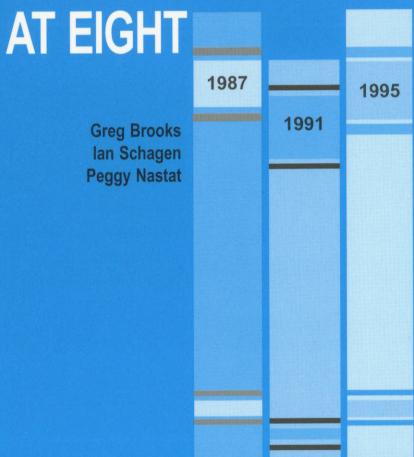
TRENDS IN READING





TRENDS IN READING AT EIGHT

A report on the 1995 survey of reading attainment in Year 3 in England and Wales

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All the statistical analysis was carried out by Ian Schagen. Peggy Nastat provided a first draft of chapters 1, 3 and 4. The remainder of the report was the work of Greg Brooks.

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BACKGROUND, KEY FINDING AND AIMS

1.1 Background and key finding

In early 1995, the National Foundation for Educational Research (NFER) carried out a survey of the reading attainment of Year 3 pupils in England and Wales, and this is the report of that survey. The survey was commissioned from NFER by the Council of Local Education Authorities of England and Wales (CLEA). The test used was level A of the *Reading Ability Series* (Kispal *et al.*, 1989). This was, in effect, the third such survey:

- The 1987 standardisation of *Reading Ability Series* level A was used as the baseline for subsequent surveys. As for most standardised tests, the average score for this test was set at 100.
- The second survey took place in 1991 (Gorman and Fernandes, 1992). The key finding then was that the average score had fallen by 2.4 standardised score points. Since this represents about six months' of reading age, the fall was not only statistically but also educationally significant.

THE KEY FINDING OF THE 1995 SURVEY WAS THAT THE AVERAGE SCORE ROSE BETWEEN 1991 AND 1995, AND IN 1995 HAD RETURNED TO THE 1987 LEVEL.

1.2 The purposes of the 1995 survey

The main purpose of the 1995 survey was to provide reliable evidence about the existence and direction of any change in average reading attainment in Year 3 from 1991 to 1995, and in particular whether the downward trend betwen 1987 and 1991 had continued, or changed.

Subsidiary purposes were:

- to compare the 1987 and 1995 results;
- to relate the 1995 results to background information about pupils and schools. Included within this aim was a commission from CLEA to attempt to use a wider range of background variables than had been used in previous monitoring surveys;

 to maintain the tradition of purpose-designed national monitoring surveys in England and Wales.

It should, however, be noted that this study was not designed to investigate the effects of particular approaches to the teaching of reading on pupils' attainment – that would require a much longer and more complex study than this.

1.3 The structure of this report

The way the survey was carried out is described in outline in chapter 2, and in full in Appendix A. The trends over time results are presented in chapter 3, and the relationships of the 1995 test results to background variables are given in chapter 4. Information on pupils' attitudes to reading, and on the relationship of those attitudes to test performance, is summarised in chapter 5. Conclusions are stated in chapter 6.

A description of the test used is given in Appendix B, and instruments used for gathering background data are reproduced in Appendices C to E.

Throughout this report, any result for which statistical significance is claimed was significant at least at the 5 per cent level (p<0.05); that is, the result would be likely to occur by chance only five times in every hundred.

AN OUTLINE OF HOW THE SURVEY WAS CARRIED OUT

A full description of how the survey was carried out is given in Appendix A.

2.1 The samples of schools

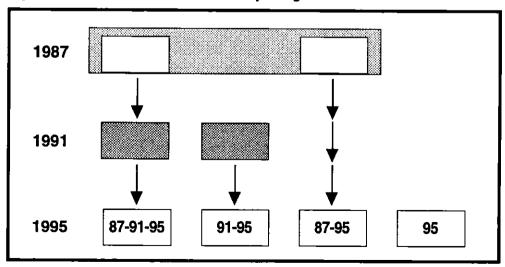
The 1995 survey was carried out in four separate samples of schools containing Year 3 pupils, as shown in Table 2.1.

Table 2.1: Samples of schools used in the 1995 survey

Sample	Number of schools	Label used in this report
Schools which had taken part in both 1987 and 1991	22	87-91-95
Schools which had taken part in 1991, but not in 1987	27	91-95
Schools which had taken part in 1987, but not in 1991	33	87-95
Schools which had taken part on neither of the previous occasions	68	95

The 1995 survey design is shown graphically in Figure 2.1. The purpose of having four samples was to check whether any trend noted was present across the board or only in certain categories.

Figure 2.1: Schema of the 1995 survey design



The schools in the 87-91-95 and 91-95 samples were chosen simply because they had taken part in 1991. The schools in the 87-95 sample were a nationally representative subset of those which had taken part in 1987 but not in 1991. The schools in the 95 sample were a freshly drawn, nationally representative sample of schools in England and Wales which contained Year 3 pupils and which had not taken part before.

2.2 The sample of pupils

The pupils involved were all in Year 3, and were born between 1 September 1986 and 31 August 1987. At the date of testing they were aged between 7 years 6 months and 8 years 6 months, and the average age was 8 years 0 months.

In each participating school, all Year 3 pupils took part in the survey. The total number of pupils for whom tests and questionnaires were returned was 4874 and 5299 respectively, from 150 schools in both cases.

The numbers of pupils for whom results are reported in the following chapters differ in many cases from those just given; this is due to missing information, for instance on whether or not pupils were receiving free school meals.

2.3 Date of testing

The survey took place in March 1995. This was, by design, exactly four years after the previous survey, which in turn was exactly four years after the standardisation.

2.4 The instruments used

The test used in this survey was level A of the *Reading Ability Series* (Kispal et al., 1989). A brief description of the test is given in Appendix B.

In 1995, in addition to taking the test, the pupils were for the first time asked to complete a Pupil Questionnaire. This contained some items on pupils' attitudes to reading, and others designed to gather background information. Further background information was gathered by means of a School Questionnaire and a Pupil Data Form. These three instruments are reproduced in Appendices C to E.

TRENDS OVER TIME, 1987–1991–1995

3.1 Trends over time calculated using all schools

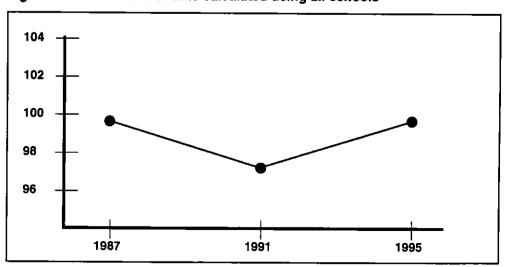
Possible trends over time were first investigated using the data from all the schools that had taken part in any of the three surveys (1987, 1991, 1995), regardless of whether they had taken part on only one occasion, or two, or all three. In order to allow for any imbalances in the samples, the scores were weighted according to the percentage of pupils in each school receiving free school meals. The main results, weighted in this way, were as shown numerically in Table 3.1 and graphically in Figure 3.1.

Table 3.1: Trends over time calculated using all schools

Year	Average standardised score	(standard deviation)	Number of schools	Number of pupils
1987	99.8	(14.7)	74	2347
1991	97.4	(15.2)	61	2064
1995	99.9	(14.9)	150	4874
Total			179*	9285

^{*} Note: The total number of schools is not the sum of this column because most schools took part on more than one occasion.

Figure 3.1: Trends over time calculated using all schools



The differences between 1987 and 1991, and between 1991 and 1995, were statistically significant, but that between 1987 and 1995 was not. The fall of 2.4 standardised score points from 1987 to 1991 confirmed the result previously reported (Gorman and Fernandes, 1992).

The main finding on this occasion was that the average score had risen by 2.5 standardised score points, and in 1995 had returned to the 1987 level.

Since 2.5 standardised score points represent about six months of reading age, the fall between 1987 and 1991 and the subsequent rise were both educationally significant also. Some possible reasons for the changes are discussed below.

3.2 Trends over time calculated using only schools which participated in 1995

In order to establish whether these trends held good not only overall but also for the various samples of schools, the results were next analysed using only schools which had taken part in 1995, and for the four samples separately. Schools which had taken part in 1987 and/or 1991 but not in 1995 were excluded from this analysis; these schools numbered 29. The purpose of this exclusion was to use, in the first three samples in this analysis, only 'repeaters', schools which participated in 1995 and on at least one previous occasion.

Also, the previous weighted analysis had shown that weighting by the percentage of pupils in a school receiving free school meals made only a negligible difference; for this analysis, therefore, unweighted scores were used. The results for pupils in the four samples are shown numerically in Table 3.2 and graphically in Figure 3.2.

The numbers of schools in the 87-91-95 and 91-95 samples were lower than the numbers which had taken part in 1991 (because some schools had since closed, or declined to take part again, etc.). The average scores and standard deviations for those samples for 1987 and 1991 given here have been calculated only for the schools which participated again in 1995, and those figures are therefore slightly different from those to be found in the report on the 1991 survey (Gorman and Fernandes, 1992).

Table 3.2: Trends over time calculated using only schools which participated in 1995

		V	verage st	andardis	ed scores,	Average standardised scores, standard deviations and sample sizes	deviation	ons and sa	mple size	S.	
	Number		1987			1991			1995		
Sample	of schools	×	(s.d.)	Z	×	(s.d.)	Z	×	(s.d.)	z	Total N
87-91-95	22	101.7	(13.8)	762	98.6	(14.3)	707	100.2	(14.6)	703	2172
61-95	27				7.76	(15.6)	926	8.66	(14.4)	1065	1991
87-95	33	7.66	99.7 (15.0) 1075	1075				6.66	(15.4)	1182	2257
95	89							101.3	(14.7)	1924	1924
Total	150			1837			1633			4874	8344

Key: \bar{x} = average score; s.d. = standard deviation; N = size of pupil sample; Total N = numbers of pupils who took part across the three occasions and four subsamples.

The statistical significances of the differences between average scores in Table 3.2 were as follows:

- within the 87-91-95 sample, both 1987 and 1995 were significantly higher than 1991;
- within the 91-95 sample, 1995 was significantly higher than 1991; and
- within the 87-95 sample, 1987 and 1995 did not differ significantly;
- and the average level of attainment of the newly-drawn nationally representative 95 sample did not differ significantly from that of the 1987 standardisation.

In other words:

- the decline observed between 1987 and 1991 had not continued, but had been reversed, and
- for the schools which had taken part in previous surveys the average score in 1995 had returned to the 1987 level.

These results confirmed for the various samples the conclusions reached from the analysis using all schools.

103 102 101 100 99 98 97 1987 1991 1995 Key: ● 87-91-95 Sample ■ 87-95 Sample O---O 91-95 ☐ 95 Sample

Figure 3.2 Trends over time calculated using only schools which participated in 1995

3.3 Discussion of the trend

An analysis of all the available data from national monitoring surveys of reading attainment carried out in the UK since 1948 (Brooks, forthcoming) suggests that the average level of attainment over that period has in general been very stable. In most cases, the average level did not change significantly between surveys; there were occasional rises, but hardly any reliably recorded falls. In fact, the fall in Year 3 in England and Wales between 1987 and 1991 may be the largest reliably recorded decline. Therefore discussion of trends in reading in Year 3 must cover not only the rise between 1991 and 1995 but also, and more particularly, the preceding fall.

What might have been happening in the educational context to account for that decline? The possibility that there had been a decline nationally in reading attainment in primary schools during the 1980s was first mooted by Turner (1990), who ascribed it to the spread of the so-called 'real books' approach to the initial teaching of reading. However, he presented only anecdotal evidence that there had been any such spread, or that phonic approaches had become less common. When the question of the frequency with which early years teachers adopt various approaches was investigated through a questionnaire survey of such teachers, the main finding was that the great majority (said that they) used a mixture of methods, and that very few (said that they) used one approach exclusively (Cato et al., 1992).

Debates over the teaching of literacy and trends in standards have included claims (like Turner's) from advocates of 'traditional' approaches that 'progressive' approaches have led to declining standards of attainment. On the other hand, advocates of 'progressive' approaches have maintained that such approaches are in some sense better or more appropriate, though such statements seem very rarely to be accompanied by claims that standards have risen as a result. But if either side were correct in maintaining the greater efficacy of its preferred approaches, and if there had genuinely been a widescale switch over previous years or decades from 'traditional' approaches, such as phonics, to 'progressive' approaches such as real books, then one would expect the impact of that switch to have shown up in national monitoring survey findings. The general trend would have been downward if the traditionalists were right, and upward if the progressives were right. But as stated above, neither of these has been the case - the average level has been remarkably stable. Thus either the switch in methods was less widespread than some have claimed, or the impact of different methods on average national levels of attainment is small, or both.

Or perhaps that half-century timespan is too broad, and influences on attainment between 1987 and 1995 should be sought nearer to the actual period concerned. Within the period of the decline in the late 1980s, two significant aspects of the educational scene were that

- the National Curriculum was introduced, and
- the proportion of teachers in primary schools leaving their job during a year increased sharply, from 9 per cent in 1987 to a peak of 14 per cent in 1990, the second largest group of leavers being those taking early retirement (Dean, 1996).

The National Curriculum broadened the curriculum for early years, and in practice meant that less time was given to literacy. Simultaneously, the departure of an unusually large number of teachers from the profession may have led to a drop in the overall effectiveness of teaching.

Between 1991 and 1995, both factors eased. The National Curriculum was revised, was no longer so crowded, and became more familiar to teachers, especially in Key Stage 1. Also, teacher turnover fell, and in 1993 was just under 8 per cent.

These factors internal to the educational system and specific to the period might be sufficient to account for the fall in average reading performance in Year 3 between 1987 and 1991, and for the return to the 1987 level by 1995.

3.4 Summary and conclusions

The 1995 Year 3 reading survey was carried out in 150 schools in England and Wales. Tests were returned for 4874 pupils.

Statistical analyses of trends over time were carried out using both the 1995 data and those from two previous surveys (1987, 1991), and on both the full sample and four subsamples.

The main finding was that the average score had risen between 1991 and 1995, and by 1995 had returned to the 1987 level. Thus the fall recorded between 1987 and 1991 had been reversed.

It was noted that two major influences on the educational system between 1987 and 1991 were the introduction of the National Curriculum and increased teacher turnover; also that between 1991 and 1995 the system settled down again. It was suggested that these changes might be sufficient to account for the observed trends over time in average reading attainment in Year 3.

CHAPTER FOUR THE 1995 RESULTS AGAINST BACKGROUND VARIABLES

4.1 Sample chosen and variables reported

This chapter is based on the test results of the same 4874 pupils in 150 schools on whom all the analyses in chapter 3 except the first were based. Those pupils' results are reported against various background variables, in the order: pupil-level variables (sections 4.2-4.5); home variables (sections 4.6-4.9); school-level variables (sections 4.10-4.11). All the variables are listed in Table 4.1.

Table 4.1: Pupil, home and school variables used in reporting the 1995 test results

Pupil variables

sex

English as a first or second language length of time in school

Key Stage 1 reading level

Home variables

free school meals consumer durables in home number of books in home home support for literacy

School variables

number of Year 3 pupils in school location (rural/suburban/urban)

PUPIL VARIABLES

4.2 Differences in performance between boys and girls

The average scores of boys and girls are given in Figure 4.1.

s.d. 2466, 14.5 Boys (52%) Girls (48%) 2307, 14.8 95 96 97 98 99 100 101 102 103 105 Average score N = Sample size s.d. = Standard deviation * Difference is significant

Figure 4.1: Average scores of boys and girls

Note: Information on gender was not available for 101 pupils (2% of the full sample)

The girls' average score was significantly higher than the boys. Such differences in reading attainment have been found in many surveys, including about half of those conducted by the Assessment of Performance Unit Language Monitoring Project at ages 11 and 15/16 between 1979 and 1988 (Gorman et al., 1988, 1991). However, this appears to be the first occasion on which such a difference has been reported at age 8 in England and Wales (though a difference at this age has been found twice in Northern Ireland – Brooks et al., 1995; Brooks et al., 1997). Also, when 1500 of the pupils in this survey were re-tested on Reading Ability Series level B at age 9 in 1996, a very similar difference in the attainment of boys and girls was found (Brooks, Pugh and Schagen, 1996).

4.3 Pupils with English as first or second language

Information on whether or not English was the pupil's first language was available for 4837 pupils. Of these, 255 (5 per cent) had English as their second language. These pupils' results, and those of pupils for whom English was the first language, are shown in Figure 4.2.

