

## **TRENDS IN ATTAINMENT IN IRISH FROM 1973 TO 1977**

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Three separate measures of attainment in Irish reading, usage and spelling were obtained for pupils in national samples of primary and post primary schools over a three-and-one half year period. Third fourth and fifth standard primary school pupils who were tested at the end of the 1976 77 school year scored higher than pupils tested during the middle of the 1973 74 school year. Among sixth standard primary and first and second year post primary pupils, the 1976 77 end-of year scores in Irish reading and usage but not in spelling were lower than the corresponding 1973 74 mid-year scores.

Over the past decade, both in this country and elsewhere, there has been increasing concern about the educational standards achieved by pupils in schools. This concern has been accompanied by an intensification of efforts to measure the performance of educational systems (cf 21). In Ireland, there is a sparseness of evidence regarding standards, a fact that may partly be attributed to a lack of appreciation of the need for such evidence and partly, until recently, to a lack of instruments suitable for monitoring standards. To date, the limited evidence based on test data that is available relates to mathematics (2, 14) and English reading comprehension (9, 15, 17, 22, 23). Only in the case of English reading studies are data available over time and these data are limited to Dublin city schools (15, 17, 23).

No study of pupil attainment in Irish, which has used data based on pupils' performance on standardized tests, has been reported. There is, however, some evidence on pupils' attainment in Irish which is based on teachers' perceptions. In a number of studies, teachers' opinions about the standards of Irish over a period of years were elicited. In two separate surveys, a majority of classroom teachers in one (13) and of principal teachers in the other (8) were in agreement that standards in Irish reading had improved over the five years preceding the times at which the surveys were carried out. Other aspects of Irish — oral Irish, written Irish and spelling — were perceived as having deteriorated. In a third study, almost

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half of teachers between the ages of 35 and 55 considered that the general command of Irish by pupils in senior grades in primary school was poorer than that which obtained ten years previously; approximately 40% of teachers, however, took an opposing view (20).

Evidence based on teachers' perceptions, while of considerable interest and value, is subject to many limitations. In assessing educational standards, it would seem important to supplement teachers' views with evidence from other sources. In the present investigation, evidence derived from norm-referenced standardized tests of achievement is used to compare standards of Irish in primary and secondary schools over the period 1973 to 1977. The tests provide measures of Irish reading, Irish usage and Irish spelling. Data are also available for the same pupils on performance on tests of English reading and mathematics; these data can provide comparative information in considering pupils' performance on the Irish tests.

#### METHOD

The data for the study are derived from the standardization samples of the Drumcondra Attainment Tests. These data were gathered at different times (beginning, middle, end) of the school year during different school years (1973-74, 1974-75 and 1976-77). Normally in studies designed to assess changes in attainment levels over extended time periods, tests are administered at approximately the same time of the school year (18). The standardization data, however, although they do not meet this requirement, can be used to throw some light on attainment levels over a period of approximately three-and-one-half years. It seems reasonable to assume, for example, that the level of reading attainment of pupils in a certain standard at the end of the school year (in our case the 1976-77 school year) should not be *lower* than that of pupils in the same standard during the middle of an earlier school year (in our data the 1973-74 school year); if it is lower, there is justification for inferring that reading standards have not risen in that grade level and in fact may have fallen during the time interval in question. Stated in another way, it is considered reasonable to infer that if there had been no decline in standards of attainment, the mean scores for pupils tested at the end of the 1976-77 school year should show some improvement over the mean scores recorded by corresponding samples of pupils tested in the middle or beginning of an earlier school year.

#### *Sample*

*Primary.* In 1973, as part of a larger study (1), a sample of 140 primary schools, stratified by location and sex served, was selected to be represent-

ative of the population of Catholic managed national schools in English speaking areas in the Republic of Ireland. Within each school all third, fourth, fifth and sixth standard pupils were expected to participate in the standardization study of the Drumcondra Attainment Tests (Levels II and III). Test standardization was carried out initially between December 1973 and March 1974 (i.e., the middle of the 1973/74 school year), subsequently between September and December 1974 (i.e., the beginning of the 1974/75 school year) and finally between March and June 1977 (i.e., the end of the 1976/77 school year). Details of the primary school samples are outlined in the technical manuals for the tests (5,7).

*Post Primary* A sample of 56 post primary schools, stratified by type (secondary, vocational), school size and sex served, was selected from the population of post primary schools in English speaking areas in the country. Within the selected schools all first and second year pupils were expected to take the appropriate Drumcondra Attainment Tests at the same time as the pupils in the primary schools. Further details of the post primary samples are provided in the technical manuals for the tests (4, 6).

Following each national test administration, statistical adjustments were made to ensure that the numbers in the individual school categories reflected the numbers of schools in the general population. A summary of the weighted number of pupils used in the standardization of the Irish reading subtest at each grade level is presented in Table 1. In each instance this number adequately reflects the weighted number of pupils used in the standardization of the remaining subtests.

TABLE 1

NUMBERS OF PUPILS IN WEIGHTED SAMPLE FOR IRISH READING TEST  
BY GRADE LEVEL AT EACH TIME OF TEST ADMINISTRATION

Grade level	Time of test administration		
	1974/75 (Beginning of Year)	1973/74 (Middle of Year)	1976/77 (End of Year)
Standard 3	1 187	2 789	1 772
Standard 4	1,180	2 934	2 376
Standard 5	1,753	2 013	2 565
Standard 6	1 378	2 061	2 760
1st Year post primary	1 578	2 685	2 176
2nd Year post primary	728	2 483	1 837

### *Instruments*

*Drumcondra Irish Test (Levels II-V).* Each test consists of separate subtests in vocabulary, comprehension, usage, and spelling. A pupil's reading score is defined as the sum of his separate scores on the vocabulary and comprehension subtests.

*Drumcondra English Test (Levels II-V).* An English reading score was obtained by summing vocabulary and comprehension subtest scores.

*Drumcondra Mathematics Test (Levels II-V).* The test contