penalising' hard work that resulted in positive outcomes. Further, considering their concerns that pupils with SEN could regress in the absence of ongoing support, teachers pointed to the impact of changing resource allocations on established teaching practices in schools, such as team-teaching and small group withdrawals. Some teachers were critical of the negative impact of standardised tests on pupils with SEN, reiterating the need for alternative and/or differentiated assessments, and flexible test administration practices. Given the range, complexity, severity and, in cases, comorbidity of SEN, perhaps this recommendation signals an overarching sense that this aspect of standardised testing requires focused attention in the immediate term.

Theme – Standardised Test Results: Teachers' opinions were very divided regarding the use and sharing of standardised test results. While concern was expressed by some about parents' lack of understanding of standardised testing in general and test scores in particular, others indicated there were times when it was appropriate to share results with parents. Concern was repeatedly expressed regarding what teachers perceived as parents' lack of understanding of apparent dis-improvements in STen scores. It was evident in the commentary that some teachers associate pupils' performance on standardised tests and parent expectation regarding test results as indicators of professional competence. Teachers were very exercised in relation to STen scores – their limitations, how they are

interpreted/misinterpreted and used for comparison purposes and the fact that pupils have access to them (usually via their parents). However, there was ready acknowledgement from some respondents that parents need greater access to information regarding testing and guidance on how results should be interpreted. Teachers called for specific kinds of information to be made available although detailed information of this kind is available currently on the NCCA website and in the standardised test manuals.

Theme – Stress and Pressure on Pupils and Teachers: Many teachers spoke about the stress, anxiety and pressure caused in one way or another by standardised tests. Some pointed to differences in children's learning styles, their observations of pupils' performance in class and how these may relate to test-taking and performance. Others focused on issues relating to labelling and categorisation and how these impact on pupils, on teachers and on parents, alike. The practice of 'teaching to the test' was raised, linked, in this case to teachers' concerns that pupil performance on standardised tests is a crude and incomplete reflection of learning, particularly when the curriculum has not been 'covered' comprehensively in advance of testing. Teachers reflected on the potential the long-term negative consequences of an over-emphasis on standardised tests, voicing specific concern about the holistic development of the child, the adverse impact of media and the use of test scores as a barometer of success in school.

Theme – Teaching to the Test: It was apparent in the data that some teachers are either aware of colleagues within their own schools who 'teach to the test' and/or know of other schools in which the practice occurs. Teachers identified a range of issues that, in their opinion, encourage this practice including pressure felt by teachers themselves and parent and/or pupil expectations. Reference was made to 'anecdotal' evidence of 'teaching to the test' - 'subconsciously' or 'inadvertently' - due to teachers' over-familiarity with the standardised tests currently in use. In turn, teachers expressed concern about attendant 'grade inflation', narrowing of the curriculum and student labelling. Advice offered included changing the content of tests routinely (which raises the issue of computer-based testing) and/or use of a wider range of standardised assessments. Teachers highlighted the different ways in which schools organised standardised testing and suggested that the seriousness with which schools view these tests influences both how and when tests are scheduled and administered. Concern was expressed too regarding the competition that standardised tests can engender in pupils and parents. The possibility that league tables would be introduced in Ireland was also raised (despite Section 53 of the Education Act, [Government of Ireland, 1998] prohibiting this). While some teachers recognised the value of standardised testing, this was balanced with expressed concern that the scores achieved did not reflect accurately the ability of some pupils.

Conclusions and Policy Recommendations

9.1 The Role of Standardised Tests in Primary Education

One of the notable findings from the quantitative data in this survey was the diversity of opinion expressed about different aspects of standardised testing – this sample of teachers were neither wholly supportive, nor wholly opposed to it. Some felt standardised tests were a valid way of measuring achievement in reading and mathematics, helped to identify important learning goals, were appropriate for all pupils, focused attention on the impact of teaching on pupil achievement and improved the quality of teaching and learning in schools. Others expressed opposing views. Some felt that questionable test preparation/administration practices as well as undue anxiety and pressure to perform were negative consequences of standardised testing, but others did not. Many agreed that standardised test results should be reported to parents, but others expressed disagreement or uncertainty. Little consensus was also evident in the data pertaining to the use of standardised tests for school accountability and policy making purposes.

Diversity of opinion about standardised testing was also evident in the qualitative data but, in this case, it had more to do with the range of issues highlighted by teachers as problematic. Teachers expressed very strong views on the form and content of current tests as well as on how and when they were administered, and the results communicated. The related issues of 'teaching to the test' and pressure to perform were mentioned on multiple occasions. The appropriateness and value of standardised testing in DEIS contexts and for decision-making about pupils with special needs or EAL was also called into question. The timing of this study in May 2017, just prior to the introduction of a new allocation model in September 2017 (DES, 2017a) may have affected teachers' perceptions about the role of standardised testing in this context. Many highlighted the need for professional development across a range of topics pertinent to standardised testing.

In essence, the data from this study could be exploited in different ways to support arguments for or against the use of standardised tests in Irish primary schools. While that would be unfortunate, a case must be made that standardised tests provide value over and above other assessments in allowing the benchmarking of every individual pupil's performance against national norms. Such information is important in broadening the focus of decision-making within classrooms and across schools and many teachers in this study acknowledged the value of standardised tests. In addition, when achievement data from sample-based national assessments are not fine-grained enough for some policy decisions, aggregated data from standardised tests across a census of schools can be useful. However, experiences with standardised testing all over the world show that there is a very real danger of undermining the potential benefits of standardised tests when the stakes associated with them are raised. There is a wealth of evidence and argument in the literature highlighting the difficulties that arise when attempting to use the same tests for formative teaching and learning purposes and for

monitoring and evaluating standards across schools (e.g. Shiel, Kellaghan and Moran, 2010; Carless, 2011). The system of standardised testing that had been in place in Irish primary schools up to 2012 has been replaced by one with mandatory testing and reporting requirements at three points during the primary years. While the stakes associated with the new system can still be considered low when compared to those observed in other jurisdictions (and all potentially high stakes uses of test data have been resisted by Irish policy makers), mandated testing in Irish primary schools has resulted in far greater attention being paid to the outcomes of standardised tests by teachers, principals, managers, parents, policy makers and, as the data in this survey suggest, pupils. Indeed, a number of teachers in this survey believe that some of the negative consequences associated with raised stakes, such as low-level teaching-to-the-test and a narrowing of children's experiences of the curriculum, are in evidence already. If standardised testing is set to continue in Irish primary schools, then the recommendation here is that a set of principles should always underpin its use and a number of initiatives should be put in place to ensure that problems associated with it in other jurisdictions do not escalate in the Irish context:

