

# Succeeding in Reading? 

Reading standards in Irish primary schools

Eemer Eivers<br>Gerry Shiel<br>Rachel Perkins<br>Judith Cosgrove

Prepared for the Department of Education and Science by the Educational Research Centre

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## Contents

Preface ..... v

1. Overview of the Survey ..... 1
2. How Pupils Performed on the Test ..... 3
3. Pupil Characteristics ..... 5
4. Home Background ..... 9
5. Classroom and Teacher Characteristics ..... 13
6. Learning-Support Teachers ..... 17
7. School Characteristics ..... 19
8. Views of Inspectors ..... 21
9. Comparing Results from 1998 and 2004 ..... 23
10. Recommendations ..... 27
References ..... 31

## Preface

This report summarises the findings of the 2004 National Assessment of English Reading (NAER), the sixth in a series of national assessments of English reading in Irish primary schools, dating back to 1972. As in the last four assessments, the reading achievements of Fifth class pupils were assessed in 2004, while the achievements of First class pupils were assessed for the first time. The present report, which is designed for a general audience, summarises key findings and recommendations in the larger, more technical, report (Eivers, Shiel, Perkins \& Cosgrove, 2005).

This report is divided into 10 chapters. Chapter 1 provides some background to the survey, and describes how it was conducted. Chapter 2 describes pupil achievement. Chapters 3 to 5 describe some of the pupil, home, and classroom characteristics associated with reading achievement. Chapter 6 describes learning-support provision, while Chapter 7 outlines some features of the schools surveyed. Chapter 8 describes the views of inspectors. Results from 1998 and 2004 are compared in Chapter 9. In Chapter 10, the main recommendations arising from the study are outlined.

## Acknowledgements

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## Statistical Terms Used in This Report

While this report is designed for a general readership, we have included some statistical terms, in order to describe our findings. These terms are explained below. The first time a term is mentioned in the report, it is shaded, indicating that you can check this page if you are unsure what the term means.

| Correlation | A correlation coefficient is a measure of the relationship between two variables. Values can range from -1.00 to +1.00 . A negative correlation (e.g., -.45) means that as one variable increases, the other decreases; a positive correlation (e.g., .35) means that both either increase or decrease together. <br> A value of 0 indicates no relationship between variables, while the closer a value is to $\pm 1$, the stronger the relationship between variables. A strong correlation does not necessarily mean that one variable causes the other; it is always necessary to consider the possible influence of other factors. |
| :---: | :---: |
| Percentile | A percentile rank indicates how a pupil's scale score compares with the scores of other pupils. If a pupil achieves a percentile rank of 10 , it means that his or her scale score is the same as, or better than, $10 \%$ of pupils nationally, on the test. |
| Scale Score | When a pupil completes a test, basic calculations are carried out to check how many answers are correct. The resulting raw scores are then converted to scale scores, to give a more regular distribution of scores, and allow comparison across different tests. |
|  | In this assessment, test results were scaled so that the average scale score on the test is 250 , and the standard deviation is 50 . This means that $68 \%$ of pupils' scores fall between 200 and 300 (i.e. within one standard deviation above or below the average of 250 ). |

Significant Difference A significant difference in achievement between groups is one that a statistical test has established is unlikely to be due to chance.

## Standard Error

This report presents mean, or average, test scores obtained by various groups of pupils (e.g., the mean score for girls in First class). Each mean has a standard error, which is an estimate of how accurately the mean found in our sample reflects the 'true' mean in the population. Standard errors are not included in this report, but can be found in the main NAER report and on www.erc.ie/naer04/e-appendix.

# 1 Overview of the Survey 

## The Reasons for an Assessment

National assessments, such as the 2004 National Assessment of English Reading (NAER), allow us to measure how education systems perform. There are many reasons for conducting national assessments, including: informing policy, monitoring standards, identifying correlates of achievement, introducing realistic standards, promoting accountability, increasing public awareness, directing teachers' efforts, raising pupil achievement, and informing political debate (Greaney \& Kellaghan, 1996). The aims of NAER 2004 were as follows:

- to assess current reading standards;
- to compare Fifth class pupil performance in 2004 with that of pupils assessed in NAER 1998;
- to inform Department of Education and Science (DES) policy development and resource allocation;
- to describe relationships between reading achievement and school, teacher, home background, and pupil factors;
- to provide a basis with which to compare the results of future assessments of English reading.


## How Reading Achievement was Assessed

The test chosen to assess reading was the Tasks for the Assessment of Reading Achievement (TARA). In both First and Fifth class, pupils completed one of several versions of a TARA test booklet, and a link test which was common to all participants at a class level. TARA provides four scores for each pupil - an overall score and three subscale scores (narrative, expository and documents). The Fifth class test included a mixture of multiple-choice and open-ended items. The First class test contained only multiple-choice items.

## Other Types of Information Gathered

A number of questionnaires were administered to collect contextual data. A School Questionnaire was given to school principals to obtain information about school characteristics (including enrolment characteristics, staffing and resources, and school planning). An Inspectors' Questionnaire sought the views of inspectors on issues relating to the teaching of English, while Class Teachers and Learning-Support Teachers completed questionnaires, which included questions on their background characteristics, teaching practices, views on the school in which they worked, and access to resources. Class teachers completed a Pupil Rating Form for each pupil selected to
take part in the assessment. The form sought information on some pupil background variables and asked teachers to rate pupils on a number of variables, including achievement in English.

Parents (or guardians) received a Parent Questionnaire, which asked for details of parental background characteristics and literacy-related activities and educational materials in the home. Separate Pupil Questionnaires were completed by First and Fifth class pupils. These included questions on attitudes to and interest in reading, homework content and frequency, engagement in leisure activities, and educational aspirations and expectations.

## Schools and Pupils Surveyed

Of the (randomly selected) schools that took part in the assessment, 114 had pupils in First class and 133 had pupils in Fifth class. In each school, no more than two classes at each grade level were selected. As shown in Table 1.1, there was a relatively even split between the number of boys and girls assessed.

| Table 1.1: Percentage of pupils completing the TARA test, by gender |  |  |
| :--- | :---: | :---: |
|  | 1st class $(\mathrm{N}=3842)$ | 5th class $(\mathrm{N}=4090)$ |
| Boys | $51.4 \%$ | $49.9 \%$ |
| Girls | $48.6 \%$ | $50.1 \%$ |

Just over 7\% of pupils in the selected classes did not complete the TARA test. Typically, this was because they were absent on the day the test was administered. Less than $1 \%$ were exempted from taking the test because their teacher felt they would be unable to complete it.

The response rates for the questionnaires and Pupil Rating Form were high (exceeding $90 \%$ in almost all cases). Indeed, the response rates were at least $95 \%$, if only those who completed the TARA test were considered. Such high response rates mean that the survey data can be taken as accurately representing the situation in Irish primary schools.

