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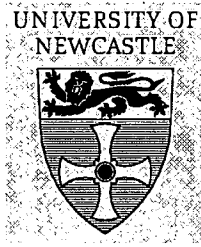
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ABSTRACT

In 1998, the British Government introduced the National Literacy Strategy (NLS) in all state primary schools (encompassing students aged 5-11) in England in a bid to raise literacy standards. A year earlier, 13 local education authorities were involved in the piloting of the project, including the city of Newcastle upon Tyne. The first Newcastle cohort of primary schools (n=19) implemented the project in January 1997, the second cohort (n=20) began in September 1997. Each cohort consisted of 3 different year groups (Year 1, Year 2, and Year 3). The aim of this project was to focus upon exam results from these schools and thereby identify possible predictors of success (e.g. socio-economic status, gender, teaching and learning style). As well as looking for differences within each cohort, the project also looked at differences between the two cohorts. In addition to this, in-depth case studies of three of the schools were conducted. Each case study involved a further analysis of pupil-level data, interviews with key staff, and observations of the "literacy hour" in action. The wider implications of the findings for the implementation of the NLS and for the training needs of teachers are also considered. Findings suggest: (1) scores are improving, but maintaining that progress could be difficult; (2) evidence from teachers indicates a gap is opening up between the more able and less able children; (3) there was a general feeling that none of the current tests were adequate measures of success; and (4) teachers in this sample are embracing the NLS. (Contains 35 figures and 13 tables of data.) (RS)



Evaluating the effectiveness of the National Literacy Strategy: identifying indicators of success

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8th June, 1999

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Executive Summary

In 1998, the Government introduced the National Literacy Strategy (NLS) in all primary schools (aged 5 - 11 years) in England in a bid to raise literacy standards. Two years earlier, thirteen local education authorities were involved in the piloting of the project. In the LEA we studied, the first cohort of primary schools (n=19) implemented the project in January 1997, the second cohort (n=20) began in September 1997. Each cohort consisted of three different year groups (Year 2, Year 4 and Year 6). The aim of this project was to focus upon exam results from these schools using three outcome measures (i.e. value-added data, a standardised reading test and National Curriculum English tests), and thereby identify possible predictors of success (e.g. socio-economic status, age of pupils, teaching and learning style). As well as looking for differences within each cohort, we also looked at differences between the two cohorts.

In addition to this, we also carried out in-depth case studies of three of the schools. Each case study involved a further analysis of pupil-level data and interviews with key members of staff.

The research questions and main findings of the study are summarised below:

1. How effective has the NLS been so far?

The findings of the analysis support the belief that the NLS is having an impact upon the schools: Suffolk Reading Scale results (all year groups) and Performance Indicators in Primary Schools (PIPS) year 2 results were significantly better in 1997/8 than in 1996/7. The National Curriculum English test results at Key Stages 1 and 2 also showed improvement but not significantly.

When looking to see if the Cohort 1 schools had made more progress than Cohort 2 schools (due to being part of the NLS for longer), the results did not support this.

In sum, there seems to be an improvement in 1997/8 compared to 1996/7 for both cohorts. One would have expected Cohort 1 to have made even more improvement because it has been part of the NLS for longer. However, it did not. This suggests that schools are improving, but that maintaining the progress could be difficult.

2. Is there any evidence to suggest that some pupils benefit more than other?

Correlation and multiple regression techniques found a relationship between the percentage of pupils on free school meals (FSM) and exam results. Schools with higher numbers on FSM obtained lower exam results. The percentage of pupil with English as an additional language (EAL) also played a role in some cases.

Evidence from the interviews with teachers suggests that there is a gap opening up between their more able and less able children. The 'average' and above average pupils are benefiting from the NLS, but those with special educational needs (SEN) are being left behind: this means that a polarisation effect could be occurring which needs to be

monitored e.g. Are SEN pupils falling behind the standards achieved by more able pupils?

3. What are the indicators of success with regard to the NLS?

Success as defined by exam scores in National Curriculum tests, PIPS and the Suffolk reading test is related to FSM (as described above). This is not a surprising result. Interview data also suggests that pupils with SEN are generally not benefiting from the NLS (with some notable exceptions). It is possible that schools with a higher proportion of SEN pupils have found the NLS to help their pupils because of the need to address this problem at a more general level.

There was a general feeling that none of the current tests were adequate measures of success. Each measures a rather limited amount of learning as related to the NLS. It was suggested that the NFER exit tests were much better at testing progress. Also, teachers' own professional judgements were seen as just as important.

The importance of never lowering expectations just because most of a school's pupils are on FSM was emphasised. The role of the parent was also seen as very important:

'Pupils at schools in the more affluent areas of the city go home and they have a computer in the house and they've got reading games. They see an adult reading and see that literacy has a role in their daily life.'

In the socially deprived areas of the LEA area, the parents want to be able to help their children, but don't have the resources to do so. Therefore homework clubs are important.

4. Are teachers embracing the NLS?

The teachers in this sample are embracing the NLS. This has been easier for those schools which were involved in the National Literacy Project (NLP). Teachers believe that the NLS's structure, its continuity and progression, helped schools with high pupil turnovers and also helped to smooth over any staff changes. On the whole, teachers do not think that the literacy hour is too prescriptive. They actually welcome the structure that it provides and feel that there is still scope for teachers to use their own judgement.

Most of the teachers interviewed felt some degree of injustice with regard to provision. Large and small schools alike receive the same amount of money. The emphasis on multiple copies of text and the need for big books with big text has put a strain on schools' budgets.

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1. Introduction

Since 1997, a major thrust of the new Labour government has been to address standards of literacy in English primary schools. Major policy decisions have followed from recommendations made by a Literacy Task Force established on 31 May 1996 by David Blunkett, then Shadow Secretary of State for Education. It was charged with developing, in time for an incoming Labour government, a strategy for substantially raising standards of literacy in primary schools over a five to ten year period. In a bid to achieve this end, the National Literacy Project was piloted in 13 LEAs and was due to run for five years. This in turn led on to the National Literacy Strategy, launched in August 1997 (DfEE, 1997), and the recently issued Framework for Teaching (DfEE, 1998). The framework has been operating under a quasi-statutory status in all state English primary schools since September 1998. It sets out the teaching objectives for pupils from reception (aged 5 years) to year 6 (aged 11 years) and gives guidance on the 'literacy hour' in which the teaching should take place.

The strategy has had a major impact on many aspects of primary education, including teaching styles and the organisation of the school day. At the current time, £71 million has been set aside for the implementation and development of the NLS making it the largest and most costly attempt to improve literacy standards in primary schools to date. Such a 'top-down' initiative also represents a major shift away from 'bottom-up' approaches to curriculum and teacher development which characterised previous government literacy initiatives.

A recent review of research evidence in support of the National Literacy strategy (Beard, 1999) shows how the Framework draws upon programmes supported by research from different parts of the world (e.g. Clay, 1993; Slavin, 1997; Crevola and Hill, 1998) which are designed to raise standards of literacy, particularly in relation to the needs of disadvantaged pupils. The programmes share common features by specifying teaching methods (e.g. a fast-paced, structured curriculum; direct, interactive teaching; systematic phonics in the context of interesting texts; a combination of shared and paired reading and writing; early intervention for pupils who have not made expected progress after one year at school) which are supported by teacher effectiveness research so as to ensure that primary teachers and schools are well-informed about best practice and have the knowledge and skills to act upon it. However, none of the programmes have fully run their course and in each case there is a need for further empirical research to evaluate the impact of such programmes on learning outcomes, classroom practices and teachers' thinking.

In light of this, a team of researchers from Newcastle University were commissioned by a local education authority to analyse literacy data from its primary schools. We concentrated the study around 39 primary schools. By using a quantitative and qualitative approach we hoped to identify predictors of success (success being defined by exam performance). Possible predictors of success included such variables as: percentage of pupils on free school meals, age of pupils, time of literacy project implementation, teaching and learning style and management of the literacy project within the school. We had several types of data available including: a standardised reading test; national examination results and value-added data.

We also carried out a case study of three schools (one chosen from Cohort 1 and two chosen from Cohort 2). We analysed each school's data at the pupil-level (in contrast to the summary data above). This allowed for a much more in-depth analysis of the three schools, and by interviewing key members of staff within each school we were able to investigate the effects of teachers' thinking, teaching and learning styles and class management skills upon the success of the project.

2. Method

2.1 Introduction

The first cohort of primary schools began implementation of the National Literacy Strategy (NLS) in January 1997. It included 19 schools. Some of these schools did not include all years in the implementation: a couple only achieved full implementation by September 1998. The majority of Cohort 1 schools, however, implemented NLS in all classes on this date. Cohort 2 began full implementation in 20 schools in September 1997. A further cohort (3) of 21 schools began in September 1998. Finally, all 93 schools in the LEA became involved in the NLS. This study focuses upon the first 2 cohorts.

Cohort 1 was not randomly selected. The schools in Cohort 1 were identified as priority schools due to their lower National Curriculum exam scores compared to other schools. This is important because any comparison between Cohorts 1 and 2 should focus upon the progress made rather than exam results *per se*.

Three schools serving different catchment areas and at different stages of implementation of the NLS were chosen as interesting case studies.

2.2 Description of test data available

In this study, three different types of test results were available:

- PIPS
- Suffolks
- KS1 and KS2 National Curriculum assessments (SATs)

The Performance Indicators in Primary Schools (PIPS) are a range of tests administered and analysed by the Curriculum, Evaluation and Management Centre (CEM Centre) at the University of Durham. The tests cover maths, reading, science, self-esteem and contextual variables (e.g. non-verbal ability, picture vocabulary and a measure of home background). Reception years through Year 2, Year 4, Year 6 and Year 8 are involved in the tests. Science is not tested until Year 6.

PIPS provided schools with standardised data which allows them to compare their performance with other schools in the same LEA. In addition to this, PIPS provide two kinds of value-added data: contextual and prior achievement. Contextual value-

added gives a measure of how well a pupil has performed in relation to their contextual score, e.g. considering the number of books in their house, their self-esteem and their attitude to reading, have they performed better or worse than expected? Prior achievement value-added compares their present performance to their past performance in the same exam.

A value-added score of zero means that the pupil is performing in line with expectations. A positive score implies that the pupil is performing better than expected. A negative score implies the pupil is performing worse than expected.

The Suffolk Reading Scale is available in three different levels: level 1 is used for Year 3 (some schools also give this to Year 2), level 2 is for Year 5 (sometimes Year 4) and level 3 is for Year 7 (sometimes Year 6). This is a progressive sentence completion test where the pupil must choose the most appropriate word from a choice of five, e.g.

It was _____ light in the room. much few any very just

This data is provided as a standardised score.

The Key Stage 2 National Curriculum assessments for 11 year olds are for English, Maths and Science. They are designed so that most pupils will move up one level every two years. The final score consists of a score for reading, spelling, handwriting and writing test. Level 4 is expected of 11 year olds. In May 1997 the Government stated that it wanted 80% of 11 year olds to have reached level 4 in KS2 English by 2002.

3. Quantitative results

3.1 Background data

In 1997/8, the average mean roll call, excluding nursery children, was 264. Among the schools there is considerable variation, the SD being 115. Figure 3.1 shows the distribution of roll call for both cohort schools (there were no appreciable differences between the cohorts). Figure 3.1 shows that the majority of schools in the sample had between 190 and 330 children on their roll call, excluding nursery children.

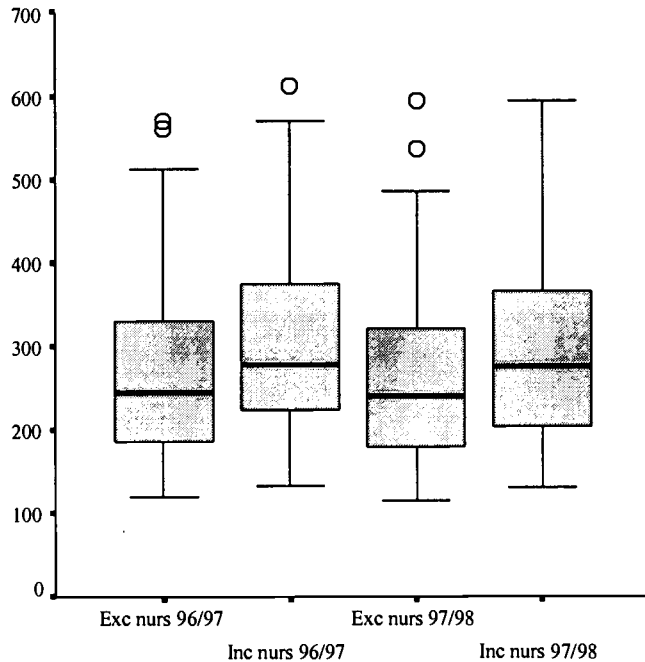


Figure 3.1: Roll call numbers in all schools for 96/97 and 97/98

The circles in Figure 3.1 indicate outliers. School C has a very high roll call. The highest roll call is 593 excluding nursery pupils.

In 1997/8, the average percentage of children on free school meals (FSM) was 52%. In 1997/8, the average percentage of children with English as an additional language (EAL) was 6%. Figure 3.2 shows the distribution of FSM and EAL for all schools.

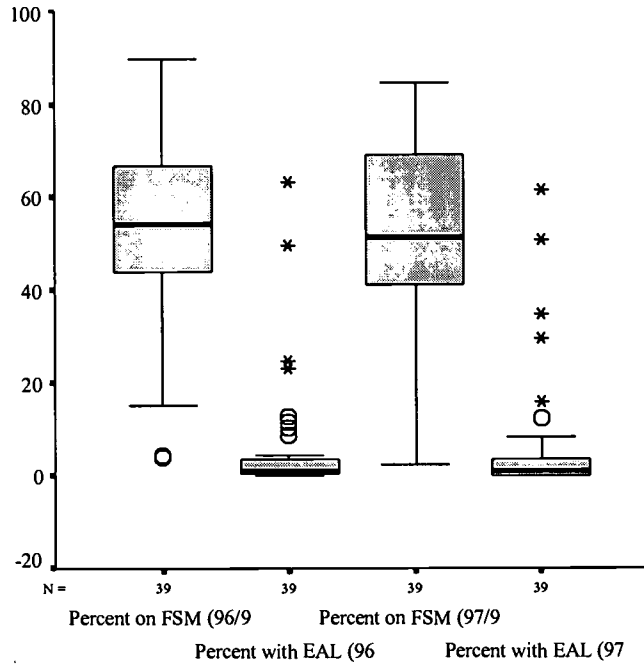


Figure 3.2: Percentage of pupils on FSM and with EAL in all schools for 96/97 and 97/98

3.2 PIPS scores for 1996/7 and 1997/8

Table 3.1 shows the average standardised PIPS scores for Cohorts 1 and 2 in 1996/7. On average, Cohort 2 schools obtained better PIPS scores than Cohort 1 schools. The majority of Cohort 1 schools had been part of the NLS since January 1997, whereas Cohort 2 schools did not begin the NLS until September 1997. As stated in Section 3.1, Cohort 2 consists of better performing schools so this result is to be expected: the *progress* made by both cohorts is of more importance, as is an investigation of whether PIPS scores are improving year after year (i.e. by comparing 1996/7 PIPS with 1997/8 PIPS).

Table 3.1: PIPS standardised scores for 1996/7

	Cohort 1			Cohort 2		
	Mean	SD	N	Mean	SD	N
Year 2	45.40	3.53	N=18	48.97	4.34	N=19
Year 4	45.53	3.77	N=18	48.77	5.01	N=19
Year 6	46.27	2.97	N=16	48.53	6.58	N=12

An independent t-test found a significant difference between Cohort 1 and 2 for PIPS scores, for years 2 ($t=-2.74$, $p<0.01$) and 4 ($t=-2.22$, $p<0.05$). The difference between the year 6 pupils in Cohorts 1 and 2 was not large enough to be significant ($t=-1.12$, n.s.).

Figure 3.3 below shows the same data, but gives a better idea of the variability within each group. It can be seen that there is more variability within the second cohort.

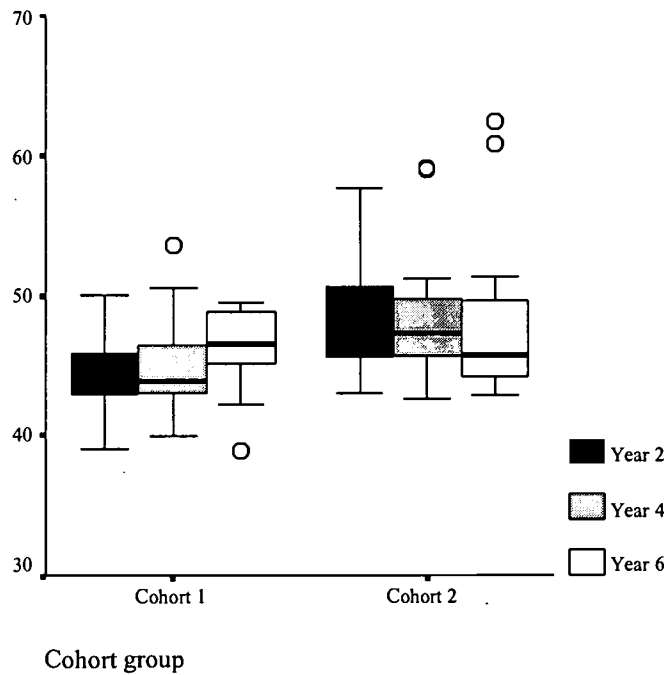


Figure 3.3: A boxplot showing PIPS standardised scores for 1996/7 for Years 2, 4 and 6: Cohorts 1 and 2

Table 3.2 shows the average value-added PIPS scores for Cohorts 1 and 2 in 1996/7. On average, Cohort 2 schools were performing in line with expectations (based on context scores). Years 2 and 4 in Cohort 1 were under-performing and Year 6 was performing slightly below expectations.

Table 3.2: PIPS value-added scores for 1996/7

	Cohort 1			Cohort 2		
	Mean	SD	N	Mean	SD	N
Year 2	-1.85	2.37	N=18	-.34	2.32	N=19
Year 4	-2.01	1.82	N=18	.05	2.64	N=19
Year 6	-.83	2.06	N=16	.02	2.73	N=12

Figure 3.4 below shows that Cohort 2 schools contained more variability within each group – especially within Years 4 and 6.

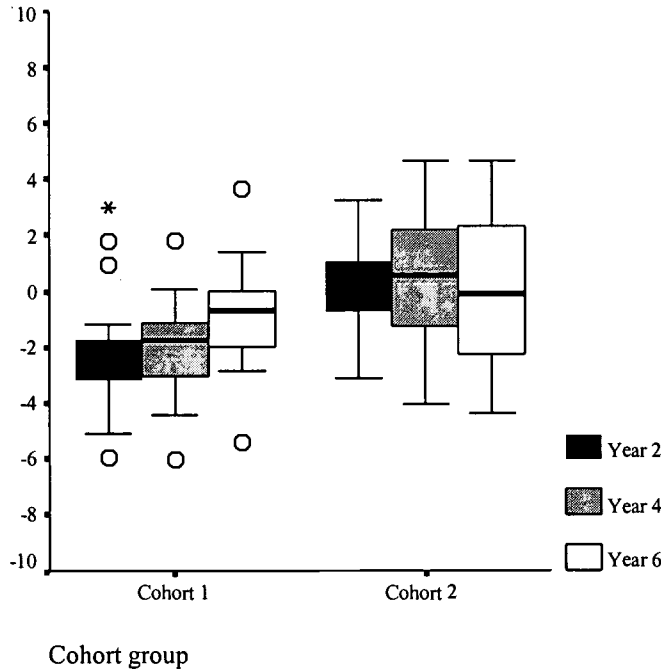


Figure 3.4: A boxplot showing PIPS value-added scores for 1996/7 for Years 2, 4 and 6: Cohorts 1 and 2

Table 3.3 shows the average standardised PIPS scores for Cohorts 1 and 2 in 1997/8. Once again, Cohort 2 schools obtained better PIPS scores than Cohort 1 schools. Also (as with last year), this difference was found to be significant for years 2 ($t=-2.64$, $p<0.05$) and 4 ($t=-2.42$, $p<0.05$), but not for year 6 ($t=-1.64$, n.s.).

It should be remembered that this difference between cohorts is not surprising because Cohort 2 contains better performing schools.

Table 3.3: PIPS standardised scores for 1997/8

	Cohort 1			Cohort 2		
	Mean	SD	N	Mean	SD	N
Year 2	45.73	3.47	N=18	49.19	4.43	N=19
Year 4	45.34	3.27	N=18	48.39	4.32	N=19
Year 6	46.00	5.22	N=16	49.04	4.29	N=12

Figure 3.5 below is a boxplot of the above information.

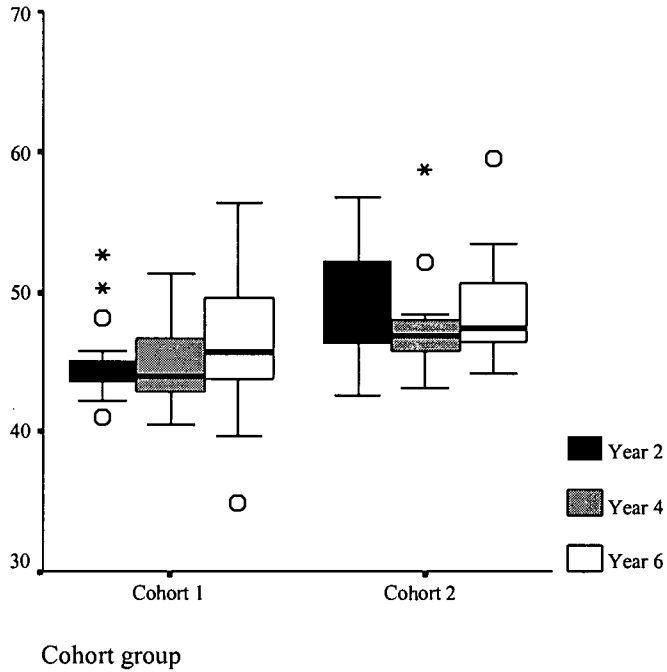


Figure 3.5: A boxplot showing PIPS standardised scores for 1997/8 for Years 2, 4 and 6: Cohorts 1 and 2

The question arises of whether these scores are any different to the 1996/7 scores and, if so, did either cohort make more progress than the other (or any year within each cohort)? Figure 3.6 goes some way to answering this question. It is clear that there is a difference between the cohorts (as expected), but there appears to be no marked interaction effect between cohort and year of exam (it might have been expected that Cohort 1 schools would have made more progress in the second year than Cohort 2 schools because they had been part of the NLS for longer).

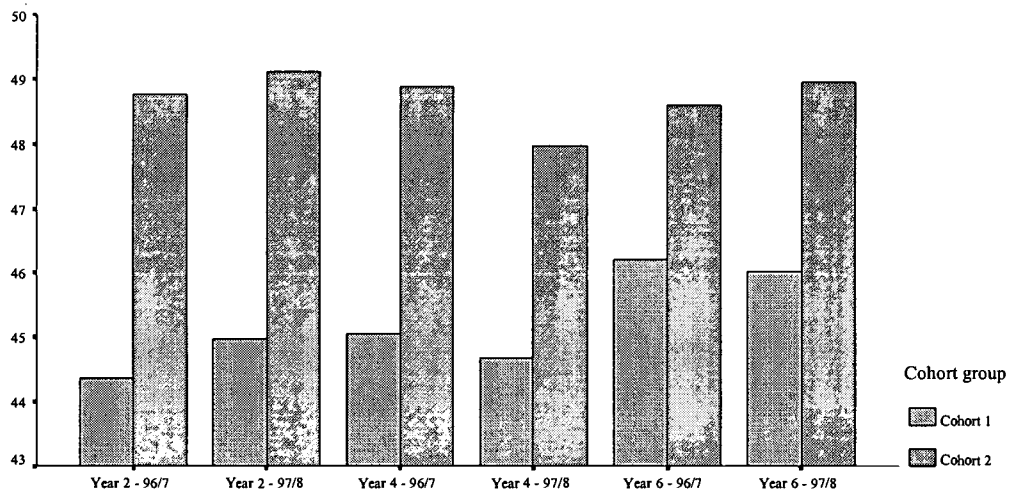


Figure 3.6: A bar chart showing PIPS standardised scores for all years in 1996/7 and 1997/8: Cohorts 1 and 2

A General Linear Model (GLM repeated measures) was performed upon this data, with year of exam as a within-subject variable and cohort group as a between-subject variable. This test was performed on each year group separately. A significant difference between cohorts was found for years 2 and 4 ($F=9.24$, $p<0.01$; $F=5.90$, $p<0.05$) but not for year 6. This confirms the t-test results found earlier. Figure 3.6 shows that the difference between cohorts for year 6 is not as pronounced as that between the other years. There was no interaction effect for any of the three year groups. Therefore neither cohort made more progress than the other.

It is also possible to compare the 1996/7 pupils with the 1997/8 pupils. A look at the graph above shows that year 2 pupils in both cohorts performed better in 1997/8. There appears to be no difference for the other two year groups. The test performed above found no significant difference between the 1996/7 pupils and the 1997/8 pupils (year 2 – $F=0.19$, n.s.; year 4 – $F=0.44$, n.s.; and year 6 – $F=0.2$, n.s.). Even if the result was significant, any improvement in scores for the 1997/8 group could be attributable to both the NLS and any ‘quirks’ of that year group.

The value-added data in Table 3.4 for Cohorts 1 and 2 in 1997/8 is interesting. It shows that, in contrast with the values-added data for 1996/7 Cohort 1 schools were performing under expectations but not as extreme. Also, Cohort 2 schools were under-performing slightly (compared to last year this situation is worse). Figure 3.7 is a boxplot of this information.

Table 3.4: PIPS value-added scores for 1997/8

	Cohort 1			Cohort 2		
	Mean	SD	N	Mean	SD	N
Year 2	-.94	2.83	N=18	-.44	3.26	N=19
Year 4	-.84	2.46	N=18	-.87	2.53	N=19
Year 6	-.94	3.93	N=16	-1.08	3.04	N=12

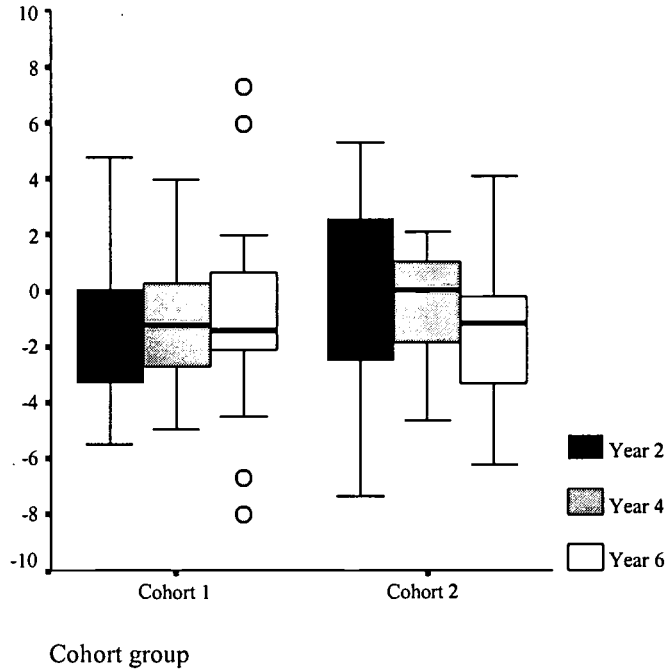


Figure 3.7: A boxplot showing PIPS value-added scores for 1997/8 for Years 2, 4 and 6: Cohorts 1 and 2

To what extent has this been caused by the NLS? Clearly, by the time of the PIPS exam for 1997/8, Cohort 1 schools had been using the NLS since January 1997 (over a year) whereas Cohort 2 schools only implemented the NLS in September 1997. It is possible that the increase in performance in Cohort 1 schools could be explained by this. Also, Cohort 2 schools may have achieved lower value-added scores than the year before due to teething problems with the NLS. Figure 3.8 shows the value-added score for all year groups for 1996/7 and 1997/8.

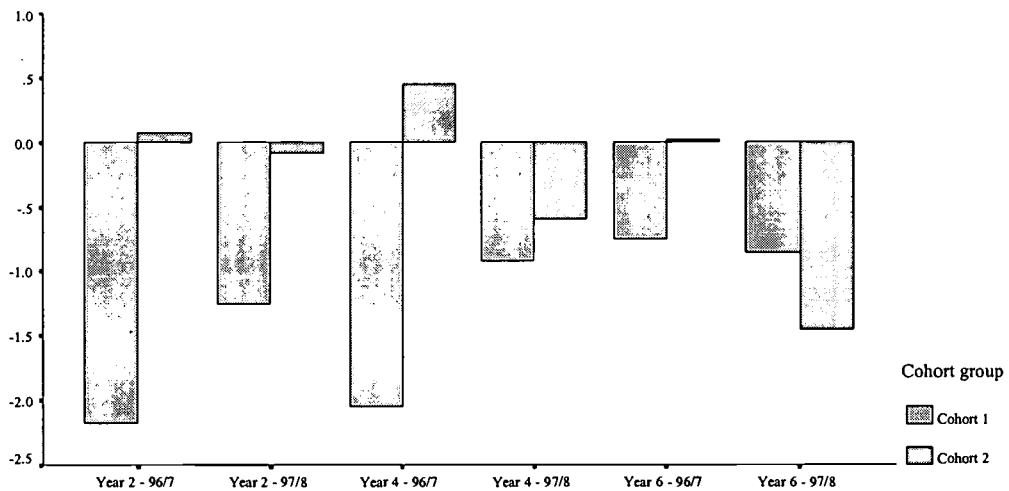


Figure 3.8: A bar chart showing PIPS value-added scores for all years in 1996/7 and 1997/8: Cohorts 1 and 2

A GLM repeated measures test was again performed upon the data. This test was performed on each year group separately. A significant interaction effect was found for year 4 between year of exam and cohort group ($F=5.84, p<0.05$). It is fair to say that for all year groups value-added scores decreased in 97/8 for Cohort 2, but this is much more pronounced for year 4. Also, value-added scores increased in 97/8 for years 2 and 4 (but not significantly). Figure 3.9 shows the interaction effect for year 4 quite clearly.

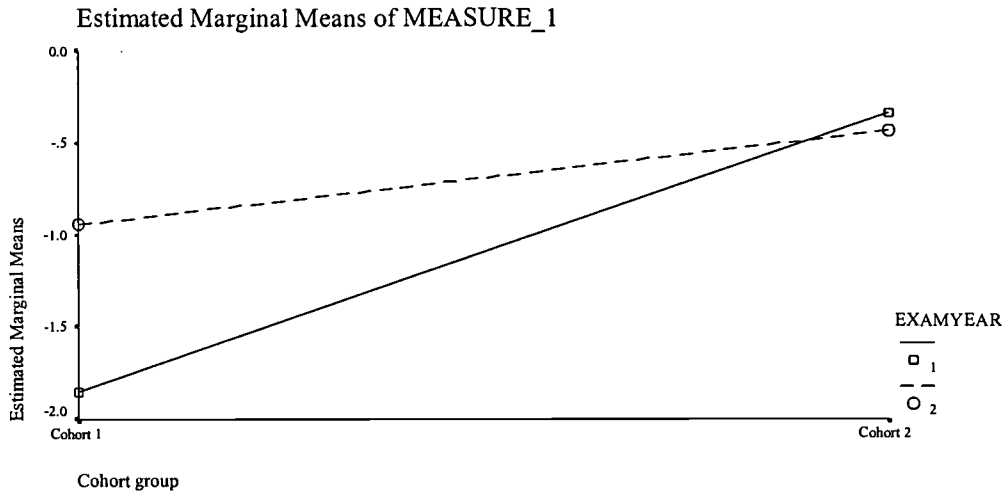


Figure 3.9: GLM profile plot of PIPS value-added scores for year 4 in 1996/7 and 1997/8: Cohorts 1 and 2

Next, the relationship between PIPS scores and three school background variables was investigated:

- Percentage of pupils on Free School Meals (FSM)
- Percentage of pupils with English as an Additional Language (EAL)
- Number of pupils on the roll call, excluding nursery.

Table 3.5 shows that a significant negative correlation was found between the percentage of pupils on FSMs and PIPS scores for 1996/7. These correlations ranged from -0.76 in year 2 to -0.48 in year 4. No relationship was found between the other two school background variables (similar correlations were found for the year 1997/8).

Table 3.5: Correlation matrix for PIPS scores - 1996/7

		Exc nurs 96/97	Percent on FSM (96/97)	Percent with EAL (96/97)
Correlation	Year 2	.019	-.755	-.001
	Year 4	-.067	-.486	.068
	Year 6	.117	-.523	.162
Sig. (1-tailed)	Year 2	.455	.000	.497
	Year 4	.346	.001	.344
	Year 6	.276	.002	.205

Figure 3.10 shows the negative correlation between percentage of pupils on FSMs and PIPS scores for the year 2 group. It can be seen from this diagram that schools with lower numbers of pupils on FSMs obtained higher PIPS scores. This is not a causal link (i.e. high numbers of pupils on FSMs does not 'cause' a school to obtain poor PIPS results), there is merely a strong relationship between the two which may reflect a tendency for segregation by home background with schools serving poor and wealthy areas (Fitz-Gibbon, 1996).

This relationship has been accepted by many as a good indicator of exam performance in a school as FSMs are widely accepted as a measure of social deprivation.

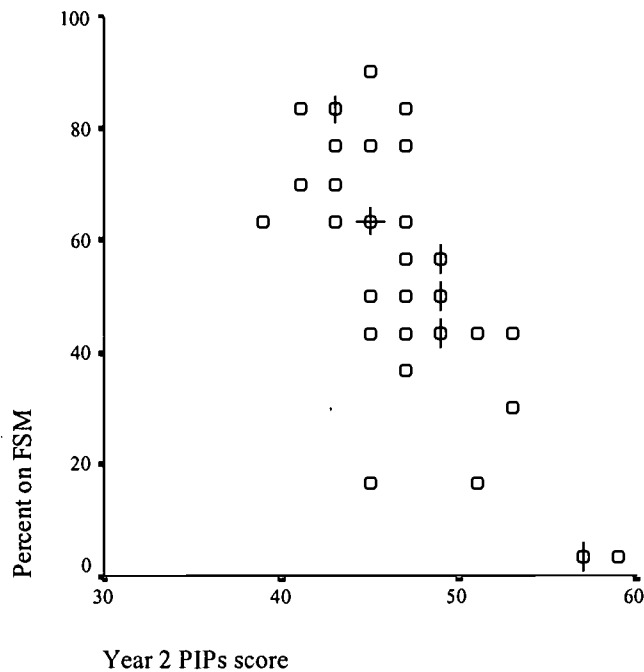


Figure 3.10: A sunflower diagram of the correlation between year 2 pips scores and FSM - 1996/7

A multiple linear regression model (stepwise method) was used to examine further the relationship between PIPS scores and school background variables. Concentrating

upon year 2 in 1996/7, 64% of the variance was explained by the FSM variable. The following model was obtained:

$$\text{PIPS} = 55.338 - 0.151(\text{FSM})$$

Therefore, each increase in 1% of FSM is accompanied by a decrease in PIPS scores of 0.151.

A similar model was obtained for year 4 in 1996/7, but this time only explaining 42% of the variance:

$$\text{PIPS} = 54.282 - 0.133(\text{FSM})$$

In year 6 a different model explaining 70% of the variance was obtained:

$$\text{PIPS} = 59.153 - 0.184(\text{FSM}) - 0.135(\text{EAL})$$

A model which did not contain EAL only explained 53% of the variance. Figure 3.11 below shows the relationship between year 6 PIPS scores in 1996/7 and EAL. These variables were not found to be significantly correlated (see earlier), but there is clearly a relationship between the two.

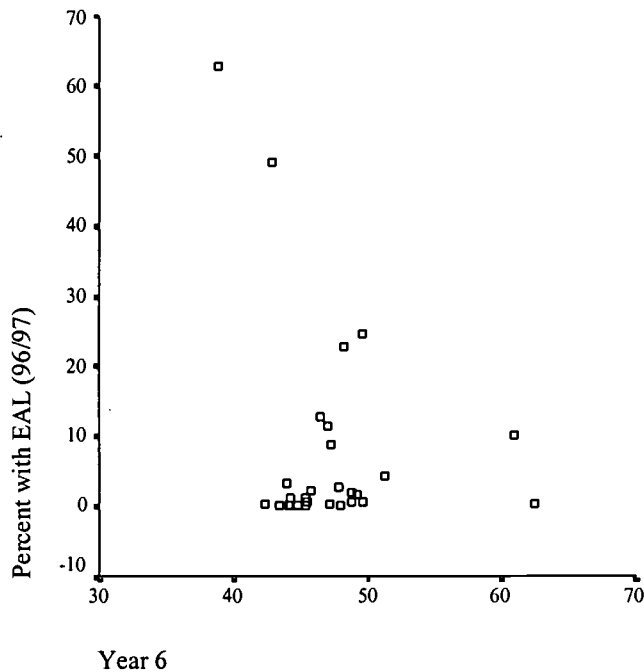


Figure 3.11: A scattergram showing relationship between year 6 pips scores and EAL - 1996/7

For 1997/8 PIPS scores similar models were found:

Year 2: $\text{PIPS} = 54.497 - 0.122(\text{FSM}) - 0.092(\text{EAL})$

This model explained 46% of the variance - a model containing FSM only, explained just 37%.