- It is very important that in all policy documents and programmes of professional development, standardised testing is conceptualised as an integral part of the teaching and learning process and that the outcomes of standardised tests can be used by various stakeholders (pupils, teachers, policy makers and others) to enhance learning.
- 2. In terms of the balance between summative and formative assessment, policy makers (the DES, government ministers) should make it clear that while standardised testing is important, it is not necessarily more important than other types of assessments that teachers and their pupils carry out in the course of everyday classroom activity.
- 3. It must be emphasised in policy documents that standardised tests in English reading and mathematics measure elements of literacy and numeracy but do not capture the full range of what achievement in both means.⁴²
- 4. Given the concerns expressed in this study about the emphasis being placed on standardised tests, the principle that single assessments are a poor basis for making important educational decisions must be stated or reiterated and highlighted in all official policy documents. Allied to that should be statements advocating that the results of standardised assessments should never be used in isolation but should always be considered in light of other relevant assessments such as teacher judgements and information on pupil progress and achievement gathered over time.
- 5. High quality norm-referenced standardised tests are constructed specifically to measure achievement along a continuum from very low to very high in a way that seeks to ensure that, for example, 50% of test takers will always score below the mean. They were never designed to be measures of teacher effectiveness. This principle must be stated, reiterated and highlighted whenever standardised testing is a focus for teachers, parents and policy makers.

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⁴² In the *Literacy and Numeracy Strategy* document, literacy is defined as "the capacity to read, understand and critically appreciate various forms of communication including spoken language, printed text, broadcast media and digital media … speaking and listening, as well as communication using not only traditional writing and print but also digital media." Similarly, numeracy is "not limited to the ability to use numbers to add, subtract, multiply and divide" but also "encompasses the ability to use mathematical understandings and skills to solve problems and meet the demands of day-to-day living in complex social settings" (DES, 2011a, p.8).

There is evidence in this survey that due to policy changes in how standardised tests results are being used and reported, these five principles are in danger of being lost. The value to teachers and learners of the different assessment approaches across the continuum of types needs to be reiterated. The fact that all of these issues are being raised by the NCCA during its consultations with key educational stakeholders regarding the redevelopment of the primary school curriculum is reassuring. In addition, the following three initiatives should be actioned as soon as possible:

- 1. Findings from the survey support the argument that rigorous validity studies of all standardised tests in use in Irish primary schools should be commissioned by the DES and carried out to ensure that the tests remain content and construct-relevant and that they continue to be used in a way that measures real achievement and supports sound decision-making.
- 2. Rigorous validity studies examining the intended and unintended consequences⁴³ of standardised testing on teaching, learning and national policy should be commissioned by the DES and undertaken on a cyclical basis (e.g. every five years) to ensure that any of the potentially negative effects highlighted in this survey are identified and addressed early on.
- 3. The process of constructing standardised tests and the interpretation of norm scores is not well understood by many teachers and this must be communicated in a respectful but honest way. The lack of professional development in the area must also be acknowledged and a plan put in place to enhance teachers' understanding of standardised testing in the context of addressing their assessment literacy more generally.

9.2 The Timing of Standardised Testing

In line with the obligatory requirement to test in May/June in second, fourth and sixth classes as set out in Circular 0056 (DES, 2011b) and subsequently, most respondents reported that standardised testing was undertaken in their classrooms during the summer term. As argued by Douglas et al. (2012) and Hart et al. (2015), administration timing is important when considering the instructional uses of standardised test outcomes. This survey has highlighted several issues arising from administering the tests late in the Irish primary school year. It seems that in many instances test scores were included on summer report cards, often without explanation or without any reference to measurement error. Moreover, many teachers did not get an opportunity to discuss the detail of test results with parents or guardians during meetings. This could explain why so many felt that parents did not understand the results or took them too seriously. In addition, many teachers did not review test scores (or reviewed them just once) with a view to addressing strengths and areas for improvement in their pupils' learning in the immediate term. End of year testing also tends to focus attention on the summative reporting and policy making aspects of assessment, and, consequently, leads to the kind of pressure/anxiety to perform which teachers in this survey said they or their pupils felt. This in turn can lead to questionable test preparation and administration practices such as 'teaching to the test' or pupils getting grinds – both of which were reported to be a reality in Irish primary schools albeit at relatively low incidence levels.

 $^{^{\}rm 43}$ Also described as consequential validity studies in the research literature.

It would be good if schools had a choice in terms of when they could administer standardised tests (this choice was available to schools when mandatory testing was introduced in 2007)⁴⁴. Assuming the availability of autumn norms, testing in October, once pupils had settled into the new school year,⁴⁵ would give teachers and schools an opportunity to communicate test outcomes at parent/teacher meetings before the end of the term. Aggregate data from the school could be returned to the DES by the end of the year without compromising the policy value of the data for longer term planning purposes. Testing at this time of the year might also decrease the pressure/anxiety felt by teachers and pupils while increasing the possibility of test data being used for formative purposes throughout the school year. Data from this survey suggest that some teachers (circa 4% of the sample) undertake standardised testing in the autumn and it would be of value to undertake a pilot study to review the experiences of such teachers in the near future.

A weakness in this proposal is that autumn norms may not be available for the revised tests in the short term.⁴⁶ If that is the case, then a system of summer testing could continue for the moment but reporting as described above could be undertaken sometime early in the autumn term. It is also acknowledged that some teachers may have to report on the results of a previous teacher's class.

Another issue with respect to timing of standardised testing is the number of points throughout the primary school cycle at which it should be mandated. Currently, testing is mandatory in second, fourth and sixth class, but the DES (2016a) has considered changing this to two points – sixth plus either fourth or second – with a view to avoiding "assessment fatigue" (p.49). The DES also highlights (but does not cite) research that addresses the appropriateness of administering standardised tests to younger pupils and, in response, questions whether it is correct to make the administration of standardised tests mandatory in second class. While the issue of how often standardised tests should be administered in primary schools was not addressed in this survey, the data show that most teachers administer them in all classes from first to sixth, suggesting that reducing the number of mandatory time points from three to two is unlikely to alleviate any such 'fatigue' that may exist. Ultimately, the issue may have more to do with how the data from the tests are used to support teaching and learning (see, section 9.6) than with the over-assessment of pupils. That said, given that reporting requirements are key in determining perceptions about the stakes associated with tests, a change in mandatory testing from three to two points during the primary school years would facilitate a concomitant reduction in the frequency of mandated reporting.