## How the Survey was Administered

Test administration was carried out in each school by class teachers, under the supervision of an inspector. Teachers administered the Pupil Questionnaire prior to the inspector's visit. To ensure test security, all test booklets were removed from schools after testing.

## 2 How Pupils Performed on the Test

In this chapter, the performance of First and Fifth class pupils on the reading test is described, following an overview of the types of reading processes and content assessed using TARA.

## Reading Processes

TARA assessed pupils' ability to use four types of reading process:

- Retrieve: This process describes a reader's ability to understand what is stated in the text, and how it relates to the information sought.
- Infer: This process describes a reader's ability to make direct inferences from the text. It may involve focusing on a particular aspect of a text, or on the text as a whole
- Interpret and integrate: This process describes a reader's ability to combine what is contained in the text with personal knowledge or experience.
- Examine and evaluate: This process describes a reader's ability to evaluate text, either from a personal perspective or from a more critical and objective viewpoint.

Most First class pupils can retrieve and infer information from what they read, and can perform some basic interpretation of texts. Fifth class pupils are expected to be able to interpret and integrate information, and to examine and evaluate what they read, as well as to perform the more basic processes of retrieving and inferring information.

As shown in Table 2.1, the percentage of items correctly answered by Fifth class pupils is highest for the retrieve process ( $66 \%$ ) and lowest for the evaluate process ( $55 \%$ ), reflecting the relative complexity of the processes. For First class pupils, retrieve also has the highest percentage of correct answers (items assessing the evaluate process were not included at this grade).

| Table 2.1: Percentages of items answered correctly, by reading process |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | 1st class |  | 5th class |  |  |
|  | \% correct | N items | \% correct | N items |  |
| Retrieve | 68.5 | 45 | 66.4 | 107 |  |
| Infer | 64.0 | 29 | 60.7 | 101 |  |
| Interpret | 56.6 | 21 | 57.7 | 69 |  |
| Evaluate | - | - | 55.2 | 16 |  |

## Reading Content

TARA examined three major reading domains, or text types, which formed three subscales:

- Narrative prose: continuous text in which the main aim is to tell a factual or fictional story
- Expository prose: continuous text in which the main aim is to convey factual information or opinion
- Documents: structured information, presented as charts, tables, maps, lists, or sets of instructions.

On average, pupils in First and Fifth class answered over $60 \%$ of items correctly (Table 2.2). At First class, the highest percentage of items answered correctly ( $70 \%$ ) was for expository items, while at Fifth class, the highest percentage correct ( $65 \%$ ) was for the documents items.

| Table 2.2: Percentages of items answered correctly, by reading content |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: |
|  | 1st class |  | 5th class |  |
|  | \% correct | Nitems | \% correct | N items |
| Narrative | 63.2 | 52 | 58.9 | 113 |
| Expository | 69.7 | 20 | 61.8 | 96 |
| Documents | 62.6 | 23 | 65.2 | 87 |
| Overall | 64.3 | 95 | 61.4 | 293 |

## Scale Scores

At each grade level, pupils' raw scores were converted to scale scores to provide a more regular distribution of scores, and to allow linking of test booklets. As this is the first time that First class pupils have been included in NAER, all scales at this level were set to an average (mean) of 250 and a standard deviation of 50 (Table 2.3). The scale for Fifth class takes 1998 as the reference year. This means that, because achievement in 2004 is not identical to that in 1998, the Fifth class scores shown in Table 2.3 deviate slightly from a $250: 50$ scale. In Chapter 9, the reading achievements of Fifth class pupil in 1998 and in 2004 are compared.

| Table 2.3: Mean scores and standard deviations, on subscales of the reading test and overall score on the test |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1st class |  | 5th class |  |
|  | Меan | SD | Mean | SD |
| Narrative | 250.0 | 50.0 | 250.1 | 48.5 |
| Expository | 250.0 | 50.0 | 250.3 | 50.0 |
| Documents | 250.0 | 50.0 | 254.8 | 54.4 |
| Overall | 250.0 | 50.0 | 251.2 | 49.2 |

## 3 Pupil Characteristics

In this chapter, we relate performance on the reading test to a number of pupil characteristics

## Gender

In First and Fifth class, girls had significantly higher average overall scale scores than boys on TARA (see Table 3.1). Girls also had significantly higher average scores on the narrative and documents subscales, but there are no significant gender differences on the expository subscale at either grade level.

| Table 3.1: Mean scale scores on the reading test, by gender |  |  |
| :--- | :---: | :---: |
|  | 1st class | 5th class |
| Boys | 244.3 | 246.8 |
| Girls | 256.3 | 253.2 |

There are slight, but not statistically significant, differences between proportions of boys and girls scoring at or below the 10th percentile, and at or above the 90th percentile. Thus, gender does not appear to be a factor in very poor or very high reading achievement

## Background Characteristics

The average age of First class pupils was 7.5 years, compared to 11.5 years at Fifth class. First class pupils who were younger than the norm obtained a below average score.

Less than $2 \%$ of pupils at either grade level were from the Traveller community. At each grade, their average score was far lower than the average score of pupils from the settled community.

Up to one in ten pupils were born outside Ireland, but only $2 \%$ spoke a language other than English or Gaeilge. First class pupils (but not Fifth class pupils) who spoke a language other than English or Gaeilge had an average score that was significantly below the overall average score on the test.

At each grade level, less than 5\% of pupils had attended an Early Start pre-school programme, while over three-quarters had attended some other form of pre-school. First and Fifth class pupils who had attended Early Start had significantly poorer scores than pupils who had attended another form of pre-school or playgroup, perhaps reflecting the

[^0]fact that Early Start targets children from very disadvantaged backgrounds. First class pupils who attended Early Start had a significantly lower mean score than pupils who had not attended any pre-school or playgroup.

## Teachers' Ratings and Pupil Achievement

Pupils were rated by their teacher on a number of behavioural variables (e.g., participation in class, ability to work with limited supervision). Pupils rated positively on one variable tended to be rated positively on other variables. Generally, the proportion of pupils described by teachers as above average was far larger than the proportion described as below average. For each variable, pupils rated as above average tended to have higher test scores than pupils rated as below average.

Teachers' ratings of pupils on academic variables (e.g., reading proficiency) were also closely related to each other and to reading achievement. For example, pupils rated as above average on reading proficiency tended to be rated above average for oral language and for English writing. There were large achievement differences between pupils rated above and below average on all of the variables (e.g., the average score for First class pupils rated as having an 'advanced' level of English reading was just over 100 points higher than the average score of pupils rated 'weak' at English reading).

## Engagement with Learning

While most pupils agreed that they liked school, $15 \%$ of First class pupils and $38 \%$ of Fifth class pupils indicated that they disliked it. Far fewer pupils (9\% in First class and $8 \%$ in Fifth class) indicated that they disliked reading. There was a clear relationship between liking reading and doing well on the reading test, but liking school and doing well on the test were not related.

School attendance rates were generally high ( $94 \%$ at First and $95 \%$ at Fifth class). Pupils who had good attendance rates tended to obtain higher test scores than poor attenders.

Almost two-thirds of First class pupils and $46 \%$ of Fifth class pupils spent 15 minutes a day or less completing their English homework (Table 3.2). In First class, highest scores on the reading test were obtained by pupils who spent five minutes or less on English homework, while in Fifth class, pupils who spent about 15 minutes on English homework obtained the highest scores.

| Table 3.2: Mean reading scores of pupils spending varying amounts of time on |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| English homework |  |  |  |  |

## Leisure Activities

Most First class pupils said that they read books for fun on a regular basis, but $12 \%$ said that they never did. Leisure reading of stories or novels was common among Fifth class pupils, although $17 \%$ indicated that they did so no more than a few times a year. Pupils who rarely engaged in leisure reading tended to have lower scores on the reading test than regular readers.

Four percent of Fifth class pupils said that they spent more than five hours a day watching TV (or videos and DVDs) on school days. These pupils obtained an average score on the reading test of 217 , which is well below the overall average (Table 3.3). Fewer pupils spent more than 5 hours on a school day playing computer games. However, the almost $2 \%$ who did obtained a very low mean score on the reading test.

| Table 3.3: Mean reading scores of pupils spending varying amounts of time watching TV <br> and playing computer games on school days (Fifth class) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | TV |  | Computer Games |  |
|  | \% in category | Mean | \% in category | Mean |
| More than 5 hours | 4.0 | 216.5 | 1.7 | 211.8 |
| 3 to 5 hours | 8.2 | 244.4 | 3.1 | 229.1 |
| 2 to 3 hours | 21.4 | 254.3 | 8.5 | 234.2 |
| 1 to 2 hours | 30.9 | 254.7 | 17.1 | 249.1 |
| Up to 1 hour | 29.8 | 251.5 | 37.5 | 252.1 |
| None | 5.7 | 237.9 | 32.1 | 257.3 |

## Educational Expectations and Aspirations

Fifth class pupils were asked how far they would like to go in school and how far they expected to go, to provide an indication of their educational aspirations and expectations. High aspirations and expectations were common, and were associated with higher scores on the reading test. For example, the $71 \%$ who aspired to a college education had a mean achievement score of 259 , which is far higher than pupils in any other category (Table 3.4).

| Table 3.4: Mean reading scores of pupils expressing varying aspirations |  |
| :--- | :---: | :---: |
| for school attainment (Fifth class) |  |

The correlation between pupils' aspirations and expectations is moderate ( $\mathrm{r}=.37$ ). Thus, for example, pupils who had high educational aspirations were also likely to have high educational expectations. However, for some pupils, expectations were lower than aspirations. For example, although $71 \%$ hoped to go to college, only $54 \%$ expected to do so.

## Chapter Highlights

- In First and Fifth class, girls have significantly higher average overall reading scores than boys.
- Pupils from the Traveller community achieve lower average scores than pupils from the settled community.
- Teacher ratings for pupil behaviour and reading skills are closely linked to test scores.
- Pupils who hardly ever or never engage in leisure reading tend to have lower scores than their classmates.
- Four percent of Fifth class pupils spend more than 5 hours a day watching TV, and these pupils obtain scores that are well below the average.
- The $71 \%$ of Fifth class pupils who hope to attend college, and the $54 \%$ who expect to, have much higher average scores than their classmates.


## 4. Home Background

In this chapter, characteristics of pupils' home environment are described. Aspects of the home environment are also related to how pupils performed on the reading test.

## Household Composition

While most pupils lived with both parents, $15 \%$ at each grade level lived in a femaleheaded lone-parent household. Pupils living in a lone-parent household averaged significantly poorer reading test scores than pupils living in other forms of household. At each grade level, average household size was five people (including the pupil). As family size increased, test scores tended to decrease.

## Socioeconomic Indicators

At each grade level, $93 \%$ of pupils had a minimum of one parent in employment. These pupils had significantly higher mean reading test scores than pupils living in households where no parent was employed (Table 4.1). Furthermore, in First class, pupils with two employed parents had a significantly higher mean score than pupils with only one employed parent.

| Table 4.1: Mean reading scores of pupils, by parental employment status |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 1st class |  | 5th class |  |
|  | \% in category | Mean | \% in category | Mean |
| No parent employed | 7.2 | 226.4 | 7.5 | 223.8 |
| One parent employed | 45.0 | 246.6 | 40.0 | 249.4 |
| Both parents employed | 47.9 | 257.7 | 52.4 | 255.1 |

Parental occupations were coded using a scale of socioeconomic status (SES). Maternal and paternal scores were combined (and the highest value was taken) to produce a 'family' score. At each grade level, pupils from high SES families tended to have higher reading test scores than pupils from low SES families.

Close to one-quarter of pupils ( $22 \%$ and $24 \%$ for First and Fifth class, respectively) were covered by the medical card scheme. The average test scores of these pupils were significantly lower than the scores of pupils whose families did not have a medical card.

Parents were asked to indicate their own level of educational attainment. The highest maternal or paternal value was taken (where both were available) to produce a family value for attainment. At First and Fifth class, there were very large differences in reading achievement associated with parental education. For example, Fifth class pupils whose parents had not completed any post-primary school examination had an average score of 214.6, compared to an average score of 278.0 for pupils whose parents had completed a postgraduate degree.

## The Home Environment

At least one-third of pupils at each grade level were read to on a daily basis before they enrolled in primary school (Table 4.2). These pupils scored significantly higher on the reading test than pupils who were read to less frequently. A similar relationship was found between achievement and the frequency with which pupils read to someone at home when they were in Infants classes.


Figure 4.1 shows the percentages of parents who said that their child had access to various resources at home. Most pupils had a quiet place to study, while First class pupils were less likely than Fifth class pupils to have access to each type of resource. At each grade level, higher reading achievement was associated with access to a larger number of resources.

Figure 4.1: Percentage of pupils with access at home to various resources


The relationship between pupils' reading scores and the number of books in the home is particularly strong (Figure 4.2). Pupils whose parents reported that they had few or no books in their home tended to perform poorly on the reading test. More than one in ten ( $12 \%$ of First class and $11 \%$ of Fifth class pupils) had 10 or fewer books in their home.

Figure 4.2: Mean reading test scores of pupils plotted against number of books in the home


At both First and Fifth class, there is a positive correlation between how often parents read books, emails, or internet materials and how well their children performed on the reading test. Parental attitudes to reading also correlate with pupil achievement (and with some of pupils' own attitudes to reading). Children who performed well on the reading test tended to have parents who had a positive attitude to reading.

Over $90 \%$ of parents said that they had rules regarding their children's TV (including DVD and video) viewing, and at least $86 \%$ had rules about playing computer games. The most common type of rule was that children could only watch TV or play computer games after they had finished their homework (Table 4.3). Only half of Fifth class pupils (and 59\% of First class pupils) were limited in the types of computer games they were allowed to play, while for a slightly larger percentage at each grade level the amount of time they were allowed to play was limited.

Table 4.3: Percentage of parents indicating that they set various types of rules for watching TV or playing computer games

|  | 1st class |  | 5th class |  |
| :--- | ---: | :---: | ---: | :---: |
|  | TV | Games | TV | Games |
| Time spent watching/playing | 65.5 | 67.4 | 54.9 | 59.0 |
| Type of material watched/played | 71.1 | 58.5 | 64.4 | 50.5 |
| Only after homework completed | 70.1 | 58.7 | 66.6 | 59.6 |

Generally, pupil achievement rose with the number of rules parents set for watching TV or playing computer games. Furthermore, pupils whose parents had rules about the amount of time they were allowed to engage in these activities, and pupils whose parents had rules about the types of materials that could be watched or played obtained significantly higher mean reading scores than pupils whose parents did not have these types of rules. Rules about completing homework before watching TV or playing computer games were not related to achievement.

## Chapter Highlights

- Pupils living in a lone-parent household, or a household where no parent is employed, have significantly lower average test scores than their classmates.
- Achievement scores tend to decrease as family size increases.
- Pupils covered by the medical card, or whose parents have few or no educational qualifications, tend to have low test scores.
- Pupils who were regularly read to before starting school, and / or who regularly read to someone at home when they were in Infants classes, have higher average test scores than their classmates.
- Pupils who can access books and resources such as an encyclopaedia, a dictionary, or a computer in their home have higher achievement scores than pupils who cannot.
- Pupils whose parents have rules about the amount of time they can spend watching TV or playing computer games, or about the types of materials they can watch or play have higher average scores than pupils whose parents do not have these types of rules.


## 5 Classroom and Teacher Characteristics

In this chapter, we describe some of the characteristics of teachers and of the classrooms in which pupils are taught.

## Teacher Characteristics

Most pupils ( $88 \%$ in First class and $63 \%$ in Fifth class) were taught by a female teacher. First class pupils' teachers averaged 15 years teaching experience, compared to 17 years at Fifth class. First class pupils were twice as likely as Fifth class pupils to be taught by a temporary or substitute teacher ( $14 \%$ versus $7 \%$ ) or by an unqualified teacher ( $9 \%$ versus $4 \%$ ). In designated disadvantaged schools, $30 \%$ of First class pupils were taught by a temporary or substitute teacher, $12 \%$ by an unqualified teacher, and $44 \%$ by a teacher with less than one year of teaching experience.

## Teaching English

The length of English lessons was approximately one hour per day. Close to 20\% of this time was spent on classroom management and administration, with the result that the average daily instruction time for English was 50 minutes in First class and 46 minutes in Fifth class. Pupils in designated disadvantaged schools had less English instruction time than pupils in non-designated schools.

A number of activities characterised the typical English lesson. In both First and Fifth class, pupils reading aloud to the class (or to small groups) was a daily feature of more than two-thirds of classrooms, while silent reading was a daily feature of approximately half of English lessons.

Thirty percent of First class pupils and $27 \%$ of Fifth class pupils never used computers in English lessons. Amongst pupils who did use computers, few used them regularly. Only $11 \%$ of Fifth class pupils and $21 \%$ of First class pupils used computers more than a few times a month as part of English lessons. Computers were most commonly used to teach basic word skills (First class), or to teach writing skills (Fifth class).

Almost all First class pupils used published reading schemes on most days (Figure 5.1). Two-thirds of First class pupils used workbooks on most days, while about half studied children's literature. Use of other types of material on most days was rare. At Fifth class, reading schemes were used on most days by almost two-thirds of pupils, while over a quarter of pupils used children's literature, reference materials, and workbooks on most days.

Figure 5.1: Percentage of First class pupils using various materials on most days during English lessons



#### Abstract

Assessment

Assessing pupils' classwork and administering teacher-made tests were by far the most frequently used methods for assessing pupils' progress in English reading and writing; well over four-fifths of pupils were assessed in these ways at least weekly. Standardised tests were typically administered once a year, but teachers of approximately $5 \%$ of pupils never used such tests. Over half of pupils at each grade level were never assessed using curriculum profiles.


## Learning Support

The teachers of almost one in five pupils described themselves as unfamiliar with the Learning-Support Guidelines (DES, 2000), while slightly less than half had contributed to their school's policy on the provision of learning support. The teachers of well over one-quarter of pupils felt that there was little or no integration between a pupil's learning in class and in learning support, or did not know if there was any integration. At each grade level, teachers of approximately half of pupils met the learning-support teacher once or twice a term, to set learning targets and plan activities. Teachers of one-quarter of First class pupils said that on most days they tried to implement agreed learning activities for pupils in receipt of learning support, but teachers of $70 \%$ of Fifth class pupils did so no more than once or twice a term, if at all.

## Teacher / Classroom Characteristics and Achievement

Only a few teacher and classroom characteristics are significantly associated with achievement and the associations are quite modest. First (but not Fifth) class pupils taught by a temporary or substitute teacher obtained a significantly lower mean score on the reading test than pupils taught by a teacher employed on a permanent basis (237.7 versus 251.9 , respectively). Temporary or substitute teachers are more likely than are
permanent teachers to work in designated disadvantaged schools and to be unqualified, but these factors do not fully explain the lower average score of pupils taught by temporary or substitute teachers.

First (but not Fifth) class pupils taught in a multigrade classroom scored significantly higher on the reading test than pupils taught in a single grade classroom (261.1 versus 245.1 , respectively). This is partially accounted for by the fact that there were no multigrade classes in the designated disadvantaged schools surveyed. If we consider only non-designated schools, there was no significant difference between multigrade and single grade settings.

At each grade level, the number of years that teachers had spent teaching is positively correlated with achievement, meaning that pupils taught by more experienced teachers tended to have higher test scores than pupils taught by inexperienced teachers (Table 5.1). The relationship is stronger in First class. In First class, but not in Fifth class, pupils' test scores tended to increase as the number of in-career development (ICD) days related to the English Curriculum attended by their teachers increased. The relationship remains significant even when recently qualified teachers are taken into account, indicating that it is not simply a matter of novice teachers having attended less ICD.

| Table 5.1: Correlations between pupils' scores on the reading test and selected class-level variables |  |  |
| :---: | :---: | :---: |
|  | 1st class | 5th class |
| Teaching experience | . 15 | . 08 |
| ICD days on English curriculum | . 15 | 01 |
| \% lesson time = instruction | . 04 | . 09 |
| Pupil : book ratio in class library | . 06 | . 15 |
| Frequency of assessment | . 14 | -. 01 |

Significant correlations shown in bold
In Fifth class, the ratio of pupils to books in the classroom library and the percentage of time in English lessons that was devoted to instruction (as opposed to classroom management) are positively correlated with pupils' achievement. Thus, as each increases, test scores also tend to increase. Finally, in First class, the frequency with which pupils were assessed (using a variety of methods) is positively correlated with reading scores. Thus, pupils who were regularly assessed by their teacher tended to have higher reading test scores than pupils who were infrequently assessed.

## Other Research on Teachers and Achievement

Many who read this summary are likely to be teachers. In this section, we outline some findings from other research that are likely to be of interest to such readers.

Firstly, evidence from long-term studies of the effects of teacher characteristics on pupil achievement show strong effects for qualifications, experience, and expertise (e.g., Darling-Hammond \& Ball, 1997). Thus, teacher characteristics matter.

Second, instructional practices matter. Frequent use of small-group instruction in Junior classes, using a range of word-recognition strategies, and using higher level comprehension questions have all been found to lead to improved reading achievement (Taylor, Pressley \& Pearson, 2002). Formative assessment, particularly where pupils engage in self-assessment, and where teachers follow structured feedback procedures, also has very beneficial effects on reading skills, with benefits most pronounced for lowachieving pupils (Black \& Wiliam, 1998).

Finally, instructional materials matter. Guthrie and his colleagues (2000) found that where schools adopted reading programmes that emphasised the use of diverse books and resources (and a much reduced use of basal readers), pupils' reading achievement tended to improve.

## Chapter Highlights

- First class pupils are twice as likely as Fifth class pupils to be taught by a temporary or substitute teacher or by an unqualified teacher.
- At both grades, approximately an hour a day is allocated to teaching English.
- Thirty percent of First class pupils and $27 \%$ of Fifth class pupils do not use computers in English lessons. Few pupils regularly used computers as part of English lessons.
- First class pupils taught by a temporary or substitute teacher achieve significantly lower scores than pupils taught by a permanent teacher.
- As teaching experience increases, pupils' reading test scores tend to increase.
- In First class, the amount of ICD a teacher had attended on the English curriculum, and the frequency with which pupils were assessed, are positively associated with achievement.
- In Fifth class, the percentage of English lesson time spent on instruction, and the ratio of class library books to pupils, are positively associated with achievement.


## 6 Learning-Support Teachers

In this chapter, the characteristics and work practices of learning-support teachers are described

## Teacher Characteristics

Most learning-support teachers (61\%) worked in a single school, while $21 \%$ worked in three or more schools. However, this may reflect the fact that teachers in large schools were more likely to be selected than were teachers in small schools. A majority (88\%) were female and very experienced, averaging 24 years as a teacher (including seven years providing learning support). Almost half (49\%) had completed a recognised diploma course in remedial education or learning support, while a further $8 \%$ were enrolled in a course. That leaves close to half (43\%) that had not attended a recognised course.

## The Work of Learning-Support Teachers

Teachers' average caseload was 31 pupils ( 30 pupils if working in a single school). Most (66\%) of their time was spent providing learning-support in English, with $19 \%$ devoted to Mathematics. Only $4 \%$ of time was spent in contact with teachers dealing with learning support issues related to English. Learning support was generally provided outside of pupils' classrooms, with $83 \%$ of respondents indicating that they never provided it in pupils' own classrooms.

In the case of both First and Fifth class pupils, at least $20 \%$ of instruction time was spent engaging pupils in reading new or familiar materials aloud, while less than $4 \%$ was spent listening to the teacher read aloud. Otherwise, the emphases on teaching activities differed at the two grade levels. For example, having pupils learn or use comprehension strategies occupied $15 \%$ of Fifth class lesson time, compared to $7 \%$ of time in First class, while teaching phonics took up 13\% of teaching time in First class, compared to $7 \%$ in Fifth class.

## Selection and Grouping of Pupils

Pupils were typically selected for learning support for English on the basis of the results of a standardised test (which was always used by $87 \%$ of respondents). However, teacher checklists, structured teacher observations, and advice from other professionals were also widely used, while parental concerns were always a criterion for $17 \%$ of respondents. The standardised tests most commonly used were the Mary Immaculate College Reading Attainment Test (MICRA-T) and the Drumcondra Primary Reading Test (DPRT).

The Learning-Support Guidelines suggest that pupils who score at or below the 10th percentile (or up to the 12 th percentile to allow for measurement error) on a standardised test should be given priority for additional support. However, our survey found that the average cut-off used to select pupils for learning support in English were the 15 th and 16 th percentile points (Table 6.1).

| Table 6.1: Mean percentile cut-off point on standardised tests used by learning-support <br> teachers to |  |  |  |  |  |  | identify |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | st | 2nd | 3rd | 4th | 5th | 6th |  |
| Mean cut-off point | 15.6 | 16.1 | 15.7 | 15.3 | 14.9 | 15.3 |  |

One-third of respondents grouped pupils according to their assessed achievement in reading; $32 \%$ grouped pupils according to grade level; $26 \%$ grouped them according to their learning needs in English; and the remainder used a combination of criteria.

## Learning Support in Schools

Almost all (95\%) learning-support teachers agreed (either very much or somewhat) that the Learning-Support Guidelines were being implemented in their school. However, fewer (73\%) felt that learning support was meeting the needs of pupils with learning difficulties in English. Over four-fifths agreed that they received adequate support from class teachers in implementing learning-support programmes. However, only $45 \%$ felt that class teachers adequately differentiated their instruction for pupils in receipt of learning support.

## Chapter Highlights

- Learning-support teachers have an average caseload of 31 pupils.
- Almost half have not completed a recognised one-year course in remedial education/ learning support.
- Outcomes on standardised tests are the most commonly used criteria to identify and select pupils for learning support for English.
- The cut-off point used to select pupils for learning support in English is usually above that indicated in the Learning-Support Guidelines.
- Less than three-quarters are of the view that learning support is meeting the needs of pupils with learning difficulties in English in their school.
- Most learning-support teachers feel that class teachers provide adequate support in implementing learning-support programmes, but less than half feel that class teachers adequately differentiate their instruction for pupils in receipt of learning support.


## 7 school Characteristics

This chapter describes the schools that took part in the survey, and relates some school characteristics to pupils' reading achievement.

## Enrolment

There was considerable variation in the size of the schools that took part in NAER ranging from 13 to 848 pupils. Average school size was well in excess of 200 pupils for both the First and Fifth class samples. Most pupils ( $95 \%$ ) were enrolled in schools where the main language of instruction was English. School-level attendance rates averaged $93 \%$, and ranged from $82 \%$ to $99 \%$. Approximately $10 \%$ of pupils were in receipt of learning support for English and 5\% in receipt of resource teaching. However, there was considerable variation between schools.

On average, 30\% of pupils participated in the School Books for Needy Pupils grant scheme, just under a quarter were covered by the medical card, and over $90 \%$ had at least one employed parent. In slightly less than $5 \%$ of schools, more than one in five pupils spoke a first language other than English or Gaeilge.

## Resources

Over $90 \%$ of pupils attended schools which had a library in each classroom, while approximately $40 \%$ could access a central school library. On average, there was one computer for every 15 pupils in First class, and one computer for every 14 Fifth class pupils. Most computers tended to be located in classrooms rather than in a central computer room. The factors most frequently cited by principals as obstacles to the teaching of reading in their school were (in descending order) large classes, shortage of learning support, and inadequate psychological services.

## School Characteristics Related to Achievement

The approximately $15 \%$ of pupils who attended designated disadvantaged schools obtained significantly lower mean scores on the reading test at both grade levels than pupils who attended non-designated schools. Average scores also tended to be lower in schools with low attendance rates and where a relatively large percentage of pupils were in receipt of learning support. In addition to considering a school's designated status, each school was assigned a composite 'deprivation score' based on four socioeconomic variables (medical card coverage, books grant, parental scores on a scale of SES, and parents whose highest level of educational attainment did not exceed Junior Certificate or equivalent). The school deprivation score shows moderate negative correlations with pupil achievement at both First and Fifth class, meaning that as a school's intake becomes more deprived, reading achievement scores decrease (Table 7.1).

In contrast, correlations between the school-level pupil-teacher ratio and reading achievement scores at First and Fifth class are positive, meaning that the higher the ratio, the better achievement tended to be (Table 7.1). This may be explained (in part, at least) by the fact that schools designated as disadvantaged tend to have lower pupil-teacher ratios. School-level attendance rates are positively correlated with achievement at both grade levels. At First class, the correlation between achievement and the proportion of parents who attended parent-teacher meetings is negative. It should be noted that pupilteacher ratios, attendance levels, and attendance at parent-teacher meetings correlate with a school's deprivation score, making the overall effects of socioeconomic factors hard to disentangle.

| Table 7.1: Correlations between school-level variables <br> and pupils' mean scores on the reading test |  |  |
| :--- | :---: | :---: | :---: |
|  | 1st class | 5th class |
| Deprivation score | -.29 | -.35 |
| School-level pupil-teacher ratio | .26 | .19 |
| School-level attendance rates | .14 | .13 |
| \% attendance at parent-teacher meetings | -.11 | .00 |

Significant correlations shown in bold

## Chapter Highlights

- The average attendance rate is 93\%, with considerable variation between schools.
- On average, $10 \%$ of pupils in each school are in receipt of learning support for English, and 5\% in receipt of resource teaching.
- The pupil-computer ratio is 15:1 in First class and 14:1 in Fifth class.
- Disadvantaged status, attendance rates, pupil-teacher ratios, and the percentage of pupils in receipt of learning-support are associated with achievement. However, each is linked to the school deprivation score, which shows the strongest correlation with achievement.

[^1]
## 8 Views of Inspectors

This chapter summarises some of the views of primary school inspectors about issues relating to the teaching of English. Fifty-one inspectors who were directly involved in inspecting schools completed the Inspectors' Questionnaire. They averaged 10 years as an inspector, and had observed a total of almost 3,000 First and Fifth class English lessons in the two years prior to the survey.

## English Lessons

All inspectors felt that class discussion of a story and teaching pupils to use reading comprehension strategies were effective approaches to teaching English. However, only $22 \%$ thought that the daily use of workbooks and worksheets was an effective strategy at First class, while $26 \%$ thought it was effective with Fifth class pupils.

Inspectors were asked to indicate their satisfaction with how teachers dealt with specific aspects of the English curriculum. Greatest satisfaction was expressed with teaching basic word identification (First class) and word meanings (Fifth class), while least satisfaction was expressed with how teachers at both grade levels developed pupils' comprehension of representational text.

Most inspectors were satisfied that teachers had adequate access to resources for teaching English, including computers, software, texts, and library materials. Fewer were satisfied with how resources were used. For example, just over three-quarters were satisfied with the availability of computers for use in English lessons, but less than one-third were satisfied with the extent to which computers were used in English lessons.

## Teaching Pupils with Differing Abilities

Most inspectors were satisfied with how teachers identified pupils' learning difficulties in English in First (78\%) and Fifth class (66\%). However, only 54\% were satisfied with how First class teachers addressed pupils' needs, a figure that fell to $44 \%$ when Fifth class teachers were considered. Just over half were satisfied with the teaching of English to pupils with a high ability in English, while the lowest level of satisfaction was recorded for the teaching of English to low-achieving pupils in both First (36\%) and Fifth class (28\%).

A majority of inspectors were satisfied or very satisfied with the quality of learningsupport provision ( $90 \%$ and $69 \%$, at First and Fifth class respectively). However, slightly less than half were satisfied with the co-ordination of the work of learningsupport and class teachers. Furthermore, only $34 \%$ of inspectors were satisfied with the integration of class and learning-support programmes in First class - a percentage that fell to $26 \%$ for Fifth class.

## Planning and Pupil Assessment

Almost all inspectors were satisfied with the administration of standardised tests of English reading, although less than half were satisfied with how test results were interpreted. At least $80 \%$ were satisfied with the feedback given to pupils during classwork and when reading aloud. Less than half were satisfied with teachers' use of informal assessments and teacher-made checklists, and with how the results of diagnostic tests were interpreted. Just over one-quarter of inspectors were satisfied with teachers' use of structured observations, and no more than a fifth were satisfied with the use and interpretation of curriculum profiles.

## Teacher Knowledge

At least $30 \%$ of inspectors selected each item from a list of 20 potential areas in which teachers might benefit from additional ICD or pre-service preparation, suggesting that inspectors believe teachers require considerable additional professional development. In particular, the teaching of oral language was an area in which almost three-quarters of inspectors felt that more training was required.

Over 80\% of inspectors felt that teachers had a comprehensive knowledge of English language structure and grammar, but less than half believed that teachers had a comprehensive knowledge of methods for teaching English. Over one-third believed that teachers had a somewhat, or very limited, understanding of the English curriculum.

## Chapter Highlights

- Most inspectors believe that the daily use of workbooks/worksheets is an ineffective way to teach English.
- Most inspectors agree that teachers have adequate access to resources, but fewer are satisfied with how resources are used.
- Up to $74 \%$ of inspectors are dissatisfied with the integration of class work with learningsupport programmes.
- Most inspectors are satisfied with teachers' administration of standardised tests, but not with how teachers interpret the results of tests.
- Less than half of inspectors believe that teachers have a comprehensive knowledge of methods for teaching English, while more than one-third believe that teachers have a somewhat or very limited understanding of the English curriculum.


# 9 Comparing Results from 1998 and 2004 

In this chapter, pupil achievements in 1998 and 2004 are compared. Changes in resources and demographics between the two years are considered, as are ways in which these might relate to pupils' reading achievement.