Year 4: $PIPS = 53.172 - 0.121 (FSM)$

This model explained only 44% of the variance.

Year 6: $PIPS = 56.644 - 0.145(FSM) - 0.134(EAL)$

This model explained 50% of the variance - a model containing FSM only, explained just 32%.

It is very difficult to interpret these results, other than to say that schools with lower numbers of pupils on FSM and lower numbers with EAL appear to obtain higher PIPS scores. FSM is an important indicator throughout years 2 to 6, but EAL is less consistent (only affecting year 6 in 1996/7 and years 2 and 6 in 1997/8).

3.3 Suffolk scores for 1996/7 and 1997/8

Table 3.12 shows the average (mean) Suffolk scores for Cohorts 1 and 2 in 1996/7. As expected, Cohort 2 schools performed better than Cohort 1 schools.

Table 3.6: Suffolk standardised scores for 1996/7

	Cohort 1			Cohort 2		
	Mean	SD	N	Mean	SD	N
Year 2	91.76	5.39	18	96.08	5.55	19
Year 4	89.58	3.46	17	95.40	7.17	19
Year 6	90.14	4.56	15	93.45	8.51	12

An independent t-test found this difference to be significant for years 2 ($t = -2.34$, $p < 0.05$) and 4 ($t = -3.15$, $p < 0.01$), but not for year 6 ($t = -1.30$, n.s.). Figure 3.12 is a boxplot of the information summarised in the table above.

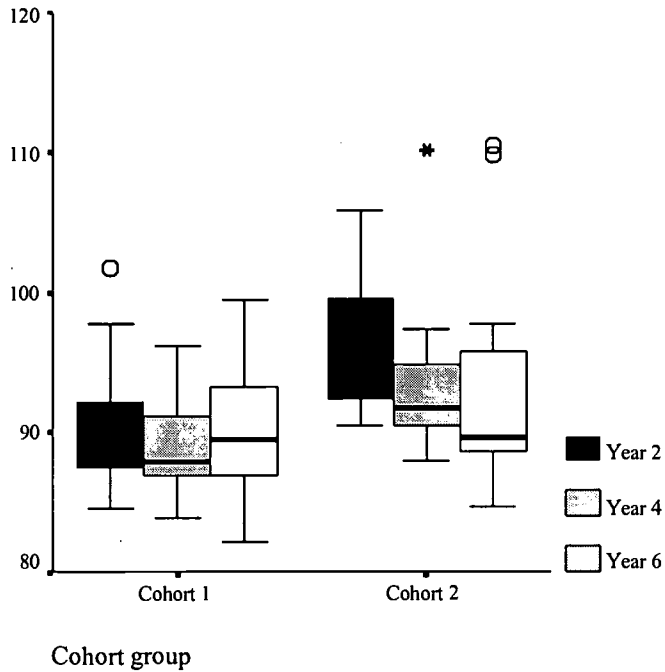


Figure 3.12: A boxplot showing Suffolk scores for 1996/7 for Years 2, 4 and 6: Cohorts 1 and 2

Table 3.7 shows the average standardised Suffolk scores for Cohorts 1 and 2 in 1997/8. Once again, Cohort 2 schools obtained better Suffolk scores than Cohort 1 schools. This difference was found to be significant for years 2 ($t=-2.32, p<0.05$) and 4 ($t=-3.87, p<0.01$), but not for year 6 ($t=-1.96, n.s.$).

Table 3.7: Suffolk standardised scores for 1997/8

	Cohort 1			Cohort 2		
	Mean	SD	N	Mean	SD	N
Year 2	94.82	3.95	18	98.55	5.71	19
Year 4	91.07	3.70	18	97.84	6.61	19
Year 6	91.26	4.27	16	96.01	7.56	12

Figure 3.13 below is a boxplot of this information.

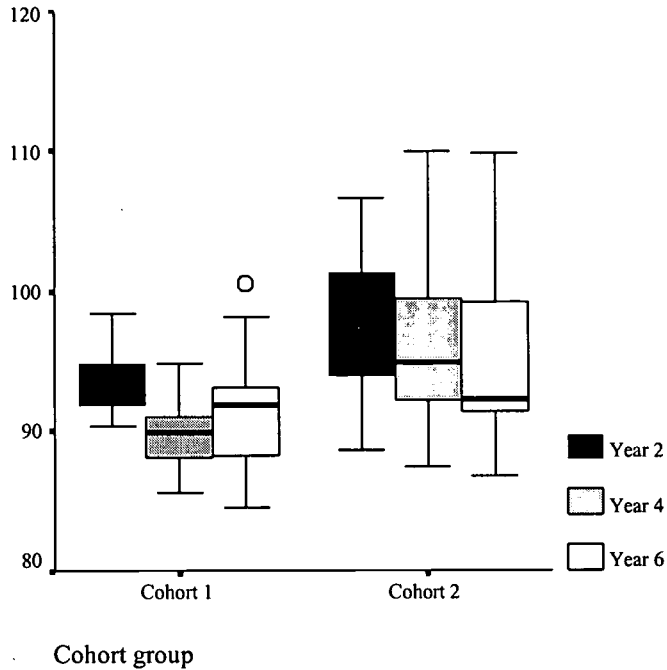


Figure 3.13: A boxplot showing Suffolk standardised scores for 1997/8 for Years 2, 4 and 6: Cohorts 1 and 2

Figure 3.14 clearly shows a difference between the cohorts (as expected). It also shows that the 1997/8 batch of pupils performed better than the 1996/7 pupils (in all year groups). There appears to be no interaction effect between cohort and year of exam.

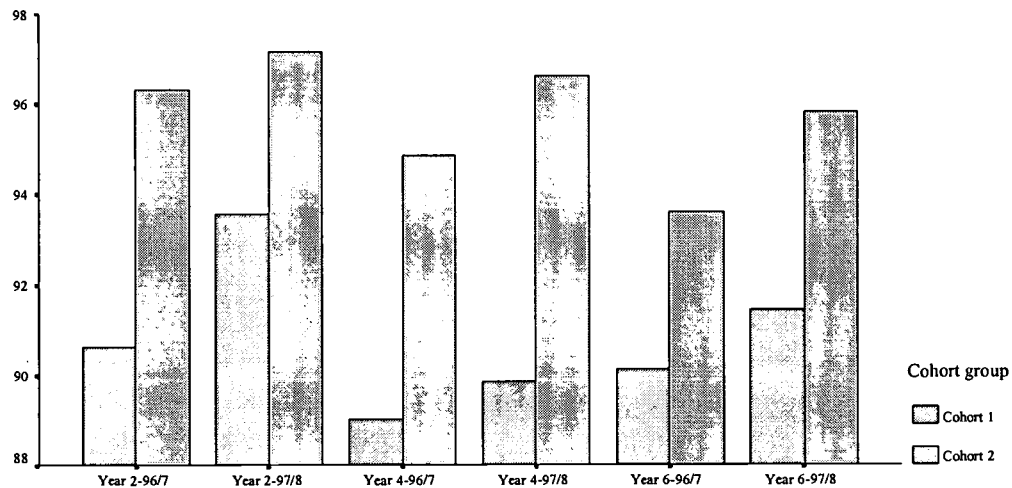


Figure 3.14: A bar chart showing Suffolk standardised scores for all years in 1996/7 and 1997/8: Cohorts 1 and 2

A GLM repeated measures was performed upon this data, with year of exam as a within-subject variable and cohort group as a between-subject variable. This test was performed on each year group separately. A significant difference between cohorts was found for years 2 and 4 ($F=6.90$, $p<0.05$; $F=13.12$, $p<0.01$) but not for year 6 ($F=2.87$, n.s.). This confirms the t-test results found earlier. Figure 3.14 shows that the difference between cohorts for year 4 is quite large, whereas there the difference is not as pronounced in Year 6. There was no interaction effect for any of the three year groups. Therefore neither cohort made more progress than the other.

When comparing the 1996/7 pupils with the 1997/8 pupils, the graph clearly shows that pupils in both cohorts performed better in 1997/8. In fact, this difference was found to be significant for all year groups (year 2 – $F=13.07$, $p<0.01$.; year 4 – $F=9.00$, $p<0.01$; and year 6 – $F=6.78$, $p<0.05$). As mentioned earlier, any improvement in scores for the 1997/8 group could be attributable to both the NLS or to changing contextual factors.

Significant negative correlations were found between the percentage of pupils on FSMs and Suffolks scores for 1996/7. These correlations ranged from -0.74 in year 4 to -0.59 in year 2 (see Table 3.8). The Year 6 Suffolk scores were also slightly negatively correlated with EAL.

Table 3.8: Correlation matrix for Suffolk scores - 1996/7

		Exc nurs (96/97)	Percent on FSM (96/97)	Percent with EAL (96/97)
Pearson Correlation	Year 2	-.067	-.593	.021
	Year 4	-.043	-.737	-.266
	Year 6	.049	-.602	-.386
Sig. (2-tailed)	Year 2	.695	.000	.903
	Year 4	.801	.000	.117
	Year 6	.807	.001	.047

These correlations were very similar (if slightly higher) for the year 1997/8 - except that EAL was not correlated to any results for this year (unlike last year).

Table 3.9: Correlation matrix for Suffolk scores - 1997/8

		Exc nurs (97/98)	Percent on FSM (97/98)	Percent with EAL (97/98)
Pearson Correlation	Year 2	-.180	-.654	-.243
	Year 4	.004	-.719	-.215
	Year 6	.096	-.628	-.291
Sig. (2-tailed)	Year 2	.286	.000	.147
	Year 4	.981	.000	.202
	Year 6	.628	.000	.133

A multiple linear regression model (stepwise method) was used to examine further the relationship between Suffolk scores and school background variables. Concentrating

upon year 2 in 1996/7, 35% of the variance was explained by the FSM variable. The following model was obtained:

$$\text{Suffolk} = 102.115 - 0.152(\text{FSM})$$

Therefore, each increase in 1% of FSM is accompanied by a decrease in Suffolk scores of 0.152. This is a much poorer model than that obtained for the PIPS scores. A different model was obtained for year 4 in 1996/7, this time explaining 65% of the variance:

$$\text{Suffolk} = 105.043 - 0.212(\text{FSM}) - 0.155(\text{EAL})$$

A model which did not contain EAL only explained 54% of the variance.

In year 6 a model explaining 64% of the variance was obtained:

$$\text{Suffolk} = 106.807 - 0.223(\text{FSM}) - 0.234(\text{EAL})$$

A model which did not contain EAL only explained 36% of the variance.

For 1997/8 Suffolk scores similar models were found:

Year 2: $\text{Suffolk} = 109.00 - 0.165(\text{FSM}) - 0.014(\text{EAL})$

This model explained 51% of the variance - a model containing FSM only, explained 43%.

Year 4: $\text{Suffolk} = 106.099 - 0.208(\text{FSM}) - 0.115(\text{EAL})$

This model explained 59% of the variance.

Year 6: $\text{Suffolk} = 105.764 - 0.198(\text{FSM}) - 0.150(\text{EAL})$

This model explained 54% of the variance.

In sum, it seems that schools with lower numbers of pupils on FSM and lower numbers with EAL appear to obtain higher Suffolk scores.

3.4 Key Stage 1 and 2 results for 1996/7 and 1997/8

Table 3.10 shows the average Key Stage results for Cohorts 1 and 2 in 1996/7. As expected, Cohort 2 schools performed better than Cohort 1 schools.