9.3 Written Communication of Standardised Test Results

Once teachers have had an opportunity to discuss standardised test results with parents and crucially, contextualise the results in terms of other assessment information (e.g. teacher everyday observations, pupil self-assessments), a formal written record should be prepared. In encouraging schools to consider three possibilities here, the importance of the work that goes into building good school/parent lines of communication more generally cannot be over-emphasised. A written record could be given to parents at the end of the parent/teacher meeting, a letter could be posted to them shortly afterwards or the results could be included on the summer report card at the end of the year (the fact that

⁴⁴ Up to 2012 schools could test either at the end of first or beginning of second and at end of fourth or beginning of fifth.

⁴⁵ The phenomenon of 'summer learning loss' (i.e. the loss of academic skills and knowledge during the period schools are closed for summer holidays) may need to be considered also.

⁴⁶ Developing autumn norms also raises a content validity question in terms of the balance of test items based on curricula for adjacent class levels e.g. should a test administered in October to fourth class pupils be based on material covered in third class, fourth class, or some combination of both?

two-thirds of teachers in this survey were supportive of including standardised test scores on summer reporting of test scores despite many expressing strong reservations about sharing this information with parents is acknowledged). In all cases test scores should not be communicated independently of a narrative text explaining them as it cannot be assumed that parents, like many teachers in this survey, will seek out guidance for interpreting them in, for example, NCCA support documentation. An appropriate narrative text describing pupil performance would help to inform parents about the imprecise nature of standardised test scores and highlight the importance of interpreting performance in light of other assessments. The prerequisite that teachers be afforded dedicated time for these activities is fully acknowledged.

Schools should have the option of reporting any combination of norm scores, but raw scores should never be reported. Ideally schools will have access to a test-wide scale score⁴⁷ which allows progress from year to year to be recorded. STen scores and percentile ranks have the advantage of being more easily understood by parents/guardians – the 1-10 STen scale is particularly intuitive. However, small changes in raw scores can lead to perceptions that a change in these scores is significant. For example, a raw score of 23 on the *DPRT* for first class converts to a STen of three (well below average), while a raw score of 24 equates to a STen of four (low average). Standard Scores (55-145 scale) are less likely than STen scores and percentile ranks to be over-interpreted and are recommended here for reporting to parents. STen scores are useful in capturing the aggregated data needed for reporting to BOMs and the DES. In terms of reading, changes to the school starting age as a result of the extension to the ECCE scheme means that greater age differences within classes are likely in the future and many teachers in this survey indicated their preference for age-based rather than grade-based scores for some pupils when such an option was available to them. In all cases a comment on whether the test scores match other classroom-based assessments and measurement error should feature in the narrative on pupil reports.

It should be noted that there are inconsistencies across testing manuals, NCCA guidelines and other support materials in the guidance given for how norm scores should be interpreted. For example, a standard score of 115 is listed as equating to a STen of seven in one test manual and a STen of eight in another.⁴⁸ Similarly a STen of four is interpreted variously as average, low average and below average.⁴⁹ Some standardised formula of words would make it easier for schools to be consistent in terms of reporting. The following two exemplars are ones that could be used or adapted for inclusion on report cards and/or letters to parents. A visual plot with the Standard Score, the 95% confidence band and the average score range would be good to add also.⁵⁰ The text in bold font will differ depending on the test used and pupil performance but everything else could be included in computer generated pro forma templates. More elaborate reports might include discussion of sub-domains e.g. for reading; vocabulary, comprehension.

⁴⁷ A test-wide scale is available for the *Drumcondra Primary Mathematics test*, for example (see ERC, 2008).

⁴⁸ See, *MICRA-T Level 1 test manual*, Table 5.5, p.28, (Wall and Burke, 2004) and the *DPRT Level 1 test manual*, Table B2, p.64, (ERC, 2007).

⁴⁹ Compare MICRA-T, Test Manual (Level 1, p.16); DPRT Test Manual (Level 1, p.25); Share and McCarthy (2011), p.46.

⁵⁰ See, for example, how scores on the Cognitive Ability Test are presented: http://bit.ly/CognitiveAbilityTest

Emily took the Drumcondra Primary Reading Test on 25 May and achieved a Standard Score of 105. Allowing for the imprecision in all tests scores, we can say that in all likelihood her true score lies in the range 99-108. Her performance⁵¹ on the day can be described as in the average range compared to the fourth⁵² class pupils nationally who took the test when it was standardised in 2018. This performance is consistent with my own day-to-day assessments of her reading. Her test-wide scale score of 545 was 46 points higher than the last year and is an indication of the progress she has made over the past year.

Emily took the Drumcondra Primary Reading Test on 25 May and achieved a percentile rank of 65. This means that she did as well or better than 65 percent of the pupils nationally who were in fourth class when the test was standardised in 2018. On a scale of one to ten (known as the STen scale), this equates to a 7 which can be considered high average⁵³ performance on this test. It is important to point out that, due to measurement error, her performance on another day or on a different reading test might have been slightly different. Her performance is consistent with my own day-to-day assessments of her reading. Her test-wide scale score of 545 was 46 points higher than the last time she was tested and is an indication of the progress she has made over the past year.

9.4 Updating of Standardised Tests

Based on responses in this survey it is clear that no one standardised test series predominates in Irish primary schools. A problem associated with combining aggregated data for different tests for policy decision-making purposes and highlighted by the DES (2016a) is that while normed empirically, the outcomes from the Irish tests in either English reading or mathematics cannot be assumed to be equivalent as they were not designed for this purpose. On the other hand, the fact that schools have a choice in selecting the test series to use avoids the possibility of any one test being used or seen as a pseudo'national' test. The merits or otherwise of designing a single test in each area for use in primary schools need to be informed by research and debated by the key stakeholders as soon as possible. In the event that a single test is not used, then an equating study, linking pupil performance across the revised standardised tests for English reading for example, would allow the DES to combine better results for making policy decisions. In general, Irish normed standardised tests of reading and mathematics achievement should be used in preference to those developed elsewhere as they are more likely to reflect what Irish primary pupils have had an opportunity to learn.