N s.d. First language 4582, 14,7 (95%)Second language **∄**12.6 255, 103 100 88 91 Average score s.d. = Standard deviation Difference is significant N = Sample size

Figure 4.2 Pupils' average scores by English as first or second language

Note: Information on this variable was not available for 37 pupils (1% of the full sample)

4.4 Length of time in school

Headteachers were asked to say how many months each pupil had been attending school at the time of the survey. Information on this was available for 4169 pupils. For statistical purposes the lengths of time pupils had been in school were grouped into four categories. These categories and the results for the pupils in each of them are shown in Figure 4.3.

The average score of children who had been in school less than 30 months was significantly lower than the scores for those who had been in school more than 40 months, and those pupils' score was in turn significantly lower than those for the other two groups, whose scores did not differ significantly. The groups did not correlate exactly with age. However, from the full data it was clear that almost all of those who had been in school less than 30 months had been born in the Summer of 1987. This result is therefore consistent with much research on summer-born children (e.g. Sharp and Hutchison, 1997). But there is no obvious explanation for why those who had been longest in school had a lower average score than the two middle groups.

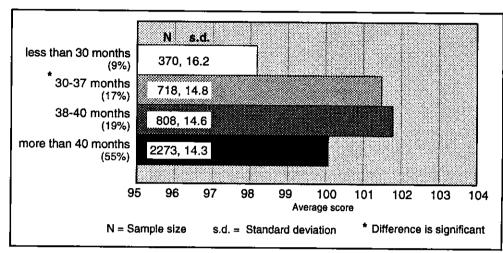


Figure 4.3: Pupils' average scores by length of time in school

Note: Information on this variable was not available for 705 pupils (14% of the full sample)

4.5 Key Stage 1 reading level

All the pupils in this survey had taken part in Key Stage 1 National Curriculum Assessment (both teacher assessments and tests) in the summer term of 1994, ten months before this survey, and for research purposes comparison of the pupils' reading test results with the results of this survey would clearly be of interest. However, this topic had to be approached with tact because of the (then) recent dispute over the national tests. In 1993, because of protest action against perceived inadequacies in the tests for Key Stages 1 and 3, very few schools had reported their results. In 1994, most schools did report, but a significant minority still did not. In this survey, therefore, schools were asked to provide their pupils' 1994 Key Stage 1 reading test results, provided that they had them and provided also that they were happy to do so; they were given the NFER's assurance that this information, in common with all information given to NFER, would be handled in strict confidence.

In the event, this information was provided for 3057 pupils, or only 63 per cent of the full sample. For other variables where data were missing on such a high percentage of pupils, no results are reported here (see section A.6). However, for Key Stage 1 results a national comparison was available as a cross-check on the representativeness of the present sample. Table 4.2 shows the distribution of these pupils across the four relevant levels of the National Curriculum scale, and the national distribution, for England only (Great Britain. Department for Education, 1994, p.29), is given for comparison.

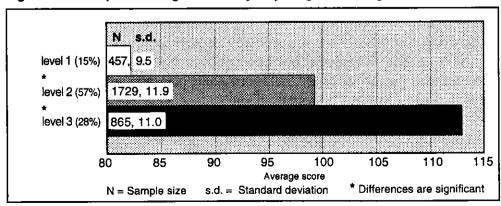
Table 4.2: Distribution of pupils' Key Stage 1 reading test results

	Thi	Nationally	
Level	Number	%	%
1	457	15	19
2	1729	57	53
3	865	28	27
4	6	<1	<1
Total	3057	100	100

The distributions for England and for this survey were very similar. It was concluded that the present sample was sufficiently representative for analysis to proceed. In order to calculate only reliable averages, the six children at level 4 were excluded; the results for the rest are shown in Figure 4.4.

All the differences between average scores were statistically significant, and this was not just confirmation of the obvious, that better readers on one test tend to be better readers on another. Other researchers (Davies et al., 1995) have found a much less strong relationship between standardised reading test scores and National Curriculum test levels. But it seems likely that this was because the reading test used by Davies et al. was very unlike the National Curriculum tests, and was sampling a significantly different aspect of the domain of literacy. Reading Ability Series level A and the 1994 National Curriculum reading test were constructed on very similar definitions of the domain, and the strong relationship between scores therefore reflects inter-test compatibility. The modest correlation between Key Stage 1 reading levels and test scores does not necessarily modify this conclusion – it probably reflects the limited range of levels in the relevant portion of the National Curriculum scale at Key Stage 1.

Figure 4.4: Pupils' average scores by Key Stage 1 reading level



Note: The correlation between Key Stage 1 reading levels and test scores was 0.65.

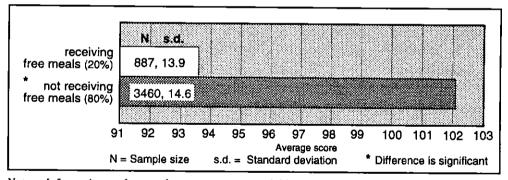
Also revealing in Figure 4.4 is the fact that the level 2 children's average score of 99.4 was very close to the national average of 100.0. The fact that the level 2 children's average score here was so close to the national average for children of average age 8 years 0 months seems to provide independent confirmation that, 10 months earlier, the mid-point of level 2 of the 1994 Key Stage 1 reading test had been set accurately at the level of attainment of the average child of 7 years 2 months.

HOME VARIABLES

4.6 Pupils receiving and not receiving free school meals

Information on whether or not pupils were receiving free school meals was available for 4347 pupils. Of these, 887 (20 per cent) were receiving free meals; this was close to the national percentage (19 per cent). The results are shown in Figure 4.5.

Figure 4.5: Average scores of pupils receiving and not receiving free school meals



Note: Information on free meals status was not available for 527 pupils (11% of the full sample)

Children receiving free schools had a significantly lower average score than others. This result replicated those of many surveys, and showed that differences in socio-economic status (SES) continued to be associated with differences in educational achievement.

When 1500 of the pupils in this survey were re-tested on *Reading Ability Series* level B in 1996, a very similar difference in attainment according to free meals status was found (Brooks, Pugh and Schagen, 1996).

4.7 Consumer durables in the home

In order to gain more detail on the relationship between SES and attainment, the pupil questionnaire contained a multiple-part item which asked children which of 10 consumer durables were present in their home; the list of consumer durables had been prepared for the Third International Mathematics and Science Study (Keys et al., 1997) and was used by arrangement with the NFER colleagues involved in that study. The numbers of pupils who ticked each of the separate consumer durables are shown in Table 4.3, in descending order of frequency.

Table 4.3: Numbers of children with different consumer durables in home

Item	Number of children	%
videorecorder	4461	92
dictionary	4266	88
car	4255	87
calculator	4234	87
microwave	4104	84
computer	3971	81
tumble drier	3786	78
desk or table for studying	3749	77
encyclopaedia	2879	59
dishwasher	2609	54

Each of the first eight items was ticked by over 70 per cent of the sample, with only encyclopaedia and dishwasher some way below. Items to support literacy (dictionary, desk, encyclopaedia) were by no means absent, but household gadgets were on the whole more frequent.

If possession of different numbers of these items is a valid measure of SES, then these differences should be reflected in differences in attainment. Accordingly, the children were grouped into four bands according to number of durables in the home, and average test scores were calculated for those groups. The results are shown in Figure 4.6.

All four average scores were significantly different, confirming the relationship between SES and achievement.

N s.d. 260. 13.5 (5%)773, 14.7 (16%)1704, 14.2 (36%)9-10 2028, 14.8 (43%)90 91 92 93 94 95 96 97 98 99 102 100 101 103 Average score N = Sample size s.d. = Standard deviation * Differences are significant

Figure 4.6: Pupils' average scores by number of consumer durables in the home

Note: Information on this variable was not available for 19 pupils (less than 1% of the full sample)

4.8 Estimated number of books in the home

Another of the questions in the pupil questionnaire asked how many books children had in their home—they were offered the five choices shown in Figure 4.7. Little reliance should be placed on the absolute numbers of books children thought were in their homes; what is of interest here is the comparative amount of support for literacy in the home indicated by the options. Information on this variable was available for 4520 pupils.