Table 3.10: Key Stage results for 1996/7

	Cohort 1			Cohort 2		
	Mean	SD	N	Mean	SD	N
KS1 Writing (%L2)	63.12	16.81	18	76.38	14.51	18
KS1 Reading (%L2)	61.11	16.66	18	73.80	14.79	19
KS2 English (%L4)	36.26	15.25	16	44.63	24.74	12

An independent t-test found this difference to be significant for KS1 writing ($t = -2.53$, $p < 0.05$) and KS1 reading ($t = -2.45$, $p < 0.05$), but not for KS2 English ($t = -1.11$, n.s.). Figure 3.15 is a boxplot of the information shown in the table above.

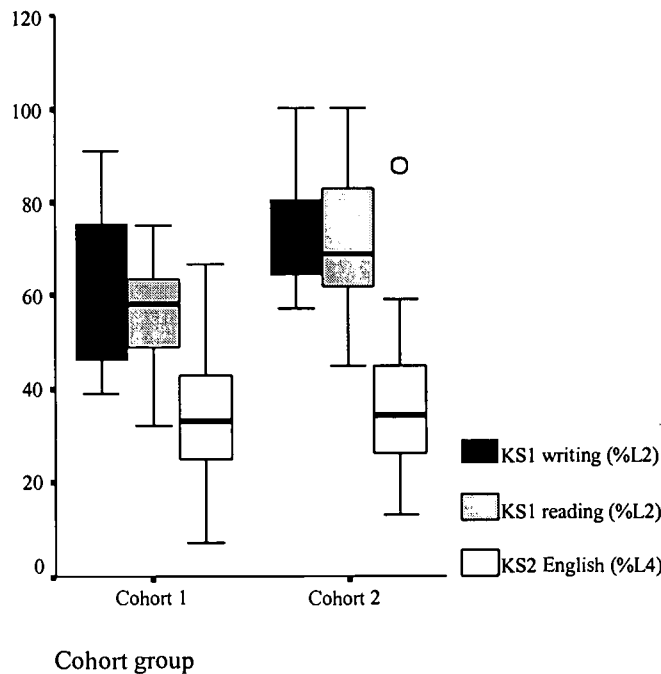


Figure 3.15: A boxplot showing Key Stage 1 and 2 results for 1996/7: Cohorts 1 and 2

Table 3.11 shows the average Key Stage results for Cohorts 1 and 2 in 1997/8. Once again, Cohort 2 schools obtained better PIPS scores than Cohort 1 schools. This difference was found to be significant for KS1 writing ($t = -2.52$, $p < 0.05$), KS1 reading ($t = -2.22$, $p < 0.05$), and KS2 English ($t = -2.80$, $p < 0.05$).

Table 3.11: Key Stage results for 1997/8

	Cohort 1			Cohort 2		
	Mean	SD	N	Mean	SD	N
KS1 Writing (%L2)	68.97	14.26	18	80.35	13.23	19
KS1 Reading (%L2)	65.81	14.87	18	76.19	13.58	19
KS2 English (%L4)	38.81	12.54	16	55.83	19.61	12

Figure 3.16 below is a boxplot of this information.

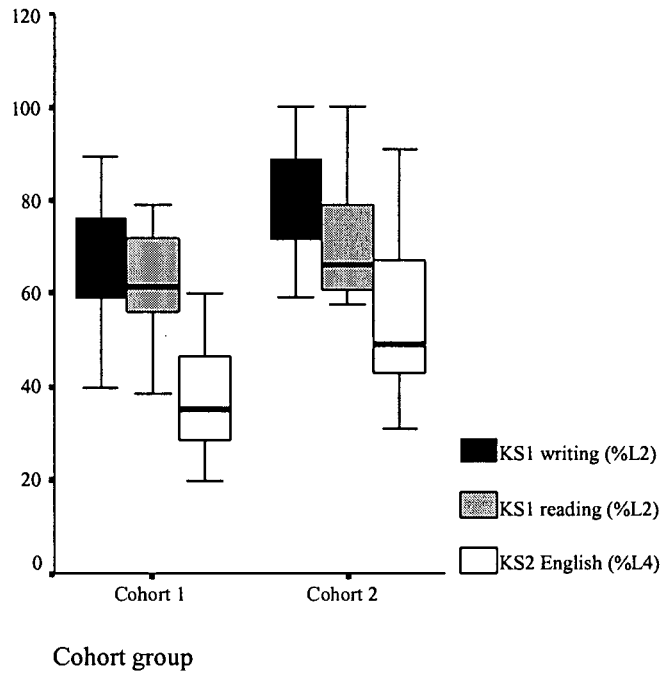


Figure 3.16: A boxplot showing Key Stage results for 1997/8: Cohorts 1 and 2

Figure 3.17 clearly shows a difference between the cohorts (as expected). It also shows that the 1997/8 batch of pupils generally performed better than the 1996/7 pupils. There appears to be no interaction effect between cohort and year of exam.

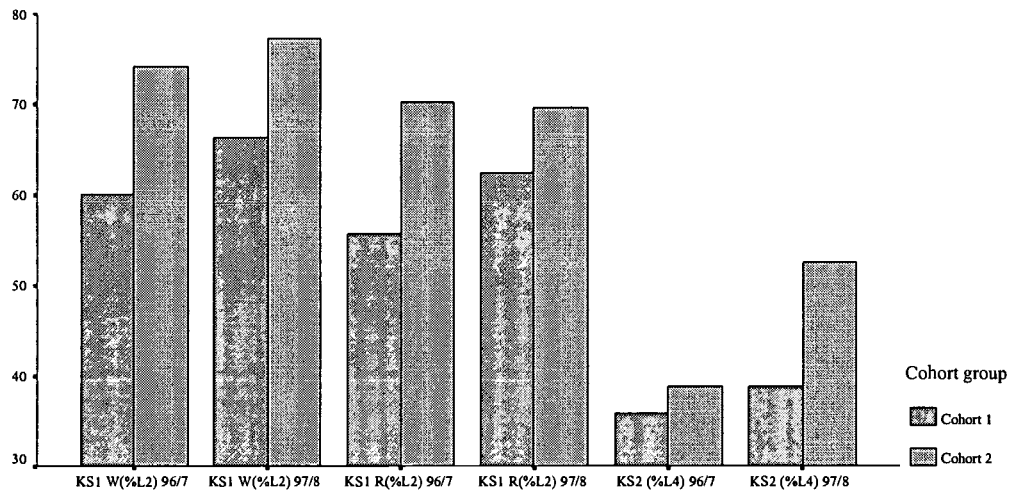


Figure 3.17: A bar chart showing Key Stage 1 and 2 results in 1996/7 and 1997/8: Cohorts 1 and 2

A GLM repeated measures was performed upon this data, with year of exam as a within-subject variable and cohort group as a between-subject variable. This test was performed on each year group separately. A significant difference between cohorts was found for all Key Stage results (KS1 writing, $F=8.60$, $p<0.01$; KS1 reading, $F=6.5$, $p<0.05$; and KS2 English, $F=4.68$, $p<0.05$). The difference is most pronounced for KS1 writing. There was no interaction effect for any of the two year groups - neither cohort made more progress than the other.

The graph above shows that the pupils in both cohorts performed better in 1997/8. However, no significant difference was found between the 1996/7 pupils and the 1997/8 pupils (year 2 – $F=2.81$, n.s.; year 4 – $F=3.29$, n.s.; and year 6 – $F=3.71$, n.s.).

As with the PIPS and Suffolk scores, significant negative correlations were found between the percentage of pupils on FSMs and Key Stage results for 1996/7 and 1997/8. These correlations ranged from -0.70 for KS1 reading to -0.59 for KS2 English (see Tables 3.12 and 3.13).

Table 3.12: Correlation matrix for Key Stage results - 1996/7

		Exc nurs (96/97)	Percent on FSM (96/97)	Percent with EAL (96/97)
Pearson Correlation	KS1 Writing (%L2)	-.106	-.584	-.055
	KS1 Reading (%L2)	-.081	-.664	-.151
	KS2 English (%L4)	.190	-.576	-.281
Sig. (2-tailed)	KS1 Writing (%L2)	.538	.000	.749
	KS1 Reading (%L2)	.635	.000	.371
	KS2 English (%L4)	.333	.001	.147

Table 3.13: Correlation matrix for Key Stage results - 1997/8

		Exc nurs (97/98)	Percent on FSM (97/98)	Percent with EAL (97/98)
Pearson Correlation	KS1 Writing (%L2)	-.146	-.642	-.107
	KS1 Reading (%L2)	-.139	-.700	-.210
	KS2 English (%L4)	.099	-.586	-.131
Sig. (2-tailed)	KS1 Writing (%L2)	.390	.000	.530
	KS1 Reading (%L2)	.412	.000	.213
	KS2 English (%L4)	.617	.001	.508

A multiple linear regression model (stepwise method) was used to examine further the relationship between Key Stage results and school background variables. Concentrating upon KS1 writing in 1996/7, 34% of the variance was explained by the FSM variable. The following model was obtained:

$$\text{KS1 writing} = 95.026 - 0.460(\text{FSM})$$

Therefore, each increase in 1% of FSM is accompanied by a decrease in Key Stage results of 0.46. A similar model was obtained for KS1 reading in 1996/7, this time explaining 44% of the variance:

$$\text{KS1 reading} = 93.904 - 0.491(\text{FSM})$$

In KS2 English a different model explaining 50% of the variance was obtained:

$$\text{KS2 English} = 79.892 - 0.609(\text{FSM}) - 0.535(\text{EAL})$$

A model which did not contain EAL only explained 33% of the variance.

For 1997/8 Key Stage results the following models were found:

$$\text{KS1 writing} = 107.439 - 0.453(\text{FSM}) - 0.034(\text{EAL})$$

This model explained 48% of the variance - a model containing FSM only, explained 41%.

$$\text{KS1 reading} = 98.317 - 0.484(\text{FSM}) - 0.275(\text{EAL})$$

This model explained 56% of the variance - a model containing FSM only, explained 49%.

$$\text{KS2 English} = 73.658 - 0.485(\text{FSM})$$

This model explained 34% of the variance.

In sum, it seems that schools with lower numbers of pupils on FSM appear to obtain higher Key Stage results. The percentage of pupils with EAL also appears to play a role for some year groups.

3.5 Interim summary

When comparing cohort performance, it is clear that Cohort 2 schools out-perform Cohort 1 schools. As stated earlier this is to be expected since Cohort 1 schools were originally chosen as the schools most in need of the NLS. This difference is significant in the younger year groups (years 2 and 4) but not significant for pupils at the end of KS2. This is interesting because it seems that Cohort 1 schools manage to narrow the gap between themselves and the Cohort 2 schools when it comes to older pupils.

When looking to see if the Cohort 1 schools had made more progress than Cohort 2 schools (due to being part of the NLS for longer), the results did not support this. However, there did appear to be evidence to support the belief that the NLS is having an impact upon the schools: Suffolks results (all year groups) and PIPS year 2 results were significantly better in 1997/8 than in 1996/7. The Key Stage results also showed improvement but not significantly.

Correlation and multiple regression techniques found a relationship between the percentage of pupils on free school meals and exam results. Schools with higher numbers on FSM obtained lower exam results. The percentage of pupils with English as an additional language also played a role in some cases.

In sum, there seems to be an improvement in 1997/8 compared to 1996/7 for both cohorts. One would have expected Cohort 1 to have made even more improvement because it has been part of the NLS for longer. However, it did not. This suggests that schools are improving, but that maintaining the progress is difficult.

4. Case study schools

4.1 Background data

The schools chosen for the case study studies were School A, School B and School C. They were chosen because of their varying socio-economic status, different size and different points of entry into the NLS. School A is part of Cohort 1 and has therefore been part of the NLS for longer. This school also took part in the National Literacy Project. School B and School C are part of Cohort 2.

None of the schools have nurseries. School C has the largest number of pupils (570 in 1996/7 and 593 in 1997/8). Figure 4.1 shows how the other schools compare.