## Overall Achievement

As First class pupils were not assessed in 1998, we can only compare the reading achievements of Fifth class pupils in 1998 and 2004. There is no significant difference between the overall mean scores on the reading test of Fifth class pupils in 1998 and 2004, or between mean scores on the test subscales (i.e., narrative, expository and documents). Thus, there has been no significant change in overall 'reading standards' since 1998.

However, statistically significant but small changes in scores were found at key percentile points for the documents subscale. Scores at the 50th, 75th, and 90th percentiles were significantly higher in 2004 than in 1998. This means that to score, for example, in the top $10 \%$ (i.e., the 90th percentile and above), pupils needed a higher score in 2004 than in 1998. Thus, there has been a slight improvement amongst high achieving pupils on the documents subscale, although the improvement was not large enough to raise overall achievement significantly on this subscale (or on the overall scale).

## Pupil Characteristics

There were very few changes in pupil characteristics (and in how these characteristics related to reading test scores) between 1998 and 2004. For example, in both years, girls performed better than boys, but there were no significant changes in the average scores of boys or girls on the two assessments. In both years, teacher ratings of pupil reading achievement were strongly related to assessed reading achievement, and teachers rated more pupils as above average than below average.

In both years also, there is a clear association between liking reading and pupil achievement, with little change in the percentage of pupils who liked reading. However, there was a significant drop in the percentage of pupils who agreed that 'It is important for me to do well at reading'. The percentage of pupils who spent three or more hours a day watching TV on schooldays decreased, while, despite an increase in the percentage of pupils who play computer games, there was no increase in the percentage of pupils who were heavy users (defined as more than three hours a day). In both years, the detrimental effects of playing computer games and watching TV are evident only at the highest levels of use.

## Home Environment

There has been a number of significant demographic changes since 1998, including a decrease in the percentage of pupils with no parent employed, and increases in the percentage with both parents employed and in the percentage living in a lone-parent household. The percentage of pupils covered by the medical card scheme decreased, but the difference between the two years is not significant. In both years, pupils covered by the medical card, living in a lone-parent household, or with no employed parent achieved lower than average mean scores on the reading test.

Demographic changes were not reflected in changes in home 'processes'. Thus, there were no changes in the following variables: home access to an encyclopaedia or a dictionary; the number of books in pupils' homes; the extent of public library membership; or parental rules about the type and amount of TV that could be viewed. However, the percentage of parents who reported that their child had a quiet place to study doubled since 1998, while there was also a significant increase in the percentage of parents who expected that their child would complete a degree course.

## School-Level Characteristics

Schools included in the 1998 and 2004 assessments are similar in terms of school urban/rural location, sex composition, and in the percentage designated as disadvantaged. There was a slight, but not significant, increase in the percentage of schools with a Parents' Association, and a slight, and significant, increase in school attendance rates (from 91\% in 1998 to $93 \%$ in 2004). In both years, pupils in schools designated as disadvantaged scored significantly lower on the reading test than pupils in non-designated schools (a gap of 38 points in 2004, compared to 33 points in 1998). Thus, there has been no improvement in reading skills among pupils in designated schools.

In both years, scores on the reading test tended to be higher among pupils attending schools that had a high attendance rate, in which few pupils were in receipt of the 'books grant', and which had a high school-level pupil-teacher ratio. However, each of these variables is in turn closely linked to the socioeconomic composition of the school.

The level of resources available to schools has improved considerably since 1998. For example, the school-level pupil-teacher ratio decreased from 27:1 to 19:1, and the number of library books per pupil increased from 8 per pupil to almost 12 per pupil. Computer availability increased dramatically. In 1998, $16 \%$ of pupils did not have access to a computer in school; access is now universal, while the pupil-computer ratio dropped from 66:1 to $14: 1$.

## Instructional Activities

The 1998 assessment did not include a questionnaire for class teachers. Thus, a direct comparison between the situation in classrooms in 1998 and 2004 assessment is not possible. However, broad comparisons can be made with data from NAER 1993 and from an international assessment of 9-year-olds carried out in 1991.
There appears to have been a slight increase in the frequency of workbook use and in the development of pupils' reference skills, but a slight decrease in having pupils regularly write in response to reading. The regular use and interpretation of diagrammatic text increased notably as did the frequency of activities designed to develop pupils' comprehension skills/strategies.

## Chapter Highlights

- Fifth class pupils in the 2004 assessment were compared to Fifth class pupils who participated in the 1998 assessment.
- There are no significant differences between the average reading scores of pupils in 1998 and in 2004, whether the overall score or subscale scores are considered.
- There is some evidence of improvement on the documents subscale among high-achieving pupils.
- The extent of the gender difference (in favour of girls) is similar in 2004 and 1998.
- While pupil attitudes to reading remain positive, there has been a significant drop in the percentage of pupils who agree that it is important for them to do well in reading.
- The percentage of pupils who could be described as heavy TV viewers dropped.
- Despite demographic changes (such as a decrease in unemployment), there has been no change in home access to educational resources such as books.
- There have been significant improvements since 1998 in the school-level pupil-teacher ratio, and in the availability of computers and library books.


## 10 Recommendations

This chapter presents a number of recommendations directed at improving national reading standards generally, as well as at addressing the literacy needs of low- and highachieving pupils. Before that, we consider why reading standards have remained unchanged since 1998.

## Why Have Standards Remained the Same?

Given the introduction of the revised curriculum in 1999, improved socioeconomic conditions, and the considerable additional resources that have been made available to schools in recent years, there may have been an expectation that national reading standards would have improved.

It can be argued, however, that it is too early to judge the effects of the 1999 curriculum. The Fifth class pupils assessed had not experienced the revised curriculum from Junior Infants. Furthermore, two recent studies of teaching practices highlighted a number of difficulties in implementing the revised curriculum (DES Inspectorate, 2005; NCCA, 2005).

Improved economic conditions (e.g., lower unemployment) have not contributed to improved reading standards either. However, economic improvements were not accompanied by a change in factors associated with home 'process' variables, such as educational resources in the home, library membership, or parental rules. Thus, it may be that a home needs more than increased wealth - it needs to be literacy-rich - to develop reading.

Finally, while resources have improved since 1998, their full benefit may not have been passed on to pupils. For example, while there has been a huge increase in the availability of computers, few teachers use them as a regular part of English lessons. Again, it may be that the potential benefit of the many schemes designed to redress educational disadvantage was reduced because the schemes operated somewhat independently of each other. Perhaps the more coherent approach to be implemented as part of DEIS - the Department of Education and Science's action plan for social inclusion (DES, 2005) - will change this.

Since it is unlikely that any single change will bring about significant improvement, in the remainder of this chapter we propose a series of recommendations.