It is good to note that, at the time of writing, work to re-standardise and modernise the Irish tests of English reading and mathematics is underway or is being planned for the near future. However, this also means that by the 2019/20 school year between 10 and 15 years will have passed since tests in use in 2017/18 had been standardised. That gap is too long and some of the difficulties that can arise as a result have been highlighted in this survey (e.g. familiarity with test content, lack of alignment with curriculum, outdated content/images, etc.) and by the DES (2016a). In line with international

⁵¹ The term 'performance' must always be used to emphasise the once-off nature of testing on a given day e.g. high average performance. A phrase such as: 'Emily is performing at the sixty-fifth percentile', should never be used as it draws a conclusion a single test may not support.

⁵² For age-based norms, the text should read: *compared to pupils nationally who were the same age when they took the test during its standardisation in 2020.*

 $^{^{53}}$ STens 1-3, 4, 5/6, 7, 8-10 = below average, low average, average, high average, above average, respectively.

good practice,⁵⁴ Irish standardised tests should be re-normed and updated regularly if they are to continue playing a role in teaching and learning and in educational policy making. Irish test developers will point to the fact that almost two decades have gone by since the introduction of the *1999 Primary Curriculum* and in addition to the challenge of updating tests, is the uncertainty regarding the introduction of new programmes of instruction (e.g. the future *Primary Mathematics Curriculum*).⁵⁵ Given the ever-increasing rate of change in Irish society as a whole and in the primary school context in particular, a plan must be put in place for more frequent updating of standardised tests to ensure that they continue to reflect ongoing changes in the school population and curricula. The DES (2016a) recommends every three years but every five to seven years may be more realistic given the scale of the work involved in standardising achievement tests. In the future when appropriate ICT infrastructure is in place in Irish primary schools, on-line Computer Adaptive Testing (CAT) would make it feasible for test items to be trialled on a continual basis thus making once-off standardisation studies redundant. Initiatives such as this would also safeguard against the possibility of hard copy tests being copied and circulated beyond school environments – a test security issue raised by some respondents in this study.

9.5 Standardised Testing in DEIS Schools and for Pupils with SEN/EAL

The appropriateness of current standardised tests generally and, more specifically, in DEIS schools and for many pupils with special educational needs and English as an additional language was called into question by large numbers of teachers in this study. This reflects concerns expressed in the research literature on the topic (e.g. Cumming and Maxwell, 2014; Lysaght, 2012). Four interlinked arguments in particular stand out as being important for policy makers to consider: (i) standardised tests should not be used in DEIS/SEN/EAL contexts, (ii) teachers should be allowed greater flexibility in how the tests are administered, (iii) new/alternative standardised tests should be developed/used specifically for these populations and (iv) standardised test results should not be used for the purpose of Special Education Teaching allocation as outlined in Circular 0013 (DES, 2017). It should be noted that with respect to the allocation issue, it was not always clear from the data if teachers were fully aware that approximately 72% of the total allocation for primary schools will be based on variables other than standardised test results.⁵⁶ Some further explanation may be appropriate with a view to alleviating some of the anxiety and confusion expressed about the use of standardised tests for this purpose. The timing of this study in May 2017 before teachers had an opportunity to familiarise themselves with the new allocation model being rolled out in September 2017 must also be considered as a factor when interpreting the data here.

⁵⁴ The *Standards for Educational and Psychological Testing* (AERA, APA and NCME, 2014) state that "test publishers should ensure that up-to-date norms are readily available or provide evidence that older norms are still appropriate" (p.104). While recommendations for re-norming vary from five years (Bracey, 2000) to eight years (Cannell,1988), the standards make it clear that re-norming is essential if significant variations in the normed population and the target population occur over time e.g. due to immigration. Shiel (personal communication, Dec 7, 2018) also notes that "in the Irish context (based on PIRLs and national assessments), standards have increased in recent years, and this is not factored into norms developed a decade ago."

⁵⁵ The model of cyclical, systematic curriculum review proposed in the NCCA's new Strategic Plan 2019/21 could alleviate this difficulty (see, www.ncca.ie).

⁵⁶ In allocations for 2019, the proportion of special education resources based on standardised test results was 27.85%.

From a system perspective, the move from a General Allocation Model (GAM) based on the number of mainstream teachers in a school to one based on the profiled needs of each individual school depends, in part, on having valid comparative data on achievement across all schools that, in theory at least, is made possible by norm-referenced standardised tests. Being flexible about the conditions under which the norms are developed will undermine the validity of decisions that can be made from the results. A proposal entitled, Schools Like Ours Standardised Testing, whereby data from standardised tests would be used by individual schools to benchmark their performance against other schools with similar characteristics (e.g. DEIS status), has been discussed in the past (see, DES, 2010) but deemed to be problematic in practice (see, ERC, 2011). Designing standardised tests and norming them specifically for DEIS schools or on SEN/EAL populations as requested by some teachers in this study could not, by definition, be used to provide national comparative data across all schools. In addition, the use of assessments designed by teachers would not be reliable across schools and would not necessarily be more inclusive as others have pointed out (e.g. Murchan and Shiel, 2017). However, tests allowing criterion-referenced interpretations should be considered – a recommendation that also has the support of the DES (see, DES, 2016a, p.50). If such tests cannot be developed in the short term, perhaps a system of facilitating criterion-referenced interpretations could be incorporated into the revised standardised tests. Reporting of individual pupil progress to parents could be done in this way with the percentages of pupils meeting benchmarked standards reported to BOMs and the DES. The system could be designed in a way that would go some way to addressing many of the concerns expressed by teachers in the study. For example, it would help to identify and facilitate the measurement of appropriate learning goals, meet the differentiated needs of the pupils taking the tests (flexibility in administration could be built into the administration for criterion-referenced interpretations), and be more reflective of teaching and learning practices in inclusive and disadvantaged settings. Criterion-referencing would also help to provide evidence of 'value added' in terms of pupil achievement which, in turn, would be more likely to affirm teacher effort and professionalism. Again, the challenges involved in developing and implementing these recommendations are fully acknowledged.

9.6 Using Standardised Test Results

It was good to see data from the survey indicating that a large majority of teachers use the outcomes of standardised tests for various formative purposes at least once during the school year. However, the data also suggest that more attention needs to be paid to how the outcomes of standardised testing can be used more frequently for teaching and learning purposes within individual classrooms and for decision and policy making on a whole-school basis – a finding that resonates with other national data on the use of Assessment for Learning (AfL) in Irish primary classrooms (Lysaght and O'Leary, 2013; 2017). While some very good practices were reported in up to a quarter of schools, the findings indicate the data are hardly used at all in another quarter of schools and under-utilised in the remainder. Issues with respect to higher-order thinking skills, the selection for gifted and talented programmes and involving pupils in discussions about their performance (pupil voice) need to be addressed. Clear and detailed guidance on how standardised test results can be used for a list of specific teaching and learning purposes needs to be made available to schools as a matter of urgency and included as a core element when planning CPD. Above all, there is a need for a more joined-up approach to supports for schools in using standardised tests for various purposes. CARPE, in association with individuals and bodies with expertise in assessment (e.g. the test developers, the NCCA and PDST) could lead the work in preparing resources such as podcasts or webinars.

9.7 Professional Development for Assessment (Including Standardised Testing)

Teachers in the survey expressed a strong desire to engage in professional development focused on standardised testing. This is unsurprising given their relatively low levels of prior exposure to the topic through pre-service/induction/in-service courses or through accessing available supports and resources. Addressing this issue is key to ensuring that the value of standardised testing to schools and the system is maximized (see also, DES, 2016a, p.50).

A programme of professional development focused on improving teachers' assessment literacy more generally and with standardised testing as one component should be devised and made accessible to all teachers (including pre-service teachers). This could be achieved using web-based video technology in addition to the use of Murchan and Shiel's (2017) book and other supporting digital/hard copy notes for reference. The standardised testing element is likely to need the equivalent of approximately five or six 'Croke Park' type hours over one or two academic years. As requested by teachers in this survey, the content of the standardised testing element should be focused on three areas: (i) how standardised tests are constructed (to address issues pertaining to validity, the meaning of norm scores and measurement error), (ii) how standardised test scores should be interpreted and communicated and (iii) how the results of standardised tests can be used in addition to other types of assessment to make valid decisions about teaching, learning and achievement. CARPE could lead this work in consultation with the INTO, PDST, DES, teacher educators, test developers and other key stakeholders.

A very high proportion of respondents in this survey indicated that there was a 'go-to' person on the staff whom teachers consulted with on matters related to standardised testing. It is strongly recommended that, where possible, this role be incorporated within a post of responsibility for assessment in all schools where posts exist or be created in schools where they do not. However, having expertise invested in individual teachers, while useful as a support in schools, is insufficient given what is known about the limitations of the 'cascade' model of professional development (e.g. Karalis, 2016). Teachers should be facilitated to engage in a programme of school-based CPD on standardised testing over a suitable period of time (e.g. two/three years). The INTO and the DES have an important role to play in ensuring that such a programme is developed and supported in the context of a plan for CPD in assessment more generally. The content of assessment modules in pre-service teacher education programmes should also be examined to ensure that sufficient time is devoted to developing an understanding of the role of standardised tests in primary education.

⁵⁷ The 'cascade' model of professional development refers to the transfer of information and skills to learners by their more knowledgeable peers.

10

Epilogue

This study, led by CARPE and the INTO, is the first large-scale investigation of Irish primary teachers' practices, beliefs/attitudes, policy advice and professional development needs with respect to standardised testing in English reading and mathematics. The study findings are relevant insofar as they shed light on the diversity of opinions and concerns currently held by primary teachers and timely given the twelve years that have passed since the introduction of mandatory testing in 2007. Data from the study provide a May 2017 snapshot indicating that standardised testing has an increased status in the primary system. The findings give educators and policy makers much food for thought and, potentially, a basis for informing decision-making, planning and action. The study findings also provide a baseline for examining changes in teachers' responses to standardised testing in the future. Moreover, the data set has a value beyond the top-level analysis presented in this report. More nuanced interpretations are likely to be drawn when analyses using categorical data are conducted to determine how school context, teaching role and experience affect responses to the survey questions while the data on teachers' advice for policy makers, which run to over 60,000 words, need to be explored further. This work will need to be undertaken in the months and years ahead in addition to the validity studies described earlier. All will be important in determining the extent to which insights gained from this study of standardised testing can be used by policy makers and others for the benefit of Irish primary school pupils and their teachers.



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Appendix 1

Survey Questionnaire and Frequency Data (Percentages)





Standardised Testing in Reading and Mathematics Survey of Irish Primary Teachers May 2017

Dear Colleague,

As you know, there's a lot happening in assessment in Ireland and the question of how standardised tests should be used to support teaching, learning and accountability in primary schools is an extremely important one right now. Your voice is critical in influencing educational policy around this issue. We, in the Centre for Assessment Research, Policy and Practice (CARPE) at Dublin City University and in the INTO, want to gain a better understanding of how standardised testing in reading and maths is implemented in your school and your attitudes towards it. We know you probably receive many requests to participate in research studies, but we hope you will agree that this questionnaire survey is really important.

We have divided the questionnaire into three parts:

- Part 1 has questions about you and your school (necessary for the data analysis we plan to do);
- Part 2 is focused on your practices, attitudes and policy recommendations in relation to standardised testing;
- Part 3 is all about your professional development needs and some of the validity issues raised by standardised testing.

At a minimum, we are requesting that you complete all of Parts 1 and 2. This should take you no more than twenty minutes. We will be delighted if you take the time to complete Part 3 also.

Given the potential significance of this research, it is vitally important that your responses are <u>accurate and honest</u>. Information from the survey will be used to write policy documents, reports and research papers for publication. Individual respondents and schools will not be identified in any way.

Please note: Your completion of this questionnaire confirms that you understand the purpose of this study and that you freely consent to participate in it.

If you wish, you can complete the survey online by typing the following into your browser: https://www.esurveycreator.com/s/STsurvey2017

PLEASE COMPLETE AND RETURN BY <u>THURSDAY JUNE 1, 2017</u>. PLEASE DO NOT FOLD OR CREASE THIS DOCUMENT

Le gach dea-ghuí, Michael O'Leary (CARPE) & Deirbhile Nic Craith (INTO)

PART 1: BIOGRAPHICAL AND SCHOOL INFORMATION

Shade bubbles like this:

Change answers like this: 🔀

56

70

36

23



A. Your Gender		B. Years Teachi		nt school In total
Female	85	0-1	10	
Male	15	2-5	2!	5 12
		6-10	22	2 26
		11-20	29	9 28
		>20	1!	5 31
C. Current Role (Sh	ade all that apply) D. Current Class	(es) (Shade all tha	at apply)
Teaching Principal	8	Infants	19	9
Admin Principal	6	First	10	5
Mainstream Class	54	Second	10	5
Special Class	3	Third	1	_
Learning Supp		Fourth	18	
Resource/EAL	,O1 () 31	Fifth	1	
Resource/ LAL		Sixth	10	
				_
		Learning Suppor	rt/Res/EAL 3:	l
E. School Location		E Cobool Turas		
	63	F. School Type		
Urban/Suburban	63	Junior	6	
Rural	37	Senior	9	
		Full Stream (ver	tical) 8!	5
G. Disadvantage		H. Gender of Pu	pils in your schoo	.l
Status		_		
DEIS Urban 1	19	Female	7	
DEIS Urban 2	7	Male	9	1
DEIS Rural	8	Mixed	84	4
Ex Disadvantaged	9			
None	58			
I. School Size		J. School Catego	ory (Shade all that	apply)
<50	6	Denominational	7.	7
51-100	13	Non-Denominat	ional 3	•
101-200	21	Multi-Denomina	ational 1:	1
201-400	35	Gaelscoil	6	•
401-500	13	Gaeltacht	2	
>500	13	Special	3	
7500	13	Special		
K. Percentage of Proficiency/EAL	pupils in your c	lass(es) currently v	vith Limited Engl	lish 11
	dministration Time	A	utumn <u>Summer</u>	Both times n/
Tests		_		_
	rovider A Reading		3 67	3 2
your class(es)	rovider A Maths Te	est	2 52	2 4
_				

Note. All frequency data in % and rounded to the nearest whole number.

Provider B Reading Test

Provider B Maths Test

(Please shade

one bubble <u>in</u> each row)

PART 2: PRACTICES, ATTITUDES, POLICY RECOMMENDATIONS

Note 1: If you are an **Administrative Principal** please ignore questions you cannot answer (e.g. questions relating to current classroom practices).

Note 2: If you have been **working/subbing in a number of schools** (e.g. covering sick/maternity leave etc.) then base your responses on the class/school you know best.

- Who conducts the main administration of standardised tests to individual classes in your school? (Ignore one-off administrations, for example, to pupils who were absent for the main administration).
 Shade all that apply.
- a. 82 The class teacher (if you choose this skip to Q4)
- b. 10 The resource teacher
- c. 17 The learning support teacher
- d. 4 Another teacher in my school
- e. 2 The principal
- f. Other arrangements (Explain)
- 2. If the class teachers do not administer standardised tests in your school, then how long has this practice of someone else administering them been in place? (n=291)
 - 12 One year
 - 8 Two years
 - 11 Three Years
 - 4 Four Years
 - 66 Five years or more
- 3 Why was the decision taken?
 - 70 To ensure all testing guidelines were/are followed correctly
 - 21 I don't know
 - 9 Other reason (please explain briefly)

4.	Approximately how much time PER YEAR do you
	spend on the following activities in preparing your
	pupils to take standardised tests in reading and
	maths?

	spend on the following activities in preparing your pupils to take <u>standardised tests</u> in reading and maths?	None	Up to half a day	A day	A few days	A week or more
a.	Teaching test taking strategies/skills	53	20	5	16	6
b.	Teaching strategies for coping with test anxiety	57	24	5	10	4
C.	Getting pupils to practise on the kinds of item formats that are on the standardised test	63	12	5	12	7
d.	Revising curriculum topics relevant to the standardised test	42	9	6	25	19
e.	Practising on prior versions of the reading and/or maths standardised tests	95	1	1	1	1
f.	Practising on other reading or maths standardised tests	94	2	1	2	1

Are you aware of any of the following test preparation activities taking place <u>in</u> your school? Shade one bubble for each. 5.

	your	scno	ol? Shade one bubble for each.
	<u>Yes</u>	No	
a.	25	75	Teachers focusing their teaching on content that is on the standardised tests
b.	16	84	Teachers getting pupils to complete worksheets on content that is on the standardised tests
c.	27	73	Teachers focusing pupils' attention on content that is on the standardised tests
d.	3	97	Teachers telling pupils that certain content $\underline{\text{is not}}$ on the standardised tests
e.	5	95	Teachers getting pupils to practise on actual questions from the standardised tests
f.	1	99	Teachers encouraging pupils not to attend school on the day when standardised tests are being administered
g.	4	96	Parents/guardians using copies of the standardised test to prepare their children
h.	7	93	Pupils receiving grinds prior to testing

6. Are you aware of any of the following activities taking place <u>during the</u> <u>administration</u> of standardised tests <u>in your school</u>?

	Yes	No	
a.	6	94	Teachers/SNAs giving pupils hints about answers
b.	12	88	Teachers/SNAs rephrasing questions
C.	17	83	Teachers/SNAs giving pupils more time than the allowed time
d.	5	95	Teachers/SNAs providing inappropriate teaching support during the test
e.	2	98	Teachers/SNAs changing or editing answers on pupil booklets
f.	9	91	Potentially helpful materials on view during testing
g.	27	73	I am aware of some of these activities happening in other schools

7.	How do you communicate standardised test results to the parents/guardians of the children in your current class(es)? Shade all that apply.	Not Reported	At P/T Meetings	Summer Report Card	Winter Report Card	Separate Letter
	a. Reading Standard Scores (Class-Based)b. " " (Age-Based)	43 44	13 13	27 20	1 0	1
	c. Reading STEN Scores (Class-Based)d. " " (Age-Based)	15 29	22 17	65 38	1 1	1
	e. Reading Percentile Ranks (Class-Based) f. " " (Age-Based)	47 48	13 12	19 16	0	0
	g. Maths Standard Scoresh. Maths STEN Scoresi. Maths Percentile Ranks	44 7 45	11 25 14	25 77 20	0 1 1	0 1 0

Stanu	ardised test results in reading and/or maths to:	.		o)	
		Never	Once	Twice	
a.	Identify individual pupil strengths and weaknesses?	8	44	24	
b.	Group pupils within your class?	23	38	16	
C.	Evaluate pupil progress?	13	47	20	
d.	Evaluate your teaching effectiveness?	30	40	14	
e.	Select teaching materials?	49	24	11	
f.	Adjust your planning?	27	36	16	
g.	Inform other teachers about pupil performance and/or progress?	9	51	18	
h.	. Have a discussion with pupils about their performance/ progress?	60	22	8	
i.	Have a discussion with parents about pupil performance and/or progress?	11	59	21	
j.	Provide written feedback on (not just scores) to parents?	50	42	5	
k.	Inform (in whole or in part) your grades (ratings) for reading and maths on your pupils' report cards?	19	74	4	
l.	Critically review your pupils' standardised test scores in reading and maths from the previous school year?	13	63	14	
m	. Inform the preparation of Individual Education Plans?	14	44	24	

9.	and/or	a typical school year how often does the principal do members of staff engage in the following ordised test related activities)?	Never	Once	Twice	3 times or more
		Held reportings to review test seems	22	Г1	17	
	a.	Hold meetings to review test scores	23	51	17	9
	b.	Discuss ways to improve test scores	26	36	18	20
	C.	Discuss ways to strengthen teaching in the specific areas where test scores indicate weaknesses	17	38	19	27
	d.	Provide materials to give pupils practice in test-taking skills	75	11	5	9

	e.	Provide support to help individual teachers improve test scores	75	12	5	9
	f.	Discuss ways to improve the teaching of higher order thinking skills	24	31	18	27
	g.	Check to see that teachers are emphasizing skills which showed weakness from past test results	48	27	11	14
	h.	Discuss ways to improve pupils' attitudes/interest in learning	22	26	15	37
	i.	Introduce/discuss important new teaching ideas	16	25	15	44
	j.	Select pupils for gifted and talented programmes	44	39	9	9
	k.	Select pupils for learning support/resource	2	33	24	41
	I.	Monitor school progress from year to year	7	46	19	27
	m.		23	54	13	11
	n.	Identify aspects of the curriculum that need to be addressed on a whole school basis	9	42	18	30
10.		at extent do you feel pressure from the following a your pupils' standardised test scores in reading a		No pressure	Some pressure	Great pressure
10.	improv maths?	e your pupils' standardised test scores in reading a				
10.	improv maths?	e your pupils' standardised test scores in reading a		65	32	3
10.	improv maths? a. b.	My principal My inspector		65 63	32 30	3 7
10.	improv maths?	e your pupils' standardised test scores in reading a	and	65	32	3
10.	improv maths? a. b.	My principal My inspector The Board of Management Resource/Learning support teachers/coordinators	and	65 63 83	32 30 16	3 7 1
10.	a. b. c. d.	My principal My inspector The Board of Management Resource/Learning support teachers/coordinators my school Other classroom teachers in my school The parents of my pupils	and	65 63 83 76 68 29	32 30 16 22 29 51	3 7 1 2
10.	a. b. c. d.	My principal My inspector The Board of Management Resource/Learning support teachers/coordinators my school Other classroom teachers in my school The parents of my pupils Personnel from local secondary schools	and	65 63 83 76 68 29 91	32 30 16 22 29 51 8	3 7 1 2
10.	a. b. c. d. e. f. g. h.	My principal My inspector The Board of Management Resource/Learning support teachers/coordinators my school Other classroom teachers in my school The parents of my pupils Personnel from local secondary schools The wider school community	and	65 63 83 76 68 29 91 87	32 30 16 22 29 51 8 12	3 7 1 2 3 20
10.	a. b. c. d. e. f. g. h.	My principal My inspector The Board of Management Resource/Learning support teachers/coordinators my school Other classroom teachers in my school The parents of my pupils Personnel from local secondary schools The wider school community Newspaper/media	and	65 63 83 76 68 29 91 87 76	32 30 16 22 29 51 8 12 19	3 7 1 2 3 20 1 1 6
10.	a. b. c. d. e. f. g. h. i. j.	My principal My inspector The Board of Management Resource/Learning support teachers/coordinators my school Other classroom teachers in my school The parents of my pupils Personnel from local secondary schools The wider school community Newspaper/media My pupils	and	65 63 83 76 68 29 91 87 76 76	32 30 16 22 29 51 8 12 19 22	3 7 1 2 3 20 1 1 6 3
10.	a. b. c. d. e. f. g. h.	My principal My inspector The Board of Management Resource/Learning support teachers/coordinators my school Other classroom teachers in my school The parents of my pupils Personnel from local secondary schools The wider school community Newspaper/media	and	65 63 83 76 68 29 91 87 76	32 30 16 22 29 51 8 12 19	3 7 1 2 3 20 1 1 6

11. How has <u>your school's performance</u> on standardised tests of reading and maths changed over the last three years?

37	Scores have improved
1	Scores have dis-improved
17	Some classes' scores have improved while other classes' scores have dis-improved
24	Scores have remained about the same (skip to Q13)
21	I don't know (skip to Q13)

12.	(as indi	scores in your school have changed in any way cated in Q11), why do you think this change has ed? Rate the importance of each of the following	Not a factor	Moderate factor	Major factor	Unsure
			40	20	4.4	•
	a.	Changes in pupil population/demographics	48	30	14	9
	b.	Alignment of curriculum with test content	52	32	7	9
	c.	Focus on test-taking skills/strategies	60	27	6	6
	d.	Changes in teaching strategies	11	46	39	4
	e.	Changes in textbooks	37	44	14	5
	f.	Changes in test preparation practices	67	22	6	5
	g.	Changes in test administration practices	81	13	3	4
	h.	Familiarity with test content	70	19	7	4
	i.	Changes in school assessment policy	59	29	7	5
	j.	Changes in government assessment policy	69	20	5	6
	k.	Changes in inspection practices	72	19	5	5
	I.	Changes in internal school evaluation practices	35	41	19	5
	m.	Changes in external school evaluation practices	67	21	5	7
	n.	The Literacy and Numeracy Strategy	19	47	31	4
	0.	Changes in teacher effectiveness	19	41	35	5

13.	Please indicate the extent to which you agree or disagree with each of the following statements.	Agree Strongly	Agree	Undecided	Disagree	Disagree Strongly
a.	Parents of pupils in my class <u>do not</u> have a good understanding of how Standard Scores, STEN scores and Percentile Ranks in reading and maths should be interpreted.	28	40	14	17	2
b.	Standardised test scores in reading and maths should be included on my pupils' summer report cards.	26	39	13	14	8
C.	Parents of pupils in my class take the results of standardised tests in reading and maths too seriously.	24	31	22	20	4
d.	Performance differences in pupil achievement on standardised tests in my school reflect differences in the characteristics of pupils rather than teacher effectiveness.	23	47	21	8	1

е	There's <u>no</u> difference between what I think should be taught and what the reading and maths tests emphasise.	4	17	26	38	15
f.	Standardised testing in reading and maths has made my school more accountable.	8	43	23	19	7
g.	A pupil's age-based STEN score can be a more valid reflection of achievement than the class-based STEN score I am required to report to the BOM and DES.	13	45	32	10	2
h	In my school it is common practice to explain the measurement error associated with standardised test scores when communicating with parents/guardians about standard test results in reading and maths.	5	23	25	31	17
i.	The standardised test results in my school are a good way of helping prospective parents to understand how good the school is.	2	12	15	41	31
j.	The requirement to report STEN Scores in reading and maths to the DES supports good educational policy making.	5	31	28	19	16
k	Some pupils in my class are getting grinds focused on improving their standardised test scores.	3	7	16	31	43

You have now completed PARTS 1 and 2. THANK YOU!

We know we are asking a lot but we would really appreciate it if you would take another few minutes to complete PART 3!

PART 3: PROFESSIONAL DEVELOPMENT, TEST VALIDITY ISSUES

15.	15. Please provide an estimate of the amount of time devoted to professional development in standardised testing you have engaged in during your career so far:			1-5 hours	6-10 hours	11-20 hours	20 hours +
	a.	Pre-service e.g. B.Ed courses	56	28	5	3	8
	b.	Induction	72	21	2	1	4
	c.	In-service e.g. summer courses	71	12	4	3	9
	d.	Croke Park Hours	38	40	10	3	9

16.		eful are the following resources in helping you to e your understanding and use of standardised				>
	tests?		Very useful	Useful	Not useful	I Don't know
	a.	NCCA assessment guidelines	15	47	12	27
	b.	NCCA website	12	45	12	32
	c.	PDST courses	9	30	16	46
	d.	PDST Website	9	35	14	42
	e.	Summer courses	7	25	23	45
	f.	DES website	4	25	28	44
	g.	DES circulars	4	29	29	38
	h.	Inspectors	3	19	42	36
	i.	The standardised testing manuals	49	44	4	3
	j.	In-school professional discourse	38	41	8	14

17. Is there at least one "go to" person in your school or connected to your school that you can consult when you need advice on standardised testing?

15 No

85 Yes

• If yes what role does this person fulfil?

18.	be im	indicate the extent to which you feel it would portant that <u>YOU</u> receive professional oment with respect to each of the following:	Extremely Important	Important	Undecided	Relatively unimportant	Not important at all
	a.	How standardised tests are constructed	14	40	15	23	9
	b.	Preparing pupils to take standardised tests	18	41	14	17	10
	C.	Administering standardised tests	18	43	7	23	9
	d.	The validity and reliability of standardised test norms	23	50	12	9	6
	e.	The validity of standardised test content	24	52	10	8	6
	f.	The meaning of Standard Scores	23	51	8	11	7
	g.	The meaning of Percentile Ranks	24	51	6	12	8
	h.	The meaning of STEN scores	25	51	6	12	7
	i.	Applying the Standard Error of Measurement when interpreting test scores	23	47	17	9	4
	j.	Providing pupils with feedback on their standardised test results	22	40	20	10	8
	k.	Using standardised test results to guide planning and teaching	33	48	10	7	4
	l.	Using standardised test scores to make judgements about special needs	34	48	9	6	4
	m.	Communicating standardised results to parents/guardians	29	52	9	6	4
	n.	Using standardised tests as assessments for learning (AfL)	30	51	11	5	3
	0.	The implications of reporting aggregated standardised test results to the BOM/DES	19	42	23	11	6
	p.	Irish and international research on standardised testing	19	46	21	9	6

19.	Please indicate the extent to which you agree or disagree with each of the following statements.	Agree Strongly	Agree	Undecided	Disagree	Disagree Strongly
a.	Some pupils in my class are extremely anxious about taking standardised tests.	32	44	6	16	3
b.	Standardised tests are a good measure of what my pupils learn in reading.	3	38	24	29	7
c.	The quality of teaching and learning in reading and maths has improved in my school because of the use of standardised testing.	3	21	35	32	10
d.	My school is more interested in increasing standardised test scores in reading and maths than in improving overall pupil learning.	4	10	12	44	30
e.	Standardised tests help me to clarify which learning goals are the most important in reading and maths.	2	28	22	36	11
f.	Standardised testing focuses my attention on higher- order thinking and problem solving skills in reading and maths.		38	18	30	10
g.	Standardised test scores accurately reflect my pupils' mastery of basic skills in reading and maths.	3	39	23	25	10
h.	Standardised testing in reading and maths has helped me to be a better teacher.	2	16	21	41	21
i.	Standardised tests focus my attention on basic skills in reading and maths.	2	39	16	31	13
j.	High scores on standardised tests represent high levels of achievement in reading and maths in my school.	6	42	24	20	8
k.	The standardised test scores in my school are <u>not</u> an accurate measure of what EAL pupils know/can do in reading and maths.	31	37	27	4	1
l.	Standardised tests are <u>not</u> a good measure of what my pupils learn in maths in my class.	15	33	23	26	2
m.	Standardised testing improves my pupils' learning in reading and maths.	1	13	28	43	15
n.	Some pupils in my class are not capable of taking standardised tests in reading and mathematics due to learning difficulties.	38	38	6	15	4
0.	Standardised testing is an appropriate way of encouraging teachers to focus on the impact of their teaching on children's achievement in maths and reading.	3	28	28	28	13
p.	Standardised testing challenges weaker teachers to do a better job.	3	19	23	34	22
q.	The importance placed on standardised test results encourages teachers in my school to teach to the test.	10	16	22	30	22