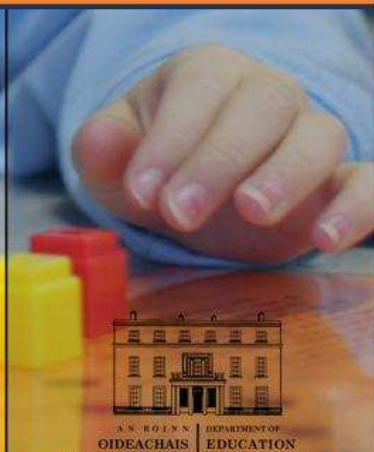




Incidental Inspection Findings 2010

A Report on the Teaching and Learning of English and Mathematics in Primary Schools

Inspectorate Evaluation Studies



PROMOTING THE QUALITY OF LEARNING





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Foreword

This report is based on the outcomes of unannounced (incidental) inspections completed in over 450 primary schools throughout all parts of the country between October 2009 and October 2010. During these visits, inspectors observed over 800 English lessons and over 500 lessons in Mathematics.

The inspectors' findings provide us with an excellent snapshot of the quality of teaching and learning in these subjects. This report sets out a summary of the findings – many of which are positive – and also analyses the weaknesses in practice observed in classrooms.

It is heartening to be able to report that inspectors found that most aspects of teachers' work were satisfactory or better in over four-fifths of the lessons in these critically important subjects. Pupils in these lessons were being provided with good opportunities to develop their skills in English and mathematics – skills that are critical for their future success as learners and as adults of the future.

However, inspectors also found that the learning experience provided by teachers for their pupils was unsatisfactory in a significant proportion of lessons. Given the critical role that literacy and numeracy play in enabling the child to learn in other subjects, it is disappointing to find that appropriate learning activities were not provided for pupils in over 16% of English lessons and that in 15% of mathematics lessons, the pupils' learning was not developed satisfactorily.

Inspectors provide us with information about the quality of the work of schools but they also seek to improve practice. During all of the incidental inspection visits, the inspectors provided oral feedback and advice about best practice to each teacher and to the principal of the school. This report is also intended to support improvement: it sets out some of the steps that teachers, principals and the educational system in general can take to improve teaching and learning in English and mathematics. Better teacher preparation for lessons (which was found to be unsatisfactory in approximately a quarter of lessons), better use of the methodologies recommended in the curriculum, and especially, better use of assessment information to track and plan children's learning emerge as key areas needing improvement.

I hope that teachers, schools and those involved in teacher education and the school support services will find the findings of the report useful as we work together to improve learning for all pupils in schools.



Harold Hislop

Chief Inspector

November 2010

Incidental Inspection Findings 2010

A Report on the Teaching and Learning of English and Mathematics in Primary Schools

This is a composite report on incidental inspections conducted in over 450 primary schools between October 2009 and October 2010. The report focuses on the quality of pupils' learning and the practices of teachers in the curriculum areas of English and mathematics. The main findings and practical implications of those findings for teaching and learning in the Irish primary school system are set out in section 5 of this report.

1. INTRODUCTION

1.1 Incidental Inspections

Incidental inspections are unannounced inspections that inspectors carry out in primary schools to evaluate the quality and effectiveness of aspects of the education provided in schools under the normal conditions of a regular school day. Inspections of this type are one model within a range of inspection models at primary level that includes whole-school evaluations (WSE), thematic inspections, and focussed research evaluations.

1.1.1 Focus

The focus of incidental inspections is on the quality of the education experienced by the learner. These inspections look at the quality of teaching, the quality of pupils' learning, and the quality of the supports that schools provide for pupils.

1.1.2 Purpose

Incidental inspections allow inspectors to:

- Monitor the quality and effectiveness of the work of schools
- Comment on the organisation and operation of schools
- Consult with and provide advice to teachers, principals and boards about the quality of the education provided in schools
- Support schools and teachers
- Collect data on the operation and effectiveness of schools for research or other purposes
- Assess the implementation of regulations made by the Minister for Education and Skills
- Collect data on factors that can be used to identify schools where further inspection may be required
- Monitor the progress made by schools in implementing the recommendations of earlier inspections

1.1.3 Implementation

Incidental inspections are conducted in accordance with the remit of the Inspectorate as set out in Section 13 of the *Education Act 1998* and are in keeping with the *Rules for National Schools*. In addition, they take place within the terms of the *Professional Code of Practice on Evaluation and Reporting for the Inspectorate*.

1.1.4 Process

Incidental inspections are generally carried out by one inspector who visits a primary school for a full day without prior notification. The incidental inspection process is flexible and an inspector may evaluate any aspect of the school's work deemed relevant. During the incidental inspection, the inspector discusses the educational provision in the school with the school principal and evaluates the work of teachers. Visits to classrooms normally last about one-and-a-half hours. The focus of the visits is on evaluating the quality of learning and teaching. The visits involve:

- Discussion with the class teacher
- Observation of teaching and learning
- Interaction with pupils
- Review of the teacher's planning and other documentation
- Feedback to the teacher

An oral report on the key findings of the incidental inspection is provided to the principal at the end of the school day during which the inspection was conducted. This is in addition to the oral feedback provided to each class teacher in the class settings inspected. The focus of the advice and/or recommendations provided by the inspector is usually on aspects for development that will improve the quality of the pupils' learning.

1.2 Incidental Inspections October 2009 – October 2010

This report is based on the outcomes of incidental inspections undertaken in the period between October 2009 and October 2010. During that period incidental inspections were undertaken in 452 schools including special schools and Irish-medium schools. In total, over 1200 classrooms were inspected and more than 2400 lessons, extending across the full range of curriculum areas and the full range of class levels, were evaluated. The number of lessons evaluated in each curriculum area is shown in Table 1.

Table 1: Curriculum areas

Curriculum area	Number of lessons	Percentage of lessons
English	803	32.6
Gaeilge	386	15.7
Mathematics	527	21.4
History	116	4.7
Geography	131	5.3
Science	105	4.3
Music	145	5.9
Visual Arts	57	2.3
Drama	37	1.5
SPHE	90	3.7
PE	43	1.7
Other	21	0.9
Total	2461	100.0

1.3 Evaluation Framework for Incidental Inspection

The evaluation framework used by inspectors in conducting incidental inspections in classrooms is that set out in *Looking at Our School – An Aid to Self-Evaluation in Primary School, Chapter 4, The quality of learning and teaching in curriculum areas*.¹ With regard to English and mathematics, inspectors looked at the quality of pupils’ learning in each subject (including their skill development and understanding of concepts) and aspects of teachers’ practice such as how pupils were organised and managed during the lessons, the teaching approaches used, how teachers prepared for the lessons, the extent to which pupils’ learning was reinforced or consolidated, how pupils were engaged in their learning and the way in which pupils’ learning was monitored and assessed. Inspectors’ judgements on the quality of pupils’ learning and on the quality of teachers’ practice accords with the quality continuum illustrated in Table 2.

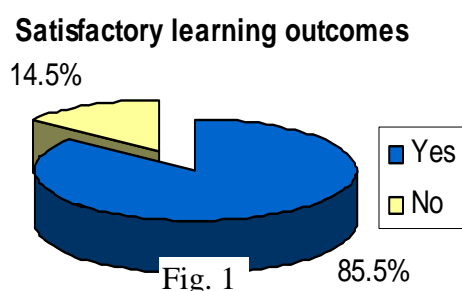
Table 2: Quality continuum

Categories	Quality levels	Descriptors
Appropriate/Satisfactory	Very good practice/ very good learning	Very good, significant strengths
	Competent practice/ good learning	Good, strengths outweigh weaknesses
Not appropriate/ Not satisfactory	Scope for development	Fair, weaknesses outweigh strengths
	Experiencing significant difficulty	Poor, significant weaknesses

2 ENGLISH

2.1 Quality of learning outcomes

Over 800 English lessons were evaluated by means of incidental inspection between October 2009 and October 2010. Findings in relation to pupils’ learning in English are mixed. The quality of learning outcomes was satisfactory in 85.5% of the English lessons observed and unsatisfactory in 14.5% of the lessons, Fig. 1. Significantly, in 15.7% of the lessons the pupils’ learning (including their skills and knowledge) was not developed satisfactorily.



¹ *Looking at Our School – An Aid to Self-Evaluation in Primary Schools, Department of Education and Science, 2003.*

2.2 Teachers' practice

2.2.1 Overall findings

Teachers' practice in the majority of the English lessons evaluated was broadly positive. In 94.6% of lessons the teachers' classroom management skills were satisfactory. Pupils' work was appropriately corrected in almost 90% of lessons. Similarly, in almost 90% of lessons the pupils were engaged appropriately in their learning. The majority of teachers were found to have made satisfactory preparation for the English lesson taught (76.5%), to have used appropriate teaching approaches in the lesson (83.5%) and to have provided appropriate learning activities for the pupils (83.8%). Effective use of resources was evident in almost 82% of lessons. In a similar percentage of lessons the pupils were provided with opportunities to learn through talk and discussion, an important learning strategy of the English curriculum. The consolidation of learning, that is, the reinforcing of pupils' learning through revision, effective questioning of pupils and ongoing checking of pupils' understanding, was a feature of 84.7% of lessons.

An example of a school with a number of significant strengths in the teaching of English is reported as follows:

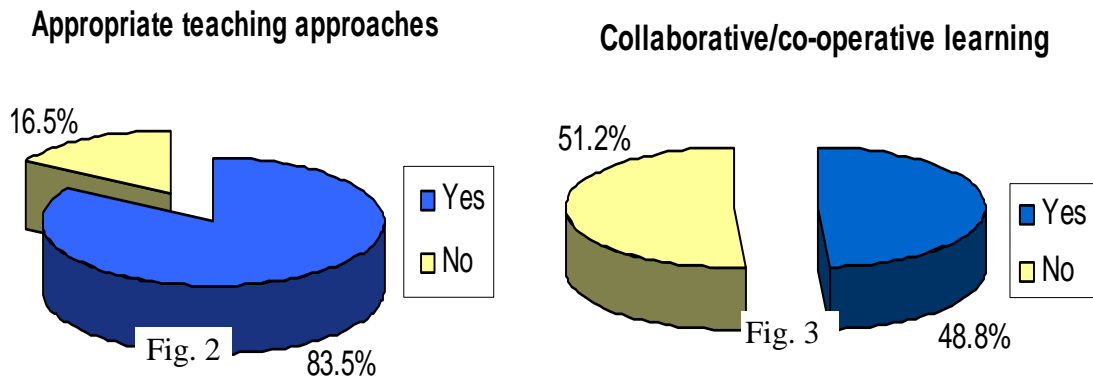
There is a clear focus on developing good listening skills at each class level. Reading is approached in a carefully structured fashion with a high level of collaboration between classroom and support teachers. In the middle standard developing confidence and fluency in reading is emphasised and this is very competently developed at senior level through use of the novel. The senior pupils are given ample opportunities to present written tasks and project work, to express their opinions and to engage in discussion and debate.

There were many strengths evident in the practice of teachers in the majority of the English lessons evaluated. Overall, teachers undertook their teaching in this curriculum area in a professional and effective way. However, there was a significant minority of lessons in which this was not the case. This is of particular concern when considered in the context of the negative findings regarding pupils' learning that emerged from a significant proportion of the lessons as discussed below.

2.2.2 Resources, learning activities and teaching approaches

According to the English curriculum, language learning is an integrated process in which oral language, reading and writing are closely linked. One of the key learning strategies of this curriculum is that of talk and discussion. Also important in the delivery of the curriculum is the related approach of co-operative or collaborative learning. Effective English lessons incorporate talk and discussion and co-operative or collaborative learning in the teaching of oral language and the development of pupils' comprehension, reading and writing skills. Such lessons take place in a context in which resources such as books and ICT are used to support skill acquisition and the development of pupils' competence in language.