N s.d. none or very few 382, 12.5 (0 to 10 books) (8%) one shelf full 550, 13.8 (11 to 25 books) (12%) one bookcase full 1107, 14.2 ////// (26 to 100 books) (24%) two bookcases full 945, 14.2 (101 to 200 books) (21%) three or more 1536, 14.7 bookcases full (34%) 90 92 88 94 96 98 100 102 104 Average score
Sovietion * Differences are significant s.d. = Standard deviation N = Sample size

Figure 4.7: Pupils' average scores by estimated number of books in the home

Note: Information on this variable was not available for 354 pupils (7% of the full sample)

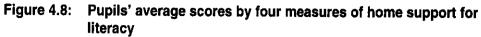
Only the difference between the last two groups in the Figure (reading downwards) was not significant. Thus whether taken as a further indirect measure of SES, or as a measure of support for literacy, estimated number of books in the home showed a clear relationship with achievement.

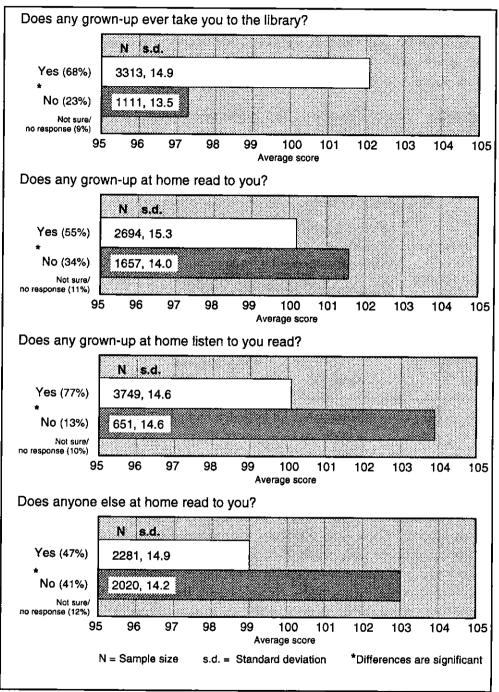
4.9 Home support for literacy

The pupil questionnaire contained four questions about literacy practices in the home, and these have been grouped here as (further) measures of home support for literacy. To each question the pupils were offered the answer options Yes, Not sure, and No. Only small proportions of children took the Not sure option or failed to respond to any of the four items. The four questions, the numbers answering Yes, No and Not sure/no response, and the results for those answering Yes or No, are shown in Figure 4.8.

All the differences between average scores for pupils responding Yes and No shown in Figure 4.8 were significant, but some require careful interpretation. It seems intuitively obvious that children who are taken to the library will be better readers, on average, but all the other three differences may seem to be in the opposite direction – better readers are read to, and heard reading, less than poorer readers. But this is in fact reasonable; families were more likely to give support to children who were not yet such good readers.

Taken with the preceding data, from consumer durables onwards, these results indicate the presence and influence of home support for literacy. This finding is consonant with the resources that even poorly qualified, mainly unemployed parents brought to Family Literacy courses (Brooks *et al.*, 1996).





SCHOOL VARIABLES

4.10 Number of Year 3 pupils in school

Information on this variable was available for 4499 pupils. For statistical purposes the schools were grouped in the five categories shown in Figure 4.9, which also shows the results.

Number of N s.d. Year 3 pupils up to 20 (10%) 456, 16.0 21-30 (14%) 619, 14.5 1087, 14.7 31-40 (24%) 982, 15.2 41-60 (22%) more than 60 1355, 14.3 (30%)103 104 105 96 97 100 102 95 98 101 Average score *Differences are significant N = Sample size s.d. = Standard deviation

Figure 4.9: Pupils' average scores by number of Year 3 pupils in school

Note: Information on this variable was not available for 375 pupils (8% of the full sample)

The average score of pupils in the schools with most Year 3 pupils was significantly lower than those of pupils in the other four groups; and the average score of pupils in the schools with fewest Year 3 pupils was also significantly higher than those of pupils in the third and fourth groups in the Figure (reading downwards). There was therefore a strong tendency for attainment to be highest in schools with fewest Year 3 pupils, and lowest in schools with most Year 3 pupils. This variable should not be taken as directly equivalent to school size – some small first schools spanning only Reception to Year 3 may have quite large numbers in Year 3, while some quite large primaries (covering nursery to Year 6) may have fewer. The finding may be confounded with school location (see the following section), since schools with larger numbers of Year 3 pupils tend to be in cities.

4.11 Location of school

Headteachers were asked to classify the location of their schools as rural (including county town), suburban, or urban (including inner city). This information was provided for 4597 pupils. The results are shown in Figure 4.10.

s.d. county town/rural 1616, 14.7 (35%)suburban (36%) 1676,14.3 urban/inner city 1305,14.9 (28%)94 93 95 96 97 98 99 100 101 102 103 Average score N = Sample size *Difference is significant s.d. = Standard deviation

Figure 4.10: Pupils' average scores by location of school

Note: Information on this variable was not available for 277 pupils (6% of the full sample)

The average score of pupils in urban schools was lower than those of pupils in schools in other locations. This is a frequent finding in monitoring surveys, and reinforces the SES data already given.

4.12 Summary

Test scores for 4874 pupils were analysed against background variables.

The principal results were:

- the girls' average score was significantly higher than the boys';
- children who had been in school for 30 months or less had a significantly lower average score than other groups. The pupils who had been in school for 30 months or less were almost all born in the Summer of 1988;
- the size of the Year 3 group in the school related inversely to average test scores – smaller year groups had higher scores, and larger year groups had lower scores. This may be related to the fact that schools with larger numbers in a year group tend to be in cities;

- the influence of socio-economic status on performance was confirmed by four results:
 - children receiving free school meals had a significantly lower average score than those not receiving free meals;
 - those with more consumer durables in the home had higher average scores;
 - those with more books in the home had higher average scores; and
 - schools in urban areas had lower average scores than those in other areas;
- the presence of home support for literacy was shown by the number of books pupils estimated were in their homes, and by the proportions of pupils reporting that an adult read to them at home, or listened to them read at home;
- the importance for attainment of home support for literacy was shown by the higher average scores of pupils who were taken to the library by an adult, and of pupils whose homes contained larger numbers of books;
- there was a close and mutually confirmatory relationship between test scores and the children's 1994 Key Stage 1 reading test levels.

CHAPTER FIVE THE PUPILS' ATTITUDES TO READING

In 1995 pupils in Year 3 were, for the first time in this series of surveys, asked to complete a questionnaire. The questionnaire contained a small number of questions on pupils' attitudes to reading. In this chapter results from these questions are reported for the 5299 pupils for whom a questionnaire was returned, and the relationship of attitudes to test performance is explored. At the end of the chapter, the relative frequency of leisure reading and some other out-of-school activities is investigated, along with the relationship between the frequency of those pursuits and attainment.

5.1 The responses to the attitudes to reading questions

The attitudes questions consisted of eight items (questions 2-9) designed to gather information on the pupils' attitudes to reading itself, and a further six-part item (question 18) on the related topic of the frequency of certain out-of-school activities. The number of attitude items was kept small both because there were other aspects of the questionnaire and in order not to overburden children of this age. The distributions of responses on the attitude items are shown in Table 5.1. The total number of pupils for each item was 5299.

The responses to items 2 and 6 suggested that between two-thirds and three-quarters of pupils enjoyed reading, and this was consistent with the findings that only about a quarter could not find books they wanted to read (item 3) or were not interested in books (item 8). The proportion who liked reading poems (69 per cent) was unexpectedly high, and almost as high as the proportion who enjoyed reading stories. Nearly two-thirds of pupils liked using a library to find things out; this suggests that many were already beginning to enjoy reading factual/expository texts as well as fiction and poetry.

Table 5.1: Pupils' attitudes to reading

Qu	estionnaire item	- 1-	N	%
2.	I like reading stories	Yes	3903	74
	_	No	357	7
		Not sure/no response	1039	20
3.	I can't find any books	Yes	1391	26
	I want to read	No	2272	43
		Not sure/no response	1636	31
4.	I like watching television	Yes	2690	51
	better than reading books	No	1242	23
		Not sure/no response	1367	26
5.	I like using a library to find	Yes	3326	63
	things out	No	750	14
		Not sure/no response	1223	23
6.	I like reading silently	Yes	3682	70
	by myself	No	785	15
		Not sure/no response	832	16
7.	Some of the books we use	Yes	1594	30
	in class are too difficult for me	No	2149	41
		Not sure/no response	1556	29
8.	I am not interested in books	Yes	1251	24
		No	3042	57
		Not sure/no response	1006	19
9.	I like reading poems	Yes	3637	69
		No	772	14
		Not sure/no response	940	18

N = Sample size

Notes: (1) Cases where percentages do not sum to 100 are due to rounding errors

⁽²⁾ The numbers of pupils who did not respond varied across items from 154 to 236 (3% to 4% of the full sample)

Just under a third found some class books too difficult. Given that these were young and still relatively inexperienced readers, this is perhaps not too surprising. But it might mean that some would begin to find difficulty in keeping up with the developing curriculum in Key Stage 2.

Half of the sample preferred watching television to reading books. Only about a quarter responded in favour of reading on this relative item, and this was a much smaller proportion than those who responded positively to those items (2, 5, 6, 9) which were phrased 'absolutely'. It therefore seems that a substantial group of pupils who liked reading nevertheless rated it below watching television.

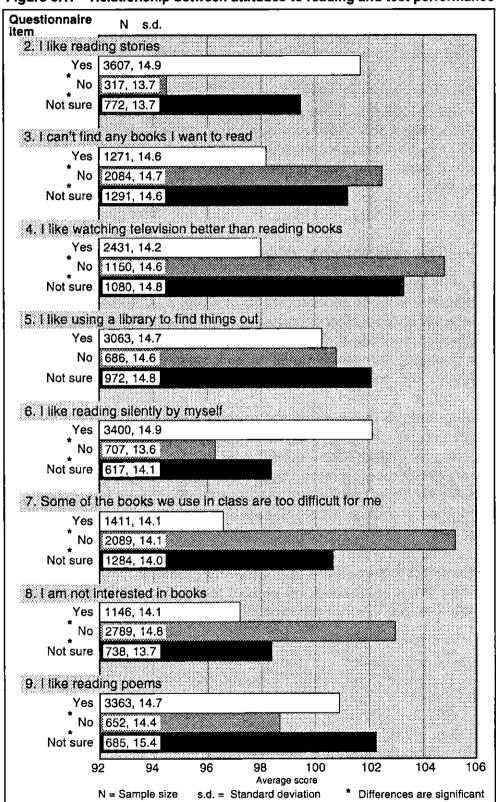
5.2 The relationship of attitudes to performance

If about a quarter of this sample had a negative attitude to reading, was that attitude reflected in their attainment? This question was explored by calculating average test scores against the responses to items 2-8. For this analysis, only data from children who both answered the questionnaire and completed the test could be used; the number varied for each questionnaire item, as shown in Figure 5.1, which also gives the results.

Ignoring Not sure responses, pupils' responses were considered as showing a positive attitude to reading if they answered Yes to items 2, 5, 6 and 9, or if they answered No to other items; otherwise as negative. On every item except 5 (library use) the average score of pupils with a positive attitude to reading was significantly higher than the average score of those with a negative attitude. All of this tends to confirm that negative attitudes to reading are reflected in lower attainment.

The largest difference (10.6 standardised score points, or about two-thirds of a standard deviation, or about two years of reading age on the test used here) occurred on item 7, which reflects difficulty in reading.





5.3 Reading and out-of-school activities

Another item in the pupil questionnaire asked the respondents: 'Out of school time, how often do you ...?', and then listed the six activities and three response categories shown in Table 5.2. This item had also been prepared for the Third International Mathematics and Science Study (Keys et al., 1997) and was used by arrangement with the NFER colleagues involved in that study. Table 5.2 also shows the frequency of responses, in decreasing order of the response 'Most days', among the 5299 pupils for whom questionnaires were returned. Here, non-responses are ignored, and percentages are calculated against the total number of pupils answering each separate item.

Table 5.2: Frequency of pupils' out-of-school activities

Out of school time,	Most days		Some days		Never		Total	
how often do you:	N	%	N	%	N	%	N	%
watch TV and videos?	2703	54	2155	43	171	3	5029	100
play with friends?	2264	45	2077	41	705	14	5046	100
play sports?	2099	42	1971	39	932	19	5002	100
read for fun?	1852	37	2102	42	1103	22	5057	100
do jobs at home?	1753	35	2419	48	871	17	5043	100
play computer games?	1704	34	2195	44	1125	22	5024	100

N = Sample size

Notes: (1) Cases where percentages do not sum to 100 are due to rounding errors

Given the young age of these respondents, it would be inadvisable to place too much reliance on the absolute figures in Table 5.2. However, the results do seem to paint a plausible picture of the out-of-school activities of 8-year-olds, and are broadly consistent with those reported above for enjoying reading and preferring television to reading. If there is a finding in Table 5.2 with important implications for pupils' literacy, it is that about a fifth of these children said they never read for fun outside school, and that this figure was much higher than those who said they never watched television or videos. Taken together with the findings that just under a third found some class books too difficult, and that such pupils had a significantly lower average test score than those who did not, this may mean that a segment of the school population can be seen even at this early age to have low literacy skills and therefore low achievement.

⁽²⁾ The overall sample was 5299; differences between this and the total Ns shown are due to non-responses; these ranged from 242 to 297 across items (5% to 6% of the full sample)

5.4 Relationship between frequency of out-of school activities and attainment

In order to investigate (among others) the hypothesis that low frequency of leisure reading would be associated with low achievement, a statistical analysis was carried out in which the average test scores of the different respondent groups to the items in question 18 were calculated and compared. The results are shown in Table 5.3, where the items are listed in the same order as in Table 5.2.

Three aspects of the statistically significant differences between scores in Table 5.3 were revealing. First, for all six items, pupils who responded 'some days' had higher average scores than those who responded 'never'. Thus pupils who had a more varied life out of school tended to achieve higher test scores.

Secondly, for all items except 'read books for fun', pupils who responded 'some days' had higher average scores than those who responded 'most days'. Thus pupils who spent the largest amounts of time on pursuits other than reading tended to achieve lower test scores.

Table 5.3: Average test scores by frequency of out-of school activities

	Most days		Some days		Never	
Activity	Average score	N	Average score	N	Average score	N
Watching TV/videos	100.2	2463	**102.4	1986	98.9	158
Playing with friends	99.3	2073	**102.9	1899	100.7	660
Playing sports	100.4	1946	**103.0	1826	97.6	827
Reading books	*102.4	1713	*101.9	1922	96.9	1015
Doing jobs at home	98.6	1592	**103.1	2229	99.3	814
Playing computer games	97.9	557	**103.1	2014	101.5	1039

N = sample size

Finally, and perhaps most significantly, the average score for those responding 'most days' for reading for fun was among the highest in the Table; while that for those responding 'never' for reading for fun was the lowest in the Table, and significantly lower than that for the other two groups on that item. This strengthens the conclusion that low frequency of leisure reading was associated with low achievement.

^{** =} score significantly different from those on either side

^{* =} score significantly different from that for 'never'

If left uncorrected, this low achievement might well persist. In fact, in the follow-up study in 1996 with the 95 sample from this survey, one of the main findings was that, on the international test used alongside *Reading Ability Series* level B, there was a 'long tail' or 'trailing edge' of low achievers compared to the distribution of scores in other industrialised countries (see Brooks, Pugh and Schagen, 1996). And a recent review of trends in literacy standards in the United Kingdom since 1948 (Brooks, 1998) found that such a group of people with low literacy skills was a feature of several recent adult literacy surveys; and that this pattern seemed to have persisted for many decades. The deleterious effect on people's lives has also been comprehensively documented recently (Bynner and Parsons, 1997). The lesson seems clear: intervene early.

5.5 Summary

- The attitudes to reading of 8-year-olds in England and Wales were analysed using the full sample of 5299 pupil questionnaires.
- Most pupils' attitudes were positive, but there appeared to be a minority (perhaps a quarter) with negative attitudes.
- Pupils with negative attitudes tended to have lower test scores than those
 with positive attitudes. The largest difference was between pupils who did
 and pupils who did not report difficulty in reading: those who did report
 this were on average two years behind their peers in reading age.
- When asked about the frequency of certain out-of-school activities, about a fifth of the sample said they never read for fun.
- Pupils with varied out-of-school activities were found to have higher average scores.
- Low frequency of leisure reading was associated with low achievement.
- The problems of pupils who have negative attitudes to reading, or report difficulty in reading, or read infrequently for pleasure need to be tackled very early in their school lives.

CHAPTER SIX SUMMARY AND CONCLUSIONS

6.1 Trends over time

A survey of the reading attainment of Year 3 pupils in England and Wales was carried out in 1995. Tests were returned by 150 schools for 4874 pupils, and questionnaires for 5299.

This was the third such survey; the previous surveys at this age had taken place in 1987 and 1991. Between 1987 and 1991 there had been a small but significant decline in average performance.

The key finding of the 1995 survey was that the average score rose between 1991 and 1995, and in 1995 had returned to the 1987 level.

The decline between 1987 and 1991 took place in the context of the introduction of the National Curriculum and of increased teacher turnover, and the improvement between 1991 and 1995 when the education system had settled down again. Those changes in the system might be enough to account both for the decline and for the recovery in average reading levels of pupils in Year 3.

The study was not designed to investigate the effects of particular approaches to the teaching of reading on pupils' attainment.

6.2 The principal 1995 results

- ♦ The girls' average score was significantly higher than the boys'.
- ♦ Children who had been in school for 30 months or less had a significantly lower average score than other groups.
- ♦ The influence of socio-economic status on performance was confirmed by several results, including:
 - children receiving free school meals had a significantly lower average score than those not receiving free meals;

- those with more consumer durables in the home had higher average scores; and
- schools in urban areas had lower average scores than those in other areas.
- The importance for attainment of home support for literacy was shown by several findings, including the higher average scores of pupils whose homes contained larger numbers of books.

There was a close and mutually confirmatory relationship between test scores and the children's 1994 Key Stage 1 reading test levels.

6.3 Pupils' attitudes to reading

- Most pupils' attitudes were positive, but there appeared to be a minority (perhaps a quarter) with negative attitudes.
- Pupils with negative attitudes tended to have lower test scores than those with positive attitudes.
- ♦ Pupils with varied out-of-school activities were found to have higher average scores.
- About a fifth of the children who answered the questionnaire said they
 never read for fun outside school, and this low frequency of leisure reading
 was associated with low achievement.
- The problems of pupils who have negative attitudes to reading, or report difficulty in reading, or read infrequently for pleasure need to be tackled very early in their school lives.

6.4 Lessons

- ♦ This survey successfully detected the (rising) trend in Year 3 pupils' reading attainment betwen 1991 and 1995.
- This trend would not have been detectable by other means (opinion surveys or national test results).

- This study therefore also maintained the tradition of purpose-designed national monitoring surveys in England and Wales.
- One of the subsidiary purposes of the study was to gather and report against a wider range of background variables than hitherto. Though some of the new attempted variables did not perform as planned, a wider range of information was gained and reported.

6.5 Recommendation

The three surveys to date have taken place at four-year intervals (1987, 1991, 1995), so that the next in the series would be due in 1999, during the National Year of Reading (school year 1998-99). It would seem appropriate to gather fresh evidence on the trend of reading attainment during the Year of Reading.

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HOW THE SURVEY WAS CARRIED OUT - FULL DESCRIPTION

A.1 The test used

The test used in this survey was level A of the *Reading Ability Series*. A brief description of the test is given in Appendix B, and full details are available in the Teachers' Manual to the Series (Kispal *et al.*, 1989).

This was, in effect, the third survey in which this test had been used:

- In 1987, Reading Ability Series level A was standardised using a sample of 2366 pupils in 74 schools. This produced nationally representative data on pupils' performance, and those results were later treated, retrospectively, as the first national survey of the reading attainment of Year 3 pupils, and as the baseline for subsequent surveys;
- In 1991, the test was again used in a survey of the reading attainment of Year 3 pupils (Gorman and Fernandes, 1992). This was specifically intended as a monitoring survey; that is, its purpose was both to establish the level of pupils' performance and to detect any change since the standardisation. In 1991, two samples of schools were used, a representative subset of 24 schools which had taken part in 1987, and a fresh nationally representative sample of 37 schools which had not. The total number of pupils across the 61 schools was 2170.

[The same test has also been used in two surveys of reading attainment of 8-year-olds in Northern Ireland, in 1993 and 1996 – see Brooks *et al.*, 1995; Brooks *et al.*, 1997.]

In 1995, in addition to taking the test, the pupils were for the first time asked to complete a questionnaire; this is discussed in sections A.5 and A.8 below.

The working time for the test was 60 minutes, plus a few minutes for administration. The time suggested for the administration of the questionnaire was 30 minutes. The time taken up by the survey per pupil was therefore about 100 minutes.

A.2 The samples of schools

The 1995 survey was carried out in four separate samples of schools containing Year 3 pupils:

Sample	Label used in this report
Schools which had taken part in both 1987 and 1991	87-91-95
Schools which had taken part in 1991, but not in 1987	91-95
Schools which had taken part in 1987, but not in 1991	87-95
Schools which had taken part on neither of the previous occasions	95

The 1995 survey design is shown graphically in Figure 2.1.

The 1995 survey design therefore both replicated and extended the 1991 design. The purpose of having four samples was to check whether any trend noted was present across the board or only in certain categories.

The schools in the 87-91-95 and 91-95 samples were chosen simply because they had taken part in 1991, and all 61 of the schools which had taken part then were asked to take part again. The schools in the 87-95 sample were a subset of those which had taken part in 1987 but had not taken part in 1991; within that group, a nationally representative group of schools were chosen and approached. The schools in the 95 sample constituted a freshly drawn, nationally representative sample of schools in England and Wales which contained Year 3 pupils and which had not taken part on either of the previous occasions. In order to select the schools in the 87-95 and 95 samples, the stratifying variables shown in Table A.1 were used.

Table A.1: Stratifying variables used to select schools in the 87-95 and 95 samples

- school type (primary, junior, independent)
- school size
- region (Wales; North, Midlands or South of England)
- (in England) whether or not within one of the former metropolitan counties

These variables were used solely for stratifying, and none was used for reporting.

The numbers of schools in each sample which were chosen and which finally returned tests are shown in Table A.2.

Table A.2: Numbers of schools chosen and returning tests, by sample and overall

	Numbers of schools		Response rate	
Sample	a) chosen	b) returning tests	(b as percentage of a)	
87-91-95	24	22	92%	
91-95	37	27	73%	
87-95	48	33	69%	
95	113	68	60%	
Total	222	150	68%	

Thus of the 109 schools which had taken part in previous surveys, 27 did not take part again. However, in each of the first three samples listed in Table A.2 enough schools did take part again to form a satisfactory basis for investigating trends over time. For a discussion of the lower participation rate in the 95 sample, and of the representativeness of all four samples, see section A.9 below.

A.3 The samples of pupils

The pupils involved in the 1995 survey were all in Year 3, and were born between 1 September 1986 and 31 August 1987. At the date of testing in 1995 they were aged between 7 years 6 months and 8 years 6 months, and the average age was 8 years 0 months.

In each participating school, all the pupils in Year 3 took part in the survey. The numbers of pupils for whom tests and questionnaires were returned are shown in Table A.3; the discrepancies are due to pupil absences.

Table A.3: 1995 survey: numbers of pupils for whom tests and questionnaires were returned, by sample and overall

	Numbe	er of pupils
Sample	Test	Questionnaire
87-91-95	703	708
91-95	1065	1265
87-95	1182	1269
95	1924	2057
Total	4874	5299

It should be noted that in chapters 3, 4 and 5 the numbers of pupils for whom results are reported differ in some cases from those just given; this is due to missing information, for instance on whether or not pupils were receiving free school meals.

A.4 Date of testing

The survey took place in March 1995. This was, by design, exactly four years after the previous survey, which in turn was exactly four years after the standardisation. In this way, possible time-of-year effects were minimised.

A.5 The pupil questionnaire

In 1995, CLEA requested that information be gathered against a rather broader set of background data than had been possible in 1991. This opportunity was taken, and more information was gathered, including some from the pupils themselves, by means of (part of) a pupil questionnaire. In Appendices C to E are reproduced the three instruments used for gathering background information, namely the Pupil Questionnaire, School Questionnaire and Pupil Data Form, respectively.