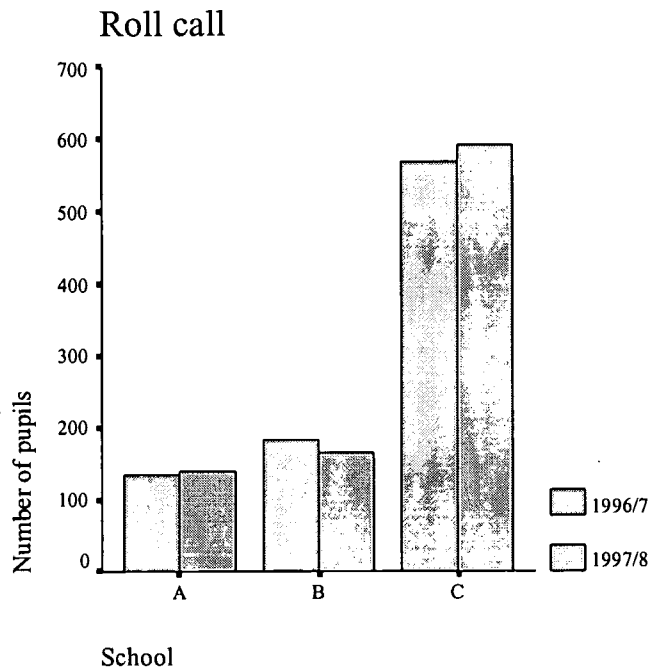


Figure 4.1: Number of pupils in 1996/7 and 1997/8

School A is the smallest school, less than a third of the size of School C. School B was the only school to have taken fewer pupils in the second year (1997/8).

School A has the greatest number of pupils on free school meals (FSM). At School C roughly 5% of pupils are on FSM (see Figure 4.2). Both School A and School B had fewer numbers on FSM in the second year.

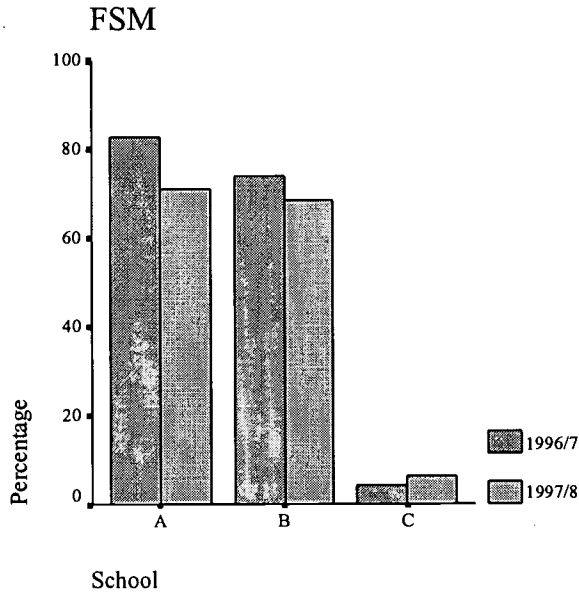


Figure 4.2: Percentage of pupils on free school meals in 1996/7 and 1997/8

Figure 4.2 shows the percentage of pupils at each school with English as an additional language (EAL). School C has the most (16% in 1997/8) and School A the least (3% in 1997/8). All schools had higher numbers with EAL in the second year.

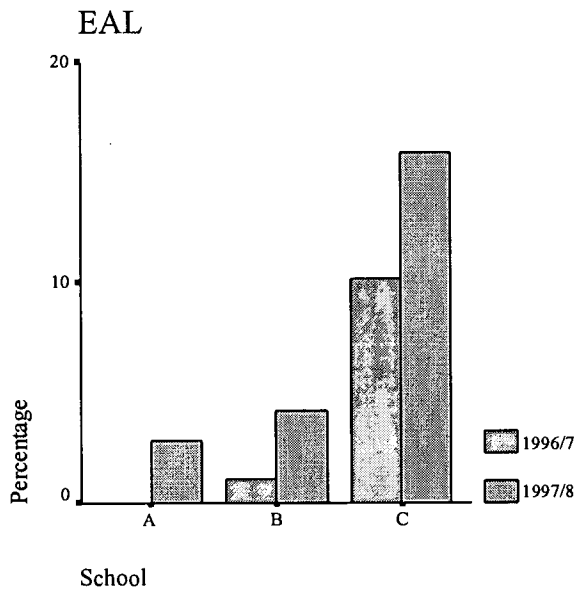


Figure 4.3: Percentage of pupils with English as an additional language in 1996/7 and 1997/8

Figure 4.4 compares the three case study schools in terms of PIPS performance in 1996/7.

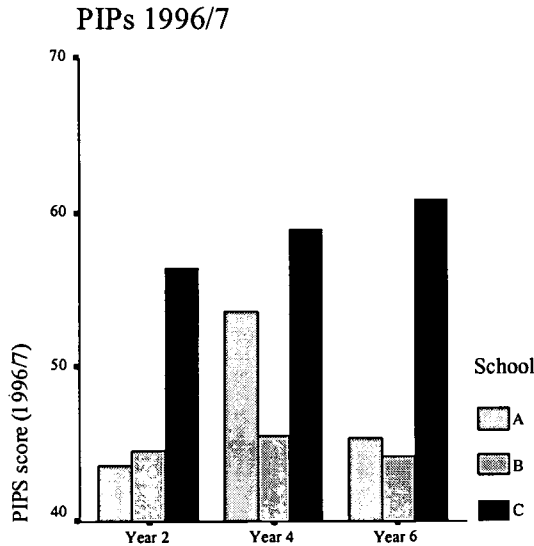


Figure 4.4: PIPS standardised scores for case study schools in 1996/7

As would be expected, School C performed better than the other two schools. School A performed better than School B in year groups 4 and 6. PIPS performance in 1997/8 shows a similar pattern (see Figure 4.5). In 1997/8, School B appears to catch up to School A.

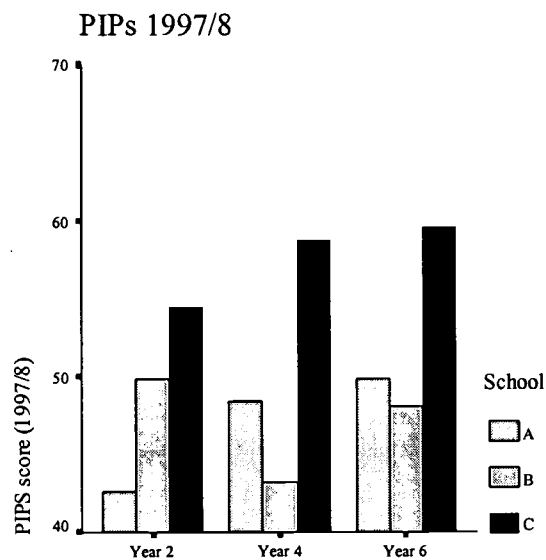


Figure 4.5: PIPS standardised scores for case study schools in 1997/8

Figure 4.6 shows the Suffolk scores for the schools in 1996/7. School A seems to have benefited from the first months of the NLS (compared to the Cohort 2 schools).

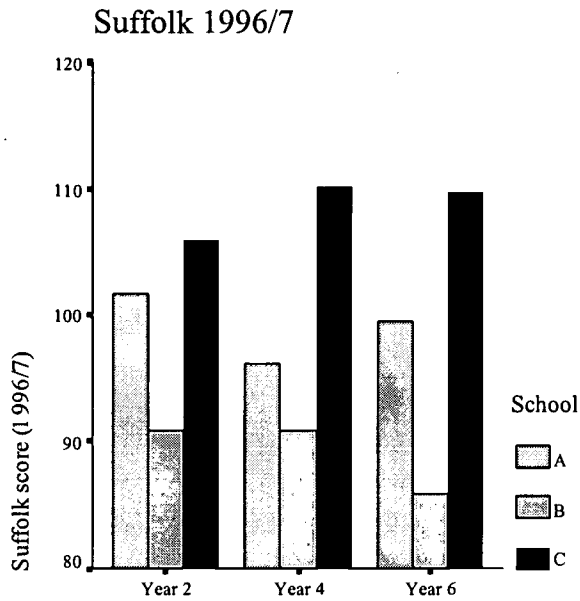


Figure 4.6: Suffolk scores for case study schools in 1996/7

However, in 1997/8 School A's performance drops compared to the previous year. This suggests that maintaining the standards achieved by the NLS is difficult.

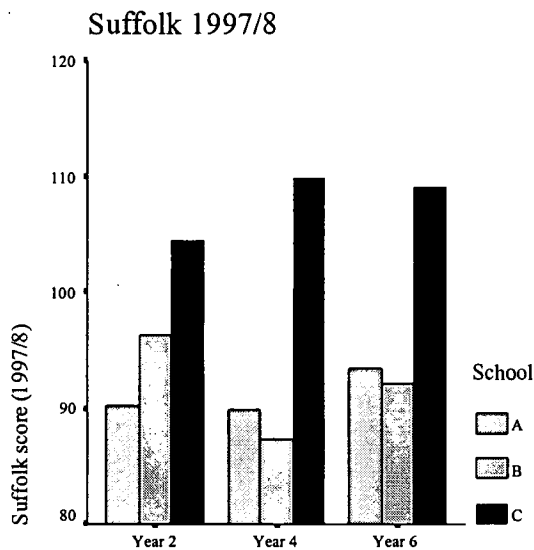


Figure 4.7: Suffolk scores for case study schools in 1997/8

The Key Stage 1 and 2 results for 1996/7 also show that School A performed quite well compared to School B (see Figure 4.8).

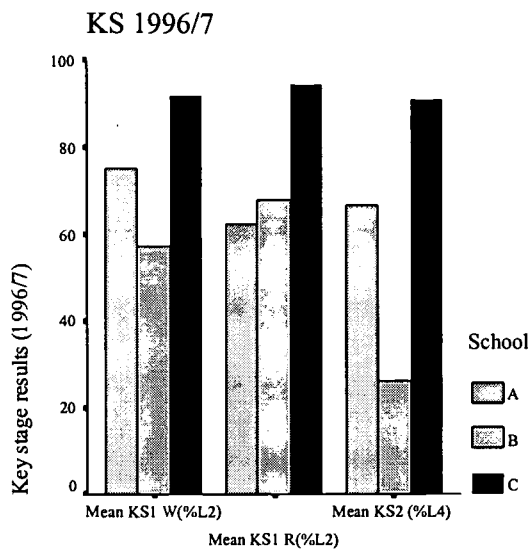


Figure 4.8: Key Stage results for case study schools in 1996/7

But once again, School A obtained lower results in 1997/8.

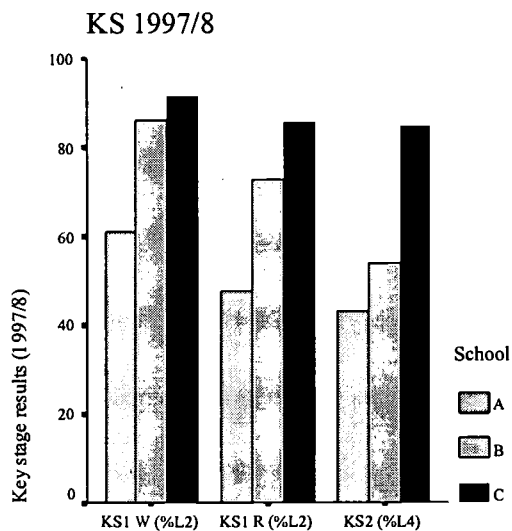


Figure 4.9: Key Stage results for case study schools in 1997/8

4.2 School A

This school's PIPS scores were lower in 1997/8 than in 1996/7 for Years 2 and 4, but higher for Year 6 (see Figure 4.10).

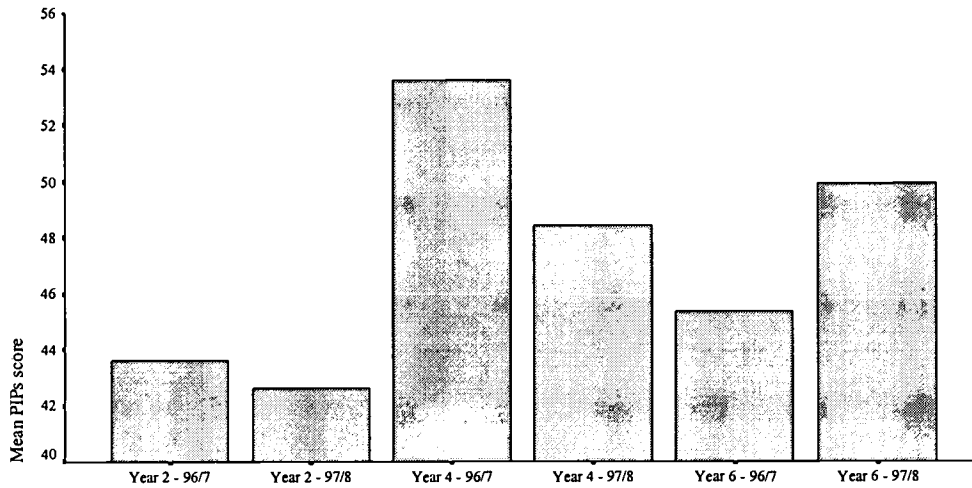


Figure 4.10: School A's PIPS results in 1996/7 and 1997/8

In both the Suffolks and Key Stage results, School A's scores were worse in 1997/8 than in 1996/7, for all years (see Figures 4.11 and 4.12).