Shortcomings in relation to the use of resources, the learning activities provided for the pupils and the teaching approaches used were identified in a significant proportion of the lessons evaluated. Resources were not used effectively in 18.1% of the lessons. Appropriate learning activities were not provided for the pupils in 16.2% of the lessons. In a similar percentage of lessons (16.5%), appropriate teaching approaches were not used, Fig. 2. Of particular significance in this regard is the fact that, despite the importance accorded to oral language in the English curriculum, teachers did not facilitate talk and discussion to support pupils' learning in 17.2% of the English lessons observed. Furthermore, collaborative or co-operative learning, one of the key learning approaches of the *Primary School Curriculum 1999*, was not adequately provided for in over half (51.2%) of the English lessons inspected, Fig. 3.



Examples of the advice given to schools by the inspectors regarding teaching approaches in English lessons include:

Pupils would benefit from additional pair work to optimise the development of their expressive language skills in ...English.

Less emphasis should be placed on textbook and workbook activities in middle and senior classes during lessons in English.

2.2.3 Information and communications technology (ICT)

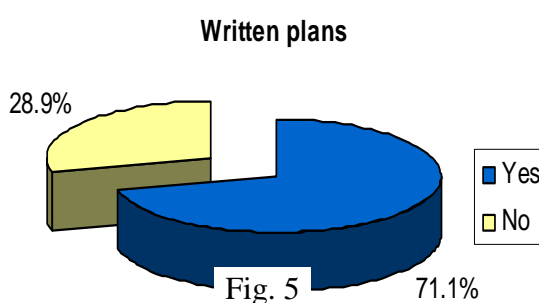
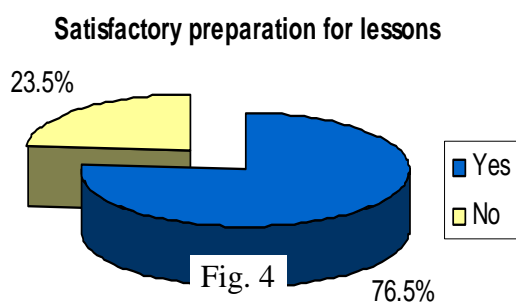
Findings regarding the frequency of the use of ICT in the lessons evaluated suggest that ICT is a relatively underutilised tool in the teaching and learning of English in Irish primary schools. The teacher guidelines for the English primary curriculum draw attention to the potential of ICT to enrich the teaching and learning of language and provide practical examples of ways in which this may be done². This is updated and expanded upon in the National Council for Curriculum and Assessment (NCCA) Guidelines on the use of ICT.³ However, despite this guidance on ICT use in the context of the English curriculum, the use of ICT was evident in only 29.6% of the English lessons inspected.

² *Primary School Curriculum 1999, English: Teacher Guidelines*, p.91

³ National Council for Curriculum and Assessment, 2004a

2.2.4 Preparation and planning

Findings in relation to the preparation and planning for English lessons undertaken by a significant minority of teachers are of concern. Specifically, preparation by teachers was not satisfactory in 23.5% of the total number of lessons observed, Fig. 4. It should be noted that inspectors did not ask for standardised formats or detail in the teachers' planning; they simply looked for evidence that teachers had made out plans to guide their teaching of the lessons.



However, it was found that 28.9% of teachers had no such plans at all, Fig. 5. These findings regarding preparation for English lessons are somewhat surprising, not only in the light of the requirement on teachers to prepare written plans as set out in rule 126 of the *Rules for National Schools*, but also in the context of the planning supports provided to teachers and schools since 1999 through the professional development support services⁴.

Examples of identified shortcomings in teachers' preparation for the teaching of English are reported as follows:

...resources [were not] adequately prepared for the two English lessons observed.

Plans for ... English consisted of the tables of contents of different textbooks.

Short-term plans do not provide guidance in relation to the development of pupils' oral language skills in English or the differentiation of activities to cater for the varying ability levels of pupils.

2.2.5 Assessment

Particularly serious problems were identified in relation to assessment. In more than one third (34.1%) of the English lessons evaluated assessment practices were unsatisfactory, Fig. 6. Inspectors identified a number of difficulties in teachers' assessment of pupils' progress in English. They found instances where records of pupils' skill development and/or their attainment levels in English were not available. They noted examples where

⁴ School Development Planning Initiative – Primary (SDPI); Primary Curriculum Support Programme (PCSP); Primary Professional Development Service (PPDS); Professional Development Service for Teachers (PDST)

pupils' written work was monitored infrequently and where there was inadequate use of formative assessment approaches⁵.

Satisfactory assessment practices

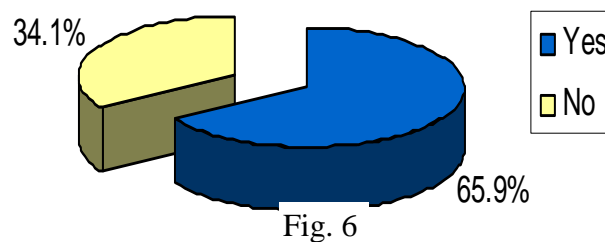


Fig. 6

Examples of schools exhibiting such shortcomings are described as follows:

One teacher had a record of results of spelling tests in English and Irish. Other than that, there were no records of assessment available. Work in copies was corrected but no directions towards improvement were given.

Records of assessment ... relating to English literacy skills are retained in all classrooms but these vary in terms of content and presentation from records that consist of individual pupils' assessment sheets to those that capture the performance of individual pupils in a whole-class context. Assessment data is mainly used for summative purposes.

2.3 Learning outcomes and teachers' practice

Analysis of the relationship between pupils' learning and teachers' practice in the English lessons evaluated highlights particular aspects of the work of the teachers that had a notable influence on the learning outcomes for pupils.

2.3.1 Teaching approaches

The data strongly suggest that failure to use appropriate teaching approaches during English lessons impacts negatively on the quality of the pupils' learning. In 70.8% of lessons with weaknesses in learning outcomes appropriate teaching approaches were not used whereas in 92.9 % of the lessons with good learning outcomes the teaching approaches used were appropriate. The data indicate that the appropriateness or otherwise of the learning activities provided for pupils is also of relevance to pupil learning outcomes. In 93.2% of the lessons with satisfactory learning outcomes the pupils were provided with suitable learning activities whereas such activities were a feature of less than one third (30.1%) of English lessons with disappointing learning outcomes. The data also strongly suggest that the way in which resources are used is relevant to the

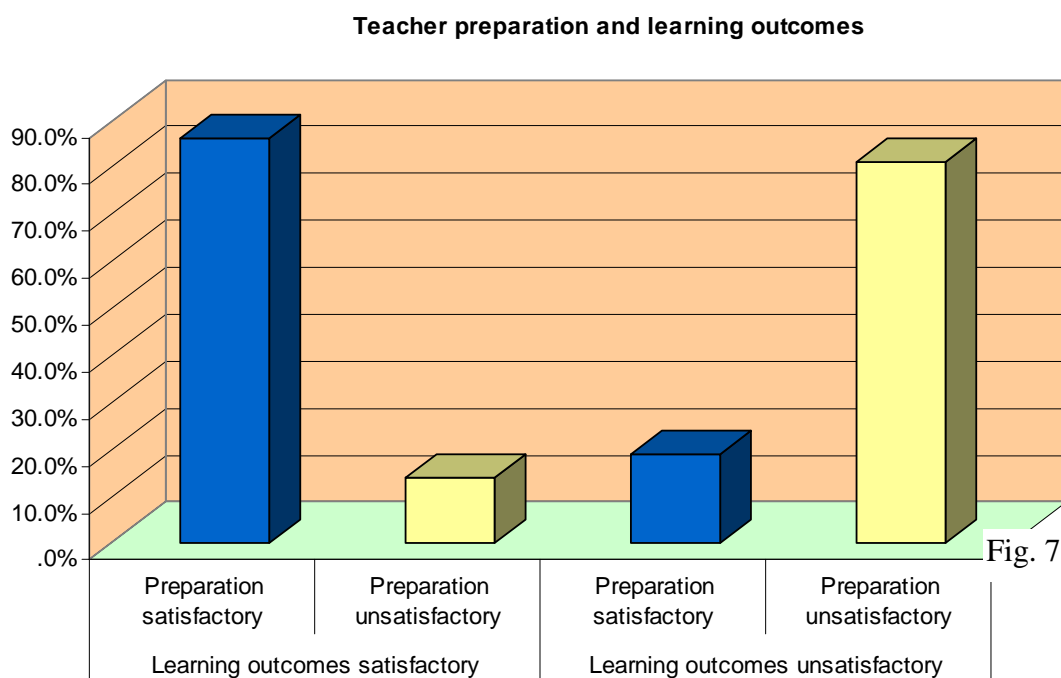
⁵ Formative assessment involves using the outcomes of assessment to inform teaching and learning. Summative assessment involves assessing children's progress and achievement at a particular point in time. Diagnostic assessment is used to identify specific learning difficulties.

quality of the learning outcomes achieved. There was effective use of resources in 90.2% of the English lessons with good learning outcomes whereas in 65.5% of the lessons with weak learning outcomes resources were not used effectively.

The provision of opportunities for pupils to learn through talk and discussion was a feature of a high proportion (88.7%) of the lessons that were positive in terms of the pupils' learning whereas it was a feature of just over half (50.4%) of the lessons with unsatisfactory learning outcomes. Similarly, the consolidation of learning was a characteristic of most (93.2%) of the lessons with positive learning outcomes while it was evident in just over one third (35.7%) of the lessons with weaknesses in the learning outcomes.

2.3.2 Preparation

A strong link between the preparation made by teachers for English lessons and pupils' learning in those lessons is also evident, Fig. 7. In 86% of the lessons with satisfactory learning outcomes the quality of the preparation made by the teacher for the lesson was satisfactory. This contrasts sharply with the level of preparation undertaken by teachers in the case of the unsatisfactory lessons; in 81.1% of those lessons the preparation was unsatisfactory. These findings clearly highlight the importance of teachers' preparation for positive pupil learning outcomes.



Whether or not a teacher has written plans to inform his/her teaching would also appear to be relevant to pupils' learning, although, as the data confirm, not quite as critical as the overall preparation made by teachers for their work. In more than three quarters (76.3%) of the lessons with satisfactory learning outcomes the teacher had written plans. Furthermore, teachers had written plans in fewer than half (42.0%) of the lessons with unsatisfactory outcomes.

2.3.3 Assessment

The relationship between assessment practices and pupil learning outcomes is also strong. Strikingly, in 77.5% of lessons with unsatisfactory learning outcomes assessment practices were also unsatisfactory. In the majority (73.1%) of lessons with positive learning outcomes there was evidence of satisfactory assessment practices.

2.4 Conclusion

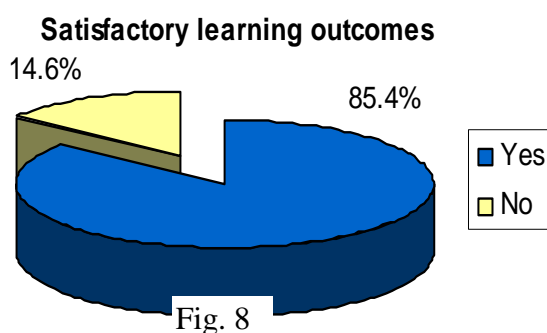
The findings in relation to pupils' learning in English are mixed. While satisfactory learning outcomes were evident in the vast majority (85.5%) of the lessons, there was nonetheless a significant minority (14.5%) of lessons in which pupils' learning was not satisfactory. Analysis of teachers' practice and pupils' learning highlights the following factors as key determinants of the quality of pupils' learning in English lessons:

- the teaching approaches used (including the learning activities provided, the way in which resources are used, the provision of opportunities for pupils to learn through talk and discussion, and the extent to which learning is consolidated or reinforced)
- the preparation undertaken by teachers for lessons (including written planning and preparation of resources and learning activities)
- the quality of assessment practices

3 MATHEMATICS

3.1 Quality of learning outcomes

To date, over 500 mathematics lessons have been evaluated through incidental inspection. The findings in relation to pupils' learning in mathematics are mixed and mirror the findings regarding pupils' learning in English. Satisfactory learning outcomes were evident in 85.4% of the mathematics lessons inspected and unsatisfactory learning outcomes were evident in 14.6% of the lessons, Fig. 8. Again mirroring the findings for English, it was found that in 15% of mathematics lessons the pupils' learning (including their skills and knowledge) was not developed satisfactorily.



3.2 Teachers' practice

3.2.1 Overall findings

As with English, the practice of teachers in the majority of the mathematics lessons inspected was generally positive. Satisfactory classroom management skills were exhibited by the teachers in almost all (95.3%) of the lessons, with teachers in only a small minority (4.7%) of the lessons having difficulty in this regard. Pupils' work was appropriately corrected in almost 90% of cases. In 90.9% of the mathematics lessons the pupils were engaged appropriately in their learning. The majority of the teachers had prepared satisfactorily for the lesson evaluated (75.0%), used appropriate teaching approaches during the lesson (82.7%), and provided the pupils with appropriate learning activities (82.2%). Findings regarding the use of resources in mathematics lessons were not quite as positive as in English lessons; effective use of resources was evident in 77.2% of the mathematics lessons compared to 81.9% of the English lessons.

Some of the strengths in mathematics teaching among the lessons evaluated are illustrated in the following evaluative comments on a selection of lessons:

The activities in mathematics are well structured and differentiated at infant level with effective use of the interactive white board for exploring number patterns in second and third class.

The teaching of mathematics in the most senior class featured appropriate emphasis on oral and mental mathematics and a constructivist approach to the teaching of new skills and concepts.

...pupils were provided with ample opportunity to use concrete apparatus to enhance their understanding of concepts. They were also encouraged to share their problem-solving strategies orally.

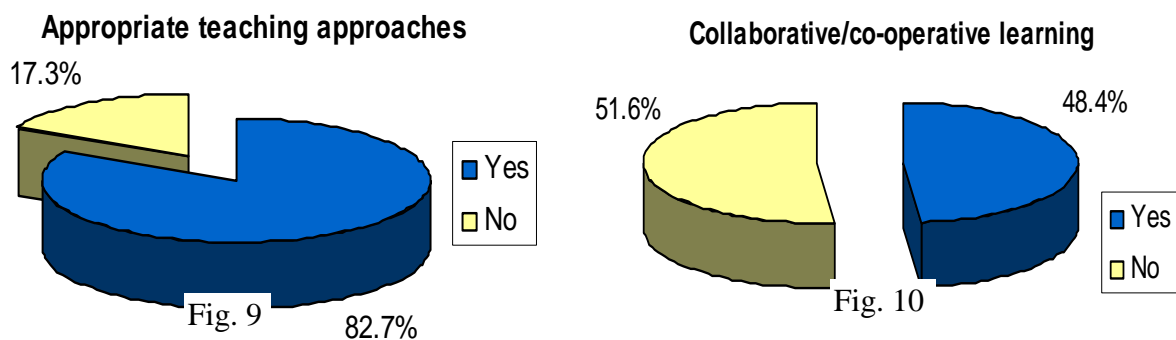
The teacher...used resources...prolifically and there was good linkage and consolidation. She made the lesson "real" for the pupils using Christmas shopping and school purchasing as examples to consolidate new learning.

As the above data illustrate, effective teaching was evident in the majority of the mathematics lessons evaluated. Similarly, pupils in the majority of lessons were making satisfactory progress in their learning. However, in a proportion of the lessons evaluated teachers' practice was found to be less than satisfactory and this was reflected in the findings in relation to pupils' learning. While such lessons constituted a minority of those evaluated it is nevertheless a cause for concern that significant numbers of pupils are not experiencing an appropriate learning environment for mathematics.

3.2.2 Teaching approaches, learning activities, resources

Unsatisfactory practices around the learning activities provided for the pupils, the teaching approaches used, and the use of talk and discussion as a learning strategy were evident in considerable numbers of the mathematics lessons inspected.

Appropriate teaching approaches were not used in 17.3% of the lessons (Fig. 9), appropriate learning activities were not provided for the pupils in 17.8% of the lessons, learning was not consolidated in 15.8% of the lessons, and pupils in close to one fifth (18.9%) of the lessons were not provided with opportunities to learn through talk and discussion. The latter finding is of particular concern given the significance the curriculum attaches to discussion as a strategy in the development of mathematical language and skills.⁶ Another related finding of concern in the context of skill development, and specifically the development of problem-solving skills, is that pupils in less than half (48.4%) of the lessons observed were enabled to work collaboratively, Fig. 10. Such findings sit uneasily with the curriculum statement that, “work on open-ended problems, where the emphasis is placed on using skills and discussion rather than seeking a unique solution, is recommended.”⁷



The finding that in close to one quarter (22.8%) of mathematics lessons resources were not used effectively is very disappointing given how necessary access to resources is for pupil learning in mathematics. As the curriculum asserts, the experience of manipulating and using equipment and objects constructively is essential to the development of both mathematical concepts and constructive thought throughout the strands of the mathematics curriculum.⁸

Some of the deficiencies regarding the use of resources in individual schools are recorded as follows:

Resources to support the teaching of mathematics were not in evidence in the junior, middle and senior classes and pupils were not provided with the necessary materials to aid their understanding or conceptual development.

There was an over-reliance on the textbook for the teaching of mathematics in one class, with insufficient use of concrete materials.

The mathematics lesson was very much textbook-based.

⁶ Primary School Curriculum 1999: Mathematics: Teacher Guidelines, p.30.