In 1995, the pupils were asked to complete the questionnaire in addition to taking the test. No pupil questionnaire had been used in either 1987 or 1991, and the main purpose of introducing one on this occasion was an experimental one, to investigate whether it would be possible to gather some background and attitudinal data from pupils of this age and to correlate the background data with the test results. In the pupil questionnaire,

- items 2 to 9 were intended to sample pupils' attitudes to reading,
- item 18 was intended to establish the frequency of pupils' reading and five other leisure activities, and
- all the remaining items were intended to gather background information.

Items 2 to 9 and 18 were successful in gathering the intended information, and the findings are reported in chapter 5.

The background information questions in the pupil questionnaire covered gender, English as a first or second language, preschool education, size of family, number of books in the home, consumer durables in the home, and several indices of home support for literacy. One of these variables (English as a first or second language) duplicated an item in the Pupil Data Form, in order to check the reliability of gathering this particular piece of information directly from pupils of this age. Otherwise, all the background information items listed earlier in this paragraph were additional to those discussed in the next section.

The reason for collecting so much background information was to contextualise the test results as fully as possible. It should be noted, however, that several items in the Pupil Questionnaire proved to be unreliable, in the sense that the results seemed unrealistic and/or uninterpretable:

- question 16 ('How often do you speak English at home?') produced results
 quite different from the corresponding item on English as a first or second
 language in the Pupil Data Form. For comparability with other surveys,
 the latter was retained;
- question 17, on forms of pre-school education, produced results quite out of line with what is known to be the national incidence (for example, only four per cent of the children in this sample said they had not been to nursery school or playgroup or a childminder);
- questions 19 and 20, both concerned with family size or structure, produced some quite impossible numbers for size of household.

Therefore no results are reported against these variables. The remaining items did, however, produce interpretable results, and these are reported alongside the other background variables in chapter 4. Since the attitudes to reading items in the Pupil Questionnaire also produced interpretable data, that questionnaire was a largely successful innovation within this survey.

A.6 Background data

By means of the School Questionnaire and Pupil Data Form, headteachers were asked to supply the information listed in Table A.4 about their schools and about those of their pupils who took the tests.

Table A.4: Background pupil and school variables collected

Pupil variables

date of birth
whether English was the pupil's first language
date of pupil's entry to school
whether the pupil was tested on entry to school
whether the pupil could read on entry to school
pupil's Key Stage 1 reading level (from national
curriculum testing, Summer 1994)
whether the pupil was receiving free school meals

School variables

number of Year 3 pupils number of full-time equivalent teaching staff location of the school (rural/suburban/urban) number of pupils with Special Educational Needs

All but four of these variables produced interpretable data. For all of the exceptions the percentages of pupils for whom schools could not supply the information were large:

- 1559 pupils out of 4874 (32 per cent) for whether pupils were tested on entry to school
- 2627 pupils (54 per cent) for whether they could read on entry to school
- 1624 pupils (33 per cent) for pupil/teacher ratio, and
- 2105 pupils (43 per cent) for proportion of pupils with Special Educational Needs.

It was concluded that the remaining pupil samples might not be reliable, and results are therefore not reported against these variables. For the different treatment of the Key Stage 1 results variable, see section 4.5.

A.7 Marking the tests

The tests were marked by a team of 10 experienced markers known to NFER using the printed marking key. The markers' reliability was checked by Anne Kispal, one of the authors of the test, and found to be satisfactory.

A.8 Variables reported

Table A.5 shows the variables against which results were calculated and are reported.

In calculating the test results pupils' dates of birth were used, since *Reading Ability Series* level A is a standardised test with norms adjusted for age; and in calculating pupils' length of time in school, data from the Pupil Data Form on date of pupils' entry to school was used.

Table A.5 lists not only pupil and school variables, but also a group called 'home variables'. Most of the background information for these variables came from the Pupil Questionnaire, and all of them concerned pupils' home circumstances in some way. It was therefore felt that they constituted a recognisably separate category, and they are reported in this way in chapter 4.

Table A.5: Pupil, home and school variables used in calculating and reporting results

Pupil variables

sex

English as a first or second language length of time in school Key Stage 1 reading level

Home variables

free school meals consumer durables in home number of books in home home support for literacy

School variables

number of Year 3 pupils in school location (rural/suburban/urban)

A.9 Representativeness of samples

At an early stage in the calculation of results an investigation was carried out into the representativeness of the samples, and therefore into whether any imbalances needed to be corrected by weighting the results. This was particularly necessary for the 95 sample, which had the lowest participation rate. It was also

necessary if the results from the four samples were to be combined, either to give overall data for 1995 when discussing trends over time, or for analysis against background variables or attitudes to reading. In order to combine results for samples drawn on different bases (as the four samples in 1995 were), it would first be necessary to show that they were (to a sufficient approximation) equally representative of the population from which they were drawn.

The proportions of schools in the four samples in various background categories were therefore compared with the national proportions in the same categories. From the results it was concluded that the four samples were sufficiently alike to combine, and the results in chapters 3 to 5 were therefore calculated on that basis. It was also established that no weightings needed to be applied – this would have been necessary to balance the results if the samples had been insufficiently representative – except in the first analysis in chapter 3.

Moreover, the representativeness of the 95 sample was so high, and the number of pupils in it was so large that, when the opportunity arose to undertake a national survey in Year 4 in 1996, the 95 sample from this survey was used again – see sections 4.2, 4.6 and 5.4 of this report, and Brooks, Pugh and Schagen (1996).

A.10 Feedback to schools

It was part of the project design that, once marking was complete, each of the schools involved would be sent the test results of those of its pupils who had participated. This information was sent out in February 1996 in the form of raw and standardised individual scores.

APPENDIX B THE TEST USED

The test used in the survey was level A of the *Reading Ability Series* (Kispal *et al.*, 1989). This series consists of six levels, A-F, which between them provide standardised norms for children of ages 7:00 to 13:11. There is an associated *Test of Initial Literacy* suitable for weaker readers at all these ages and for children under seven. The whole series was standardised in England and Wales in 1987; the questions are a mixture of multiple-choice and open-ended.

Each level of the series consists of a Reading Book and a Work Book. Level A consists of three exercises to be completed in one session of 60 minutes:

- an advertisement about 'Two Lost Kittens'. In the whole series, this is the
 only piece of text provided in the answer booklet rather than in a separate
 reading booklet. Five simple questions (one with two parts) are set on it;
- a 'Wonderland Cafe Children's Menu', with five questions (one having five parts);
- a story about 'The Time I Put a Bead up my Nose', with 10 questions.

The total number of assessable items is 25.

Detailed commentaries on pupils' performance on this test can be found both in the *Teacher's Manual* for the series (Kispal *et al.*, 1989) and in the report on the 1996 survey of reading attainment in Northern Ireland (Brooks *et al.*, 1997).

APPENDIX C THE PUPIL QUESTIONNAIRE

NFER TRENDS IN READING IN YEAR 3 PROJECT 1995

What do you think about reading?

Your name	
Your school	

GENERAL DIRECTIONS				
In this booklet, you will find questions about yourself. Some questions ask for facts. Other questions ask you what you think.				
Read each question carefully before you answer it. You may ask for help if you don't understand something.				
Some of the questions ask you to tick one box. For these questions, you have to tick the box under or next to the answer which is true for you.				
Look at Example 1.				
Example 1 Yes No				
1. I go to school				
The "Yes" box has been ticked because you go to school.				
If you decide to change your answer to a question, put an "X" over your first choice and then put a tick for your new choice as shown in Example 2.				
Example 2 agree disagree				
a lot agree disagree a lot 1. I like ice cream				
In a few questions you will be asked to tick one or more boxes. Look at Example 3.				
Example 3				
Which of the following videos do you have at home?				
tick as many boxes as you need				
Jungle Book				
Snow White				
Fantasia				
I have ticked the boxes for Jungle Book and Snow White because I have these videos at home. I do not have Fantasia so I have not ticked that box.				
For a few questions you will be asked to write an answer in the space provided. Please be sure that your writing is clear.				
· ·				

Are you a girl or a boy? Pl I like reading stories. I can't find any books I want to read.		Boy Girl Some box in e	
I like reading stories.		Girl [
I like reading stories.		L one box in e	
I like reading stories.			
	YES	Not sure	NO
I can't find any books I want to read.			
L			
I like watching television better than reading books.			
I like using a library to find things out.			
I like reading silently by myself.			
Some of the books we use in class are too difficult for me.			
I am not interested in books.			
I like reading poems.			
Does any grown-up ever take you to the library?			
Does any grown-up at home read to you?			
Does any grown-up at home listen to you read?			
Does anyone else at home read with you?			
(If YES) Who?			
How did you learn to read?			