## Differentiation - Matching Instruction to Pupil Needs

Differentiation refers to the identification of a range of achievements and needs in a classroom, and the subsequent provision of instruction matched to the achievement level and needs of each pupil. Our survey provides evidence of insufficient differentiation in some classrooms. We recommend that teachers (particularly those teaching in multigrade classrooms) should incorporate greater differentiation of teaching practices and materials into their classrooms. Such differentiation should address the needs of both low- and high- achieving pupils.

## Teaching Practices and Curriculum Implementation

The 1999 English curriculum differs from its predecessor in a number of ways, including greater emphases on oral language, developing higher-level comprehension skills, writing in response to reading, the use of a broad range of texts, and the use of a variety of assessment techniques. We found that classroom practice does not yet adequately reflect all of these changes.

We suggest that teachers need to place greater emphasis on planning oral language, reading, and writing activities designed to enhance pupils' comprehension of text. Also, teachers require additional support in teaching reading comprehension skills as they relate to different text genres, and in developing pupils' ability to respond to reading (including emotional and imaginative responses) through oral language and writing.

The over-use of published reading schemes and workbooks by many teachers should be replaced by the use of more authentic reading texts in a range of genres and by enhanced opportunities to engage in sustained writing in response to reading.

Teachers require ICD (and additional guidance at the school-level) on assessment, to enable them to use of a wider variety of techniques, including formative assessment, and to use assessment outcomes to inform their daily teaching practices.

## Information and Communication Technologies (ICT)

Despite a dramatic improvement in the availability of computers, ICT does not form a regular or integral component of pupils' experiences in English lessons. As it is likely that use of ICT is related to teacher competence in ICT, all teachers should receive training in the application of ICT to English lessons, in matching programmes to pupils, and in providing support to pupils using such programmes.

## Co-ordination of Learning-Support and Classroom Activities

Given a lack of integration between experiences in the classroom and in learning-support settings for a sizeable minority of pupils, school principals should work to provide opportunities for regular meetings between class and learning-support teachers, and to ensure that pupils' experiences in these settings are integrated.

All teachers should ensure that they are familiar with the Learning-Support Guidelines.

## Assigning Teachers to Classes

It is common practice within schools to assign more senior staff members to senior classes, while junior classes (where teacher characteristics are most strongly related to achievement) are generally assigned the least experienced teachers. This is counter to what research recommends. We suggest that classes of beginning readers should be given priority by school principals when assigning qualified and experienced teachers.

## In-Career Development (ICD)

Most ICD should be implemented within schools on an ongoing basis. This would enable the particular needs and circumstances of each school to be addressed in a more coherent manner, as well as making ICD more accessible to teachers.

## The Role of the Home

The results of the assessment show long-term associations between pupils' reading achievement and regularly reading to children before they enrol in school and regularly reading with them while in Infants classes. There is also a clear link between the extent of education resources in the home (such as an encyclopaedia or books) and pupil scores on the reading test. We recommend that parents of pre-school children should be targeted by information campaigns explaining the importance of providing educational resources in the home, of developing children's vocabulary, and of engaging in literacyrelated interactions (e.g., regularly reading to their child).

All schools should make significant efforts to help parents in developing their children's language and literacy skills. To facilitate the adoption of effective strategies, the Home-School-Community Liaison service should disseminate details of successful initiatives to all schools (including those not categorised as disadvantaged).

## Children at Risk of Reading Difficulties

Efforts to improve reading achievement in schools in disadvantaged areas should acknowledge the sometimes negative effects of school context on the achievement of individual pupils. To address the issue, interventions that attempt to bring about improvement at the level of individual pupils must be complemented by whole-school approaches that address the literacy needs of all pupils.

Children at risk of reading difficulties should receive a greater amount of reading instruction, preferably through a combination of increased English lesson time and participation in targeted after-school support programmes.

Children who are at risk of experiencing reading difficulties, including children for whom the language of instruction is not their first language and children from the Traveller community, should receive extensive additional support, irrespective of school context.

## Gender Differences

As in most studies that examine relationships between gender and reading achievement, we found that boys achieved a lower mean score than girls on the overall reading scale. While the 'feminisation' of the teaching profession is sometimes offered as a reason for boys' slightly lower achievement, relative to girls, we found no evidence to support this.

Another reason often offered is that boys tend to have a restricted range of reading interests (e.g., non-fiction materials about topics such as cars or sport), not adequately catered for by class libraries largely composed of fiction texts. We recommend that class libraries be composed of texts reflecting a variety of interests and include a broad range of non-fiction texts. However, boys should also be encouraged, by their parents in particular, to read texts covering a variety of genres and topics.

## National Assessment of First Class Pupils

The appropriateness and value of testing First class pupils in national assessments (as distinct from teacher and diagnostic assessments) of English reading should be reconsidered.

## References

Black, P., \& Wiliam, D. (1998).

Inside the black box: Raising standards through classroom assessment. Retrieved May 21, 2004, from www.pdkintl.org/kappan/kbla9810.htm

Darling-Hammond, L., \& Ball, D.L. (1997).
Teaching for high Standards: What policymakers need to know and be able to do. Prepared for the National Education Goals Panel. Retrieved June 14, 2004 from www.govinfo.library.unt.edu/negp/Reports/highstds.htm

DES (Department of Education and Science). (2000). Learning-support guidelines. Dublin: Stationery Office

DES (Department of Education and Science). (2005). DEIS (Delivering equality of opportunity in schools): An action plan for educational inclusion. Dublin: Author.

DES (Department of Education and Science): Inspectorate (2005).
An evaluation of curriculum implementation in primary schools: English, mathematic and visual arts. Dublin: Stationery Office.

Eivers, E., Shiel, G., Perkins, R., \& Cosgrove, J. (2005).
The 2004 National Assessment of English Reading. Dublin: Educational Research Centre.

Greaney, V., \& Kellaghan, T. (1996). Monitoring the learning outcomes of education systems. Washington DC: World Bank.

Guthrie, J.T., Schafer, W., Von Secker, C., \& Alban, T. (2000) Contributions of instructional practices to reading achievement in a statewide improvement program. Journal of Educational Research, 93, 211-225.

NCCA (National Council for Curriculum and Assessment). (2005).
Primary curriculum review. Phase 1. Final report. Dublin: Author.

Taylor, B.M., Pressley, M., \& Pearson, P.D. (2002).
Research-supported characteristics of teachers and schools that promote reading achievement. In B.M. Taylor \& P.D. Pearson (Eds), Teaching reading, effective schools, accomplished teachers (pp. 361-374). Mahwah, NJ: Lawrence Erlbaum.


[^0]:    ${ }^{1}$ The standard errors associated with mean scores are available in the main NAER report and on www.erc.ie/naer04/e-appendix.

[^1]:    ${ }^{2}$ The school-level ratio, which is distinct from the ratio of pupils to teachers in a classroom, refers to all full-time teachers in a school (including learning-support teachers, resource teachers and administrative principals).