⁷ Ibid., p.4

⁸ Primary School Curriculum 1999: Mathematics: p.6

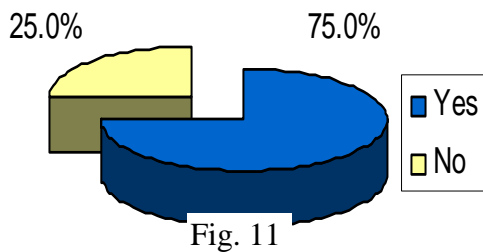
3.2.3 Information and communications technology

The data regarding ICT use in mathematics lessons are similar to those emerging from English lessons with ICT used in just 30.4% of the mathematics lessons observed. This suggests that schools and teachers generally are not systematically incorporating curriculum or NCCA guidelines on ICT in mathematics into the mathematics work that takes place every day in classrooms.

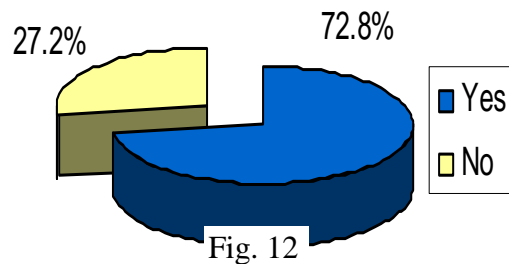
3.2.4 Preparation

The quality of the preparation for mathematics lessons undertaken by a significant number of teachers is disappointing. It was found to be unsatisfactory in one quarter (25.0%) of the lessons observed (Fig. 11), with 27.2% of the teachers having no written plans for the teaching of the subject (Fig. 12). As in the case of the equivalent finding in English, the unsatisfactory preparation evident in significantly high numbers of mathematics lessons exists notwithstanding the Department requirement to prepare written long-term and short-term plans and the range of professional development supports provided to assist in planning tasks.

Satisfactory preparation for lesson



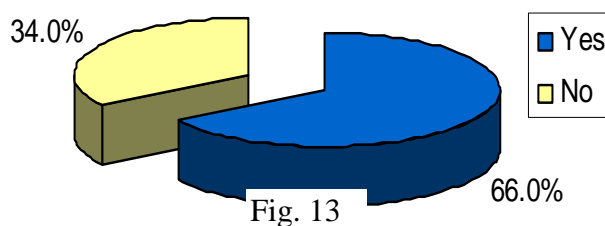
Written plans



3.2.5 Assessment

Particularly serious issues are evident in relation to assessment practices in mathematics. In more than one third (34.0%) of the mathematics lessons evaluated, assessment practices were unsatisfactory, Fig. 13. Many of the difficulties with assessment in mathematics were similar to those noted in relation to assessment in English. Inspectors found, in a number of cases, that records of pupils' progress in mathematics (including their results in standardised tests) were not available.

Satisfactory assessment practices



They also encountered situations where there was no whole-school approach to assessment. Furthermore, they noted situations where, even though assessment data were available, teachers did not adequately use these data to inform their mathematics lessons and programmes of work.

3.3 Learning outcomes and teachers' practice

Analysis of the relationship between the quality of pupils' learning in mathematics lessons and aspects of teachers' practice shows, as in the case of English, that certain aspects of how teachers go about their work in this subject can impact in a very significant way on the quality of pupils' learning.

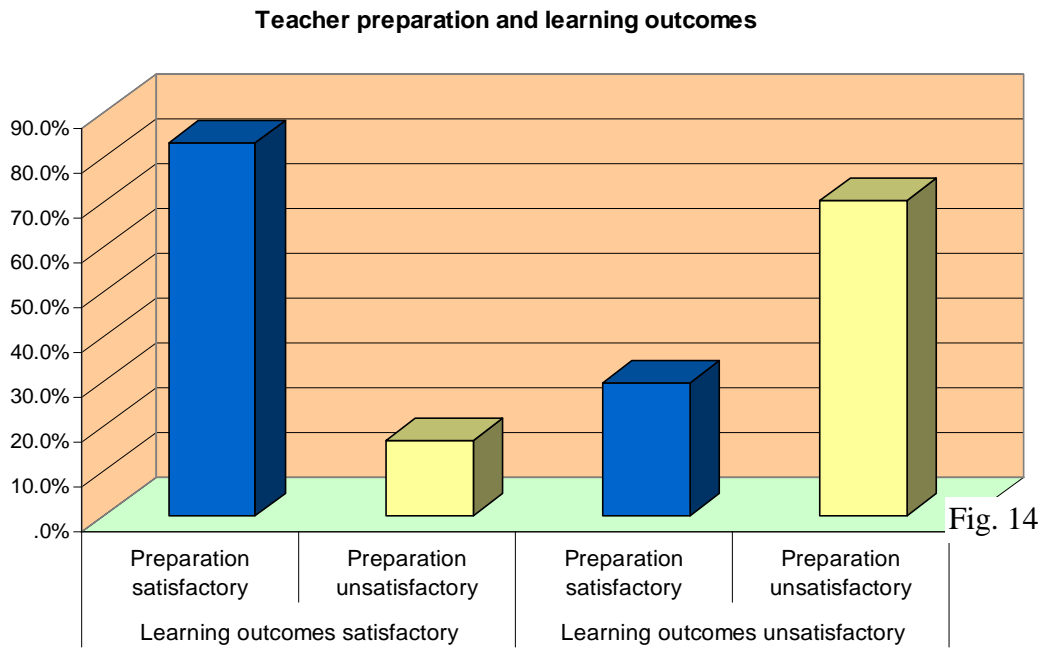
3.3.1 Teaching approaches

The data strongly suggest that the teaching approaches used in the mathematics lessons evaluated had a significant bearing on the quality of the pupils' learning. In 90.9% of the lessons with positive learning outcomes appropriate teaching approaches were used whereas in 64.9% of the lessons with weaker learning outcomes appropriate teaching approaches were not used. A similar relationship exists between the learning activities provided for the pupils during mathematics lessons and the quality of their learning. Appropriate learning activities were provided in 91.3% of the lessons with good learning on the part of the pupils whereas such activities were provided in less than one third (30.7%) of lessons with unsatisfactory learning.