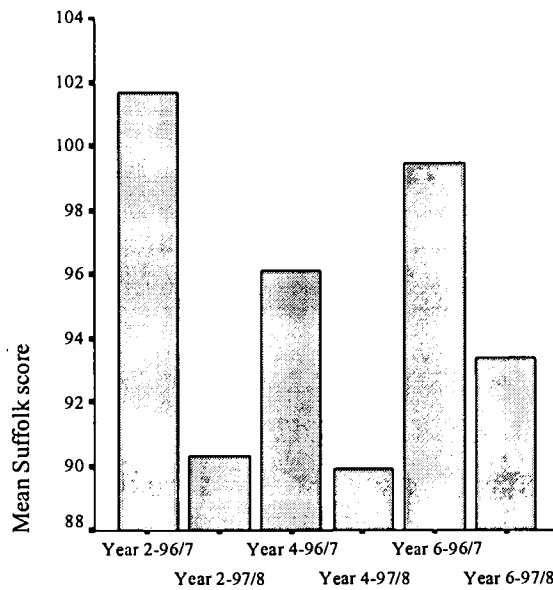


Figure 4.11: School A Suffolk results in 1996/7 and 1997/8

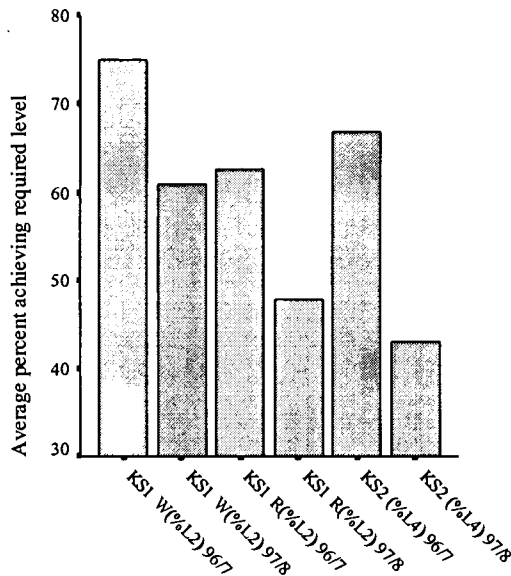


Figure 4.12: School A Key Stage results in 1996/7 and 1997/8

The headteacher's annual review for this school offers some insight into the possible reasons for poorer performance in 1997/8 compared with 1996/7. Out of all of the results available, it is the Key Stage results which are the most disappointing (a large drop in the number of pupils reaching the required levels). In fact, the headteacher (for 1997/8) reported prior to these tests:

'...we are concerned that we may not have achieved the expected improvements due to our Year 2 class having had 3 teachers this year and the impact of admissions to Year 2 have come from schools not participating in the NLP'.

'The current Year 6 class consists of only 20 pupils, with a significant percentage of these being on our SEN register, consequently we do not anticipate SATS (KS2) results to be as favourable as those in 1997'.

Therefore this could explain the poorer performance in the second year of the NLS.

4.3 School B

Figure 4.13 shows the PIPS scores obtained by School B in 1996/7 and 1997/8. It can be seen that years 2 and 6 did better in 1997/8 than in 1996/7, but the reverse is true for year 4.

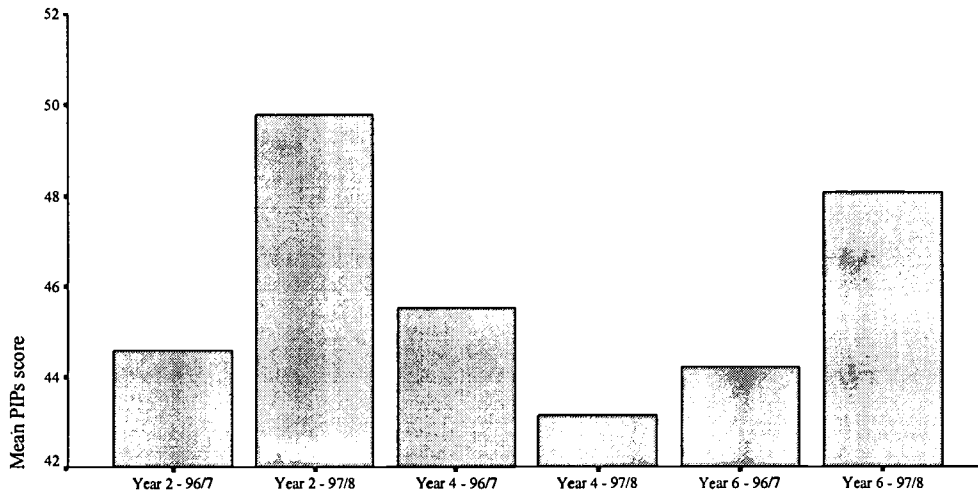


Figure 4.13: School B PIPs results in 1996/7 and 1997/8

Figure 4.14 shows a similar pattern for the Suffolk scores.

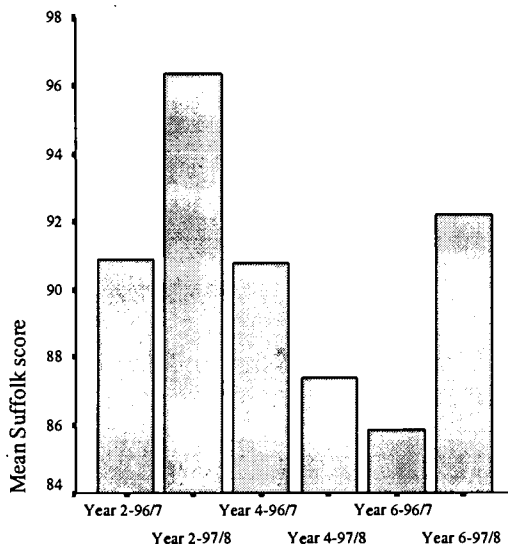


Figure 4.14: School B Suffolk results in 1996/7 and 1997/8

Figure 4.15 shows that the Key Stage results improved in 1997/8 compared to 1996/7. This is interesting when compared with School A which performed lower in the second year. This supports the idea that the NLS impacts positively in its first year, but sustaining performance in the second year is difficult.

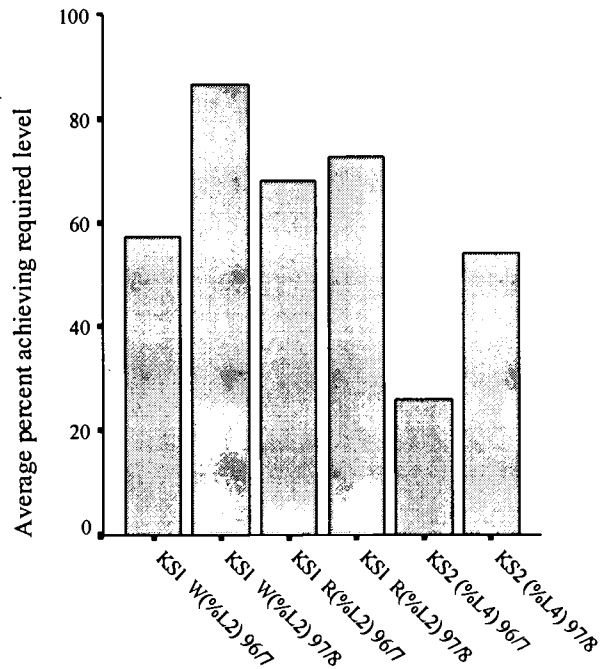


Figure 4.15: School B Key Stage results in 1996/7 and 1997/8

The headteacher's annual review in 1997/8 offers an explanation for the poor PIPS results:

'...Year 4 test results were...disappointing but there are known factors influencing this; not least 44% pupil movement'.

However, in general the headteacher had a 'very positive view of the NLS after 1 year of implementation' and felt that 'the advantages certainly outweigh the disadvantages'.

4.4 School C

School C's PIPS scores were slightly worse in 1997/8 than in 1996/7 (see Figure 4.16).

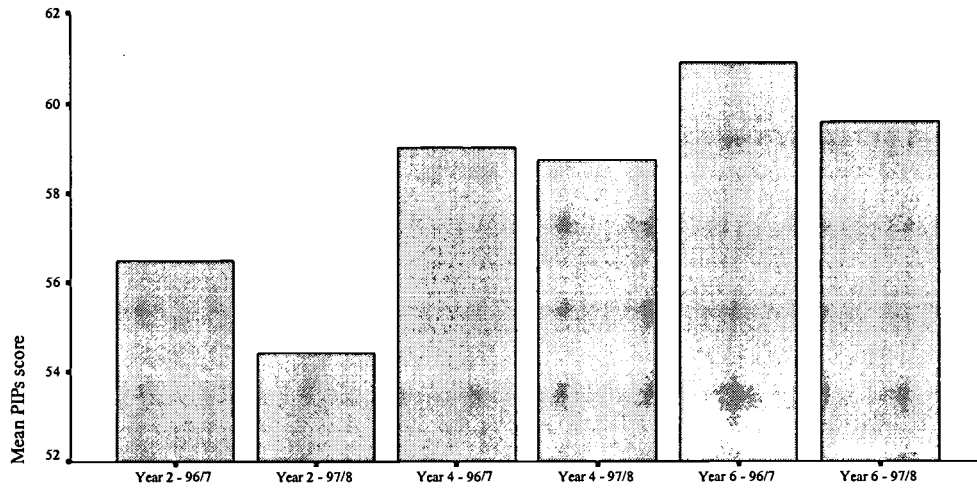


Figure 4.16: School C PIPs results in 1996/7 and 1997/8

In fact, the same is true for School C's Suffolk scores (see Figure 4.17) and Key Stage results (Figure 4.18).

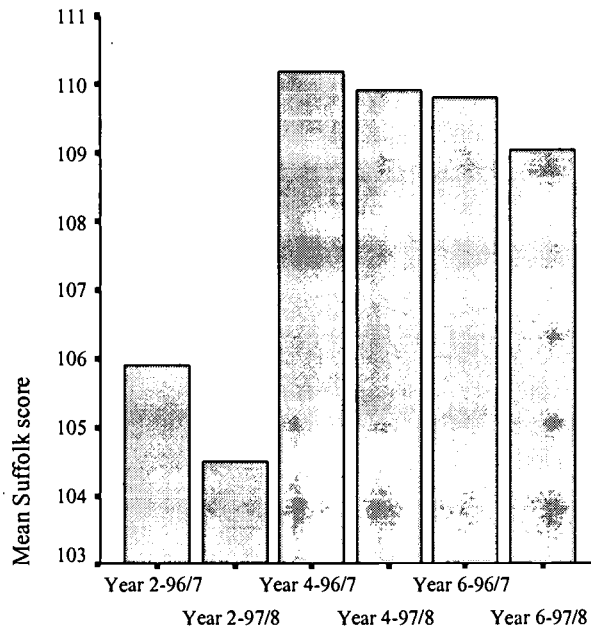


Figure 4.17: School C Suffolk results in 1996/7 and 1997/8

The difference is, perhaps, most noticeable with KS1 reading and KS2 English.

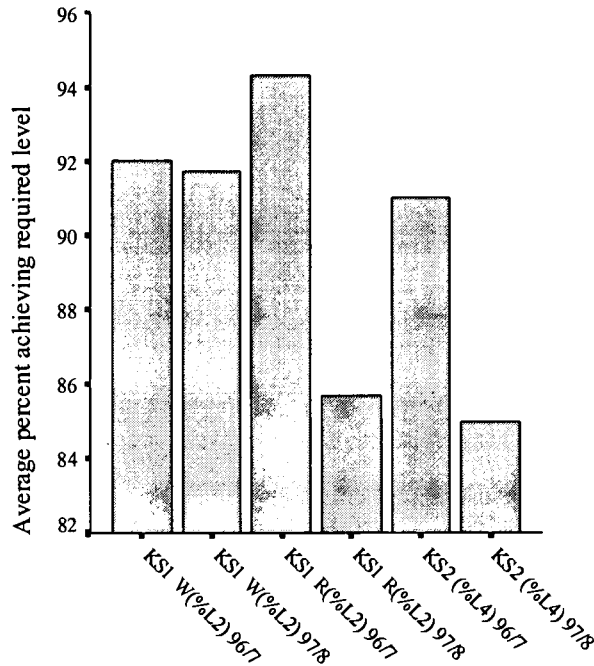


Figure 4.18: School C Key Stage results in 1996/7 and 1997/8

The headteacher's review for 1997/8 did not anticipate lower results compared to the previous year.

4.5 Interview results

All three schools (A, B and C) took part in the interviews. The headteacher, a Key Stage 1 teacher, a Key Stage 2 teacher and the NLS coordinator from each school were interviewed (some teachers took on more than one of these roles). The results below are aggregated to protect the anonymity of each teacher. It may be possible to attribute certain views to particular schools, but the intention of this section is to present the different opinions that currently exist about the NLS. Each interview question and its responses are dealt with in turn:

Do you think that the NLS will help raise standards for every pupil, including those with special educational needs?

Opinion appeared to be divided in this area. Some teachers feel that the NLS is helping children with special educational needs others do not. In one school, it is these children who appear to be showing the most improvement. One teacher felt that because the NLS is so structured, these children can sense for themselves the level of progress they have made. She felt that it gave the SEN pupils a lot of motivation and a sense of achievement. However, the SEN pupils still need a lot of help in the class. Some teachers could see a gap opening up between their more able and less able children. The 'average' pupils are also benefiting from the NLS: this means that a polarisation effect could be occurring which needs to be monitored (e.g. Are SEN pupils falling behind the standards achieved by more able pupils?).

'SEN pupils are not getting the input from the teacher that they need. The shared text is too challenging for them, so you find that they are the children who can't concentrate and are disruptive. The direct teaching time is way above their heads. Some of those children are still working at a very simple level, an early phonic level, it is often beyond them. The guided writing time tends to be that the teacher is the scribe for the SEN children. When it's the guided reading time they only get two 15 minute sessions a week.'

Some teachers were concerned about the standards of written work with SEN pupils:

'They are digesting all of this vocabulary, their verbal skills are improving, they are writing with a richer vocabulary...but they're not using grammar. There's no punctuation in their sentences. It's as if they can't cope with both, they can't digest everything. Their spelling has improved...but once they start writing, their spelling seems to go.'

In terms of raising standards for every pupil, some teachers expressed caution:

'I've learned that there are never going to be levels of gain across all ability ranges or age ranges, but I do think that in general terms...attitudes to reading and writing, motivation, and ability to concentrate, we've seen huge gains across all ability groups - particularly with SEN pupils.'

A more general concern was the lack of creativity in writing:

'Even with all of this reading their imagination is not developing. There is no creativity in their writing at all. They are far better with non-narrative writing. They find it very difficult to be imaginative because they are not expected to be imaginative anywhere else but in their writing. They watch TV, they play on computers - everything is very visual.'

Do you feel that the literacy hour will support the effective management of literacy at school and classroom level by providing continuity in planning, monitoring and evaluation?

Overwhelmingly, teachers agreed with this. They believed that its structure, its continuity and progression, helped schools with high pupil turnovers and also helped to smooth over any staff changes.

'Now you pick up any teacher's evaluation and you find the same language, the same levels and the same standards...it is much better.'

'Planning is much easier now than it was with the National Curriculum. The planning issue I would raise is that it is a lot more time consuming.'

Teachers felt that the weekly plan took a long time to develop due to the need to differentiate between pupils.

Do you think that the literacy hour uses a range of teaching strategies which promote high quality interaction?

The strategy appears to have helped to improve the quality of direct teaching in schools. The quality of interaction has improved between teachers and pupils, and between pupils.

'The children are very adept now at using correct terminology and staying on task, so their interaction in the lessons tends to be far more focused. The teachers' questioning skills have improved tremendously and this is a significant part of high quality direct teaching. So the teachers are now more able and confident about extending children's responses and thinking through their own questioning skills.'

However, there was also a feeling that the government underestimated how teachers taught before the NLS:

'We used a range of teaching strategies, we promoted high quality interaction. The literacy hour has not changed drastically how I or several of the other teachers teach. Yes the literacy hour focuses you but it was what good teachers were doing anyway.'

Will the move away from individualised teaching towards guided reading make for more effective use of the teacher's time?

Some teachers had reservations about the effectiveness of individualised teaching, and so the move away from this was welcomed by them:

'I do think that individualised teaching never actually happened. Teachers heard children read but they didn't actually, in that time, teach reading - which is what you do in guided reading sessions.'

Other teachers supplemented the literacy hour with extra time in which individual reading can take place:

'The extra time offers the opportunity for teachers to hear individual readers, because that has to go on especially with the younger pupils.'

'Children who do not read at home, need to read to someone at school. They want to be important for a little while. They want to be praised. So constant teaching in a group teaching situation does not help those with special needs.'

'The literacy hour should not be seen as the whole English curriculum. Many other aspects will need to be addressed outside it'. Do you agree?

All of the teachers agreed with this statement. They felt that other aspects of English work needed to be addressed beyond the literacy hour:

'...including the teacher reading a novel to the class, poetry and oracy work. There's a lot of other aspects of English done in timetabled sessions in this school over and above the literacy hour, but also in other areas of the curriculum.'

'Nowhere within the literacy hour is there any reading for pleasure. They have a lot of bits of text, but we very rarely finish a book. So you still need the reading for pleasure, imagination and creativity.'

Speaking and listening skills were, generally, developed outside of the literacy hour in a cross-curricular way. As mentioned earlier, writing was also seen as needing more emphasis.

'The literacy hour is not too prescriptive and allows sufficient room for teachers to exercise their professional experience and judgement in deciding what is in the best interests of the child'. Do you agree?

On the whole, teachers do not think that the literacy hour is too prescriptive. They actually welcome the structure that it provides and feel that there is still scope for the teacher to use their own judgement.

'...because the planning is, to a certain extent, done for you...teachers don't spend as much time on the 'what' to teach and they do spend more time on the 'how' to teach.'

'In a way it's nice to have (the prescriptiveness), to know exactly what you should be doing. I think sometimes schools have been doing their own thing not knowing what other schools are doing.'

Do you think that a reasonable timescale has been allowed for the implementation of the NLS?

Those schools which were part of the NLP felt that the timescale (for them) was adequate. Those which were part of the project felt that the NLS was now fully embedded within the school:

'It's part of the fabric of the school and part of the substance of what we do. We wouldn't give it up now if you asked us to.'

However, teachers did think that the timescale was unrealistic for those schools which were not part of the project.

'I'm fairly sure that it's been rather more difficult for other schools and I think the time constraints have not been suitable.'

Do you think that adequate provision has been made for the additional resources needed for the literacy hour?

Most of the teachers interviewed felt some degree of injustice with regard to provision. Large and small schools alike receive the same amount of money. The emphasis on multiple copies of text and the need for big books has put a strain on schools' budgets. Often the schools have found ways of dealing with the extra strain by diverting money from elsewhere or by being even more resourceful.

'We use a lot of newspaper articles which we can get cheaply, enlarged them, and used them as the big text and the multiple text. However, provision is going to be an on-going problem...not just in terms of affordability, it's in terms of being able to access the right sorts and quality of resources.'

But the costs are considered to be difficult to meet:

'I have to say that our photocopying bill has shot up and the amount of photocopying paper that we use has trebled.'

There is, of course, also the issue of staff time which is also stretched by the NLS. Most teachers would welcome a trained literacy assistant in class.

Which set of data (PIPS, Suffolks, or SATS) do you find the most useful given your knowledge of the children?

There was a general feeling that none of the current tests were adequate:

'I don't think that any of them, in themselves, is enough to measure progress in the NLS. They test and assess different areas of learning, different skills. I think that there are huge areas of learning that none of them pick up in terms of the literacy strategy.'

It was suggested that the NFER exit tests were much better at testing progress. Also, teachers' own professional judgements were seen as just as important.

These interviews occurred the week after SATS tests in schools, therefore these test were foremost in teachers' minds:

'I'm furious about the SATs. The NLS lays down what we should teach. They tell us what word lengths we should teach, when we should teach it, which spellings the children should do...but then when I get SATS papers which are testing something totally different, I think this is not showing what my children are capable of.'

Teachers felt that the QCA needed to 'get to grips' with the DfEE:

'If they want us to implement the NLS then they've got to support it by testing what they're telling us to teach.'

Needless to say, teachers felt under considerable pressure due to the SATs:

'SATs take precedence regardless of how useful we think they are. But that's the standard we have to work towards. The amount of pressure that is put upon the school, particularly the Year 6 class teachers is absolutely ridiculous. The situation that they are working in, with all those comparisons being made, and everybody is on your back to improve, improve, improve every year, is to my mind extremely unpleasant.'

One teacher felt that the SATs could be improved by :

'...allowing the children the opportunity to actually prove their knowledge, I think sometimes there's a bias towards catching them out.'

The Suffolk test was generally not supported by the teachers:

'Children just go through and tick a box...and they can't read the words, they just tick the word they think looks nice'.

The PIPS tests were viewed as being too difficult.

'I think the PIPS are very hard for the Year 4s. I think it should be more differentiated. They give a few sample questions at the beginning of each section which lead the children to think that it's going to be mega-easy, and there's a big jump'.

However the PIPS were seen as giving a more balanced picture of the children, and more useful feedback. Also PIPS were stress-free compared to the SATs.

We found a high correlation between the number of pupils on free school meals and exam results (high number on FSM, lower results). Can you comment on this?

Teachers were extremely passionate in their responses to this question. They expected this to be the case, but would never as a result have lower expectations of FSM pupils.

'There is a lower expectation of FSM children and people just say 'well what can you expect from this school'. Well we have a very simple answer to that in our school, we expect the very best standard that those children can achieve.'

'It's to do with a lot of the insidious aspects of poverty which are perhaps less apparent to people. For instance, access to books and reading materials in the home. The parents don't have much disposable income to spend on books. Also, the parts of the city where there are very high incidents of free school meals tend to be the same families where the

parents themselves have had very negative experiences of the education system.'

The role of the parent was seen as very important:

'Pupils at schools in the more affluent areas of the city go home and they have a computer in the house and they've got reading games. They see an adult reading and see that literacy has a role in their daily life.'

In the poverty stricken areas of the LEA area, it was reported that parents want to be able to help their children, but don't have the resources to do so. Therefore the role of homework clubs was seen as crucial.

5. Discussion and recommendations

Overall, the findings of the analysis support the belief that the NLS is having an impact upon the schools and that teachers are generally supportive of the programme as found in a recent survey of teachers' attitudes (Mroz *et al*, 1999). However, the findings show that there are variations across year groups within schools and that schools' results vary from year to year. The case study interviews suggest such variations can often be explained by changing contextual factors such as teacher illness and pupil turnover.

The findings suggest there is a need for:

- longitudinal studies to measure the effectiveness of the NLS and to evaluate its impact on classroom practices and teachers' thinking;
- data which measures individual attainment alongside aggregations at school and LEA level. Such analysis at an individual level would also provide information on how effective the NLS is with children of different levels of ability, including those with special educational needs;
- the development of assessment measures with high curriculum validity and sensitivity to what is actually taught the Literacy Hour.

6. References

Beard, R. (1999) *National Literacy Strategy: Review of Research and other Related Evidence* London: DFEE.

Clay, M.M. (1993) *Reading Recovery: A guidebook for teachers in training* Auckland, New Zealand: Heinemann Education.

Crevola, C.A. and Hill, P.W. (1998) Evaluation of a Whole-School Approach to Prevention and Intervention in Early Literacy *Journal of Education for Students Placed At Risk* 3, 2, pp. 133 - 157.

DfEE (1997) *The Implementation of the National Literacy Strategy* London: Department for Education and Employment.

DfEE (1998) *The National Literacy Strategy: A Framework for Teaching* London: Department for Education and Employment.

Fitz-Gibbon, C.T. (1996) *Monitoring Education: Indicators, Quality and Effectiveness* London: Cassell.

Mroz, M., Smith, F & Hardman, F. On the hour: teachers' attitudes to the National Literacy Strategy, *Studies in Teaching and Learning*, 1.

Slavin, R.E. (1996) *Education for All* Lisse: Swets and Zeitlinger



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