		_ 	
16. How often do you speak English	at home?		
	always or almost always		
	sometimes		
	never		
17. Before you started school, did yo	ou		
		tick as many boxe	es as you need
go to nursery school?			
go to playgroup?			
go to a childminder?			
18. Out of school time how often do	you		
	1	Tick one box in each	line
	Most days	Some days	Never
watch television and videos?			
• play computer games?			
play with friends outside school	ol?		
• do jobs at home?			
• play sports?			
• read a book for fun?			
	<i>3</i>		

19. Which of these people live at home with you most or all of the time?				
Tick	as many boxes as you need			
· mother				
· father				
· one or more brothers				
· one or more sisters				
· anyone else				
20. Altogether, how many people live in your home?				
Write in the total number of people.				
(Don't forget to include yourse	lf.)			
21. About how many books are there in your home?				
(Do not count magazines, newspapers, or your school bo	oks.)			
	Tick one box			
none or very few (0 - 10 books)				
enough to fill one shelf (11 - 25 books)				
enough to fill one bookcase (26 - 100 books)				
enough to fill two bookcases (101 - 200 books)				
enough to fill three or more bookcases (more than 200)				
4				

22. Do you have any of these things at home?	any boxes as you need
1.07.45 77	will bones as you need
• calculator	
• computer	
 study desk/table for you to use 	
• dictionary	
 encyclopaedia 	
• car	
• tumble dryer	
 dishwasher 	
 microwave 	
• video recorder	
THANK YOU VERY MUCH FOR FILLING	IN THIS OF IESTIONNAIDE
THE TOO VEHT WOOTT OFFI LEING	IN THIS GOESTIONNAINE
5	

APPENDIX D THE SCHOOL QUESTIONNAIRE

NFER TRENDS IN READING IN YEAR 3 PROJECT 1995

A study being carried out on behalf of the Local Education Authorities of England and Wales.

SCHOOL QUESTIONNAIRE

Please return the completed questionnaire, together with the tests and pupil questionnaires, to the NFER, using the pre-paid label provided, within two weeks of receipt.

If you have any queries please contact: Field Research Services, NFER, The Mere, Upton Park, Slough, Berkshire SL1 2DQ Tel.: (01753) 574123 Ext.272.

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National Foundation for Educational Research in England and Wales

1. Type o	f catchment area:	(please circle)
	mainly country town and/or rura	1
	mainly suburban	
	mainly urban/inner city	
2. Numb	ber of pupils in Year 3 in 1994/ (please enter nu	
	number of	boys
	number of	girls
3. Pupils	s with Special Educational Nee	ds
	e give the numbers of pupils in the as stages of the Code of Practice:	
	number of pupils at St	tage 1
	number of pupils at St	age 2
	number of pupils at St	rage 3
	number of pupils at St	age 4
	number of pupils at St	age 5
includ	er of full-time equivalent teachers ing any non-teaching Head or ling non-teaching assistants:	
	(please enter number)	

5.	School Policies Does your school have a policy document on:	(please o	circle)
	boto your concornation a point, accument on	Yes	No
	 5.1 Parental involvement in teaching children to read? 5.2 Using other adult volunteers to teach children to read? 5.3 Pupils taking school reading books home? 5.4 Materials for and approaches to the teaching of reading. 	1	2 2 2 2
	We would be most grateful if you could send us a cop documents you have said YES to above. Please tick the to show which document(s) you are sending:	following	boxes
		(please ti	ck)
		5.1	_
		5.2	
		5.3	=
6.	The Nature of the School:		
	If your school did NOT take part in either the 1987 or please go to Section 7.	the 1991	study,
	If your school DID take part in either (or both) of the please complete this section.	earlier st	udies,
	Pressor compress since consum	(please ci	ircle)
	6.1 Since your school last took part, has the age rang whom it caters been changed?	e of pupil	s for
		Yes 1	No 2
	If Yes, please give brief details here:		
	2		

6.2	2 Since your school last took part, has the management type school changed (e.g. has it gone from 'county' to voluntary or from LEA-maintained to grant-maintained)?				
		0	(please ci	rcle)	
			Yes	No 2	
	If Yes, please give brief d	etails here:	1	2	
		• • • • • • • • • • • • • • • • • • • •			
		•••••	•••••		
6.3	Since your school last affected by new buildin	took part, has i g?	ts catchment area l	oeen	
			Yes	No	
-	If Yes, please give brief d	etails here:	1	2	
•	•••••••••••		••••••		
		••••••			
6.4	Since your school last to changed greatly (that is,	ook part, has the by more than 1	e overall number on 0%)?	roll	
	Has declined by 10% or more	About the same	Has increased by 10% or more		
	1	2	3		
	If there has been a chan change and the reasons i		brief details of the		
		• • • • • • • • • • • • • • • • • • • •			
		3			

	whom English is a seco	imi-baago on	inged signification). please circ		
	Has declined by 10% or more	About the same	Has increased by 10% or more		
	1	2	3		
	If there has been a change, please give brief details of the change and the reasons for it:				
6.6	Since your school last took part, has the catchment area experie a significant growth or decline in population?				
	Has declined by 10% or more	About the same	Has increased by 10% or more		
	1	2	3		
	If there has been a change, please give brief details of the change and the reasons for it:				

6.7	Since your school last took part, has there been any othe significant change in its character or circumstances?				
			Yes		
			1		
	If Yes, please give brie	ef details here:			

7.a	Have you noticed ar	v change in the ave	rnga raadina ahilit.		
/ .a	Have you noticed any change in the average reading ability of Year 3 pupils over the past four years?				
	Has improved	About the same	Has deteriorated		
	1	2	3		
	-	_	-		
7.b	If you have noticed a four years, what fact change?	a change in reading s	standards over the pa		
7.b	If you have noticed a four years, what fact	a change in reading s	standards over the pa		
7.b	If you have noticed a four years, what fact	a change in reading s	standards over the pa		
7.b	If you have noticed a four years, what fact	a change in reading s	standards over the pa		
7.b	If you have noticed a four years, what fact	a change in reading s	standards over the pa		
7.b	If you have noticed a four years, what fact	a change in reading s	standards over the pa		
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7.b	If you have noticed a four years, what fact	a change in reading s	standards over the pa		
7.b	If you have noticed a four years, what fact	a change in reading s	standards over the pa		
7.b	If you have noticed a four years, what fact	a change in reading s	standards over the pa		
7.b	If you have noticed a four years, what fact	a change in reading stors do you think ha	standards over the pa		

APPENDIX E THE PUPIL DATA FORM

	
	KS1 reading level
Month	Could read on entry?
CCT 1995 Day ng:	Tested on entry?
NFER TRENDS IN READING IN YEAR 3 PROJECT 1995 PUPIL DATA FORM Day Day	6 Month/ Year of entry
/EAR JRM E	SEN SEN
JIN Y	FSM FSM
READING IN YEAR PUPIL DATA FORM	Absentee
NDS IN F	Language
SR TRE	Date of birth d m y
NFJ	Sumame
School name:	Pupii No First Name
School	Pupil No



TRENDS IN READING AT EIGHT

In March 1995, the National Foundation for Educational Research carried out a survey of reading attainment in Year 3 classes in England and Wales. The survey followed up similar surveys carried out in 1987 and 1991. The key finding of the 1991 survey was that the average score had **fallen** by 2.4 standardised score points, or about six months of reading age, since 1987.

THE KEY FINDING OF THE 1995 SURVEY WAS THAT THE AVERAGE SCORE ROSE BETWEEN 1991 AND 1995, AND IN 1995 HAD RETURNED TO THE 1987 LEVEL.

Other principal 1995 results were:

- The girls' average score was significantly higher than the boys'.
- Children who had been in school for 30 months or less who were mainly summer-borns - had a significantly lower average score than others.
- Children receiving free school meals had a significantly lower average score than those not receiving free meals.
- The importance for attainment of home support for literacy was shown by several findings, including the higher average scores of pupils whose homes contained larger numbers of books.
- There was a close and mutually confirmatory relationship between test scores and the children's 1994 Key Stage 1 reading test levels.
- About a fifth of the children said they never read for fun outside school, and this low frequency of leisure reading was associated with low achievement.