The findings also highlight a relationship between pupils' learning in the mathematics lessons evaluated and how mathematics resources were used. Effective use of resources was a feature of 85.7% of lessons with satisfactory learning outcomes whereas in 69.3% of the lessons with unsatisfactory learning outcomes resources were not effectively used. The consolidation or reinforcement of learning was a characteristic of most (92.0%) of the lessons with satisfactory learning by pupils while such consolidation was evident in only two-fifths (40%) of lessons with unsatisfactory learning.

3.3.2 Preparation

One of the striking findings emerging from the incidental inspection data concerns the relationship between the preparation undertaken by teachers for mathematics lessons and the quality of pupils' mathematics learning. In 83.2% of the lessons with satisfactory learning outcomes the quality of the preparation for the lesson was also satisfactory, Fig. 14. In 70.3% of the lessons with unsatisfactory learning outcomes the preparation was not satisfactory. This highlights what is also clearly evident from the incidental inspections of English, that is, that the quality of preparation for the lessons is a critical factor in ensuring effective learning outcomes for pupils.



3.3.3 Assessment

The link between assessment practices in mathematics and pupils' learning is also strong. In 77.0% of the lessons with unsatisfactory learning outcomes assessment practices were also unsatisfactory whereas in 73.5% of the lessons with satisfactory learning outcomes assessment practices were satisfactory.

3.4 Conclusion

The findings in relation to pupils' learning in mathematics are mixed and mirror the findings in relation to pupils' learning in English. Learning outcomes were satisfactory in 85.4% of the mathematics lessons inspected but were unsatisfactory in a significant 14.6% of the lessons. Analysis of teachers' practice in relation to pupils' learning shows the following as key influences on the quality of learning outcomes in mathematics lessons:

- the teaching approaches used (including the learning activities provided, the way in which resources are used, and the extent to which learning is consolidated or reinforced)
- the preparation undertaken by teachers for lessons
- the quality of assessment practices

4 AGGREGATED INCIDENTAL INSPECTION FINDINGS

As well as giving an insight into pupils' learning in individual curriculum areas, the incidental inspection process provides an overview of the work of the schools visited with regard to pupils' learning, the quality of teaching, the assessment practices in the schools and the planning undertaken by teachers.

The overall findings regarding pupils' learning were positive in the majority (85.4%) of schools visited. There was, nonetheless, scope for development of pupils' learning in a significant minority (14.6%) of the schools. The data regarding the overall quality of teaching in the schools are similar. In 83.2% of the schools the overall quality of teaching was good, with 14.7% of these schools exhibiting significant strengths. Notwithstanding this positive finding in the majority of schools, the fact that good teaching was not evident in 16.8% of schools is of concern. Indeed, further analysis of the schools with less than satisfactory standards in overall teaching shows that in 4.1% of the total number of schools visited there were significant weaknesses in the practices of teachers.

The findings regarding the overall quality of assessment practices in schools are, as in the individual curriculum areas of English and mathematics, of particular concern. 29.3% of schools exhibited weaknesses in their assessment practices while significant weaknesses in assessment were evident in 5.5% of schools. Varying degrees of deficiency in the planning undertaken by teachers for the lessons were noted in more than two-fifths (41.0%) of schools.

5 OVERALL CONCLUSION

The incidental inspection data identify many strengths in the provision of education in the majority of the classrooms visited, both in the specific areas of English and mathematics, and across the curriculum more generally. In these classrooms, most pupils are achieving to a good standard and the teachers take a professional and effective approach to their work. Nevertheless, there is an unacceptably high number of pupils for whom the learning experience in schools is not satisfactory. Analysis of the data from the lessons evaluated in English and mathematics points to the following as major contributory factors to the quality of pupils' learning in the classrooms visited:

- the teaching approaches used
- the preparation undertaken by teachers for lessons
- the quality of assessment practices

As the data clearly show, a considerable number of schools and teachers need to improve practice in these areas in order that pupils are not short-changed in terms of the learning experiences to which they are entitled.

5.1 Practical implications

5.1.1 Preparation

One of the professional responsibilities of teachers is to prepare satisfactorily for their work. The importance of the quality of the preparation undertaken by teachers for the lessons they teach is evident in the light of the incidental inspection findings in the curriculum areas of English and mathematics. Supports in relation to planning and preparation for teaching and learning in classrooms have been provided through the various professional development support services. However, as the data show, considerable numbers of teachers are not preparing adequately for lessons. A key conclusion of this report is that all teachers must recognise their professional responsibilities in relation to being ready to deliver the curriculum in an effective way to the pupils they teach.

Adequate preparation on the part of teachers is not just about complying with Rule 126 of the *Rules for National Schools* which requires teachers to prepare long-term and short-term written plans of work. Being prepared to teach involves, among other things, identifying and sourcing necessary teaching resources to support pupils' learning, planning specific activities to promote gainful learning (taking due account of the particular learning needs and abilities of pupils), and identifying and putting in place effective systems for monitoring and tracking pupils' progress in learning. In short, effective teaching really depends to a very large extent on the amount of practical preparation undertaken by teachers for their work. Whole-school systems to support such preparation, for example, whole-school plans and collaborative sharing of expertise among teachers regarding preparation, are also important.

Principals are in a pivotal position to influence the quality of the work in classrooms through ensuring that teachers are ready to teach. By visiting classrooms regularly the principal can keep in tune with the quality of teaching in the school. Furthermore, by ensuring that teachers have written plans and the necessary resources available to them, and by supporting effective classroom-based and school-wide assessment practices, the principal can influence the quality of learning in the school in a practical and significant way.

5.1.2 Assessment

The findings from incidental inspections clearly indicate that there is significant scope for development of assessment practices in Irish primary schools. The importance of assessment in the process of teaching and learning is clearly recognised in the *Primary School Curriculum 1999*.⁹ More recently, in its published guidelines on assessment, *Assessment in the Primary School Curriculum: Guidelines for Teachers*, the NCCA highlights two particular aspects of assessment that are essential to the work of teachers:

- Assessment *for* learning whereby a teacher uses evidence from assessment on an ongoing basis to inform teaching and learning

⁹ *Primary School Curriculum 1999*, p.17-18

- Assessment of learning whereby a teacher periodically records pupils' progress and achievement for the purpose of reporting to parents, teachers and other relevant persons¹⁰

The incidental inspections show that the practice of considerable numbers of teachers in relation to assessment is at odds with the practical advice and guidance on assessment provided by the NCCA. This shortcoming has to be addressed because effective assessment is necessary for effective teaching. If teachers do not assess pupils' learning, that learning cannot be tracked and appropriate programmes of work to meet the pupils' learning needs cannot be prepared. There is a need for significant numbers of teachers and schools to improve their practices around assessment so that they have a coherent assessment process that becomes embedded in the teaching and learning cycle and becomes every teacher's everyday professional business. This is particularly important in the areas of literacy and numeracy where the significance of effective assessment for the learning programmes planned and taught is critical. The outcomes of the incidental inspections show that developing the ability to use assessment approaches to maximum effect should be a priority in continuous professional development activities for teachers.

5.1.3 Teaching approaches

The absence of collaborative or co-operative learning strategies in so many of the lessons evaluated is of concern given the potential of such strategies for enriching pupils' learning. Co-operative or collaborative learning contributes to the creation of an engaging and social classroom environment that helps pupils to master traditional skills and knowledge; furthermore, it provides a means of developing the interactive and creative skills necessary for the 21st century.¹¹ The incidental inspection findings suggest that the awareness of teachers of the potential of co-operative or collaborative learning needs to be heightened and that school staffs need to work collaboratively to put in place collaborative or co-operative learning in all classrooms as an integral methodology in teaching and learning. Similarly, there is a need for teachers and schools to ensure that the learning strategy of talk and discussion, of particular importance in the development of language and mathematics skills, features more prominently in English and mathematics lessons.

Schools and teachers also need to ensure, as a normal part of their everyday implementation of the curriculum, that pupils have access to the objects, equipment and materials necessary for them to discover, learn and consolidate their learning.

The incidental inspections conducted in the current calendar year showed that more than half of the classrooms inspected had a data projector for teaching purposes permanently in the classroom. In approximately 80% of classrooms there was a PC or laptop for teaching purposes permanently in the classroom. However, it is very obvious from the incidental inspections that greater effort is required in relation to the use of ICT in many classrooms.

¹⁰ *Assessment in the Primary School Curriculum: Guidelines for Schools*, 2007, p. 8.

¹¹ Co-operative learning: what makes group-work work?, Robert E. Slavin, in *The Nature of Learning: Using Research to Inspire Practice*: OECD 2010 (unpublished).

On the basis of the data gathered through the incidental inspection process between October 2009 and October 2010, it would appear that, notwithstanding the guidelines provided by the NCCA on the use of ICT¹², and the Department of Education and Skills recommendations regarding the integration of ICT in teaching and learning,¹³ many teachers have not yet embraced ICT as a means of enriching, extending and consolidating pupils' learning. As the Department has previously advised¹⁴, schools and teachers need to regularly review and plan for their use of ICT with a view to exploiting more fully its potential in the development of pupils' learning, particularly literacy and numeracy skills.

5.1.4 Literacy and numeracy

It is very clear that pupils' learning in an unacceptably high proportion of the lessons evaluated in the curriculum areas of English and mathematics is not satisfactory. The link between pupils' learning and the quality of the preparation, assessment, and teaching approaches in the lessons evaluated is also clear. To ensure better outcomes for learners, particularly in the areas of literacy and numeracy, weaknesses in preparation, assessment and teaching approaches must be tackled at classroom, school and system levels.

Addressing the weaknesses identified must now become an urgent school improvement issue for all schools and for the system generally. Boards of management, school principals and teachers have a responsibility in this regard. A core strategy for bringing about improvement must be the embedding of effective school self-evaluation activity in schools. Schools need to monitor the quality of teaching and learning in classrooms. Principals need to work closely with teachers to ensure that the teachers prepare properly for lessons and use effective assessment strategies. It is also clear that consideration needs to be given to prioritising aspects of the teaching of literacy and numeracy – and especially the use of assessment to improve learning – in the provision of continuous professional development for teachers and principals. These are important school improvement issues that need to be addressed in all schools so that all children are enabled to make effective progress in their learning.

¹² *Information and Communications Technology (ICT) in the Primary School Curriculum*, 2004.

¹³ *ICT in Schools: Inspectorate Evaluation Studies*, 2008, p.138.

¹⁴ *Ibid*



Incidental Inspection Findings 2010

A Report on the Teaching and Learning of English and Mathematics in Primary Schools

Incidental inspections are unannounced inspections that inspectors carry out in primary schools to evaluate the quality and effectiveness of aspects of the education provided in schools under the normal conditions of a regular school day. The focus of incidental inspections is on the quality of the education experienced by the learner.

This report from the Inspectorate of the Department of Education and Skills is a composite report on incidental inspections conducted in over 450 primary schools between October 2009 and October 2010. The report focuses on the quality of pupils' learning and the practices of teachers in the curriculum areas of English and mathematics. The main findings and practical implications of those findings for teaching and learning in the Irish primary school system are set out in this report.

The report is intended to support improvement: it sets out some of the steps that teachers, principals and the educational system in general can take to improve teaching and learning in English and mathematics.

PROMOTING THE QUALITY OF LEARNING



Inspectorate Evaluation Studies

Inspectorate Evaluation Studies present the outcomes of focused and thematic evaluations of aspects of the educational system carried out by the Inspectorate, which has statutory responsibilities for the evaluation of schools at primary and second level in Ireland. The reports in the series focus on practice in schools and are intended to disseminate good practice and policy advice based on evaluation outcomes.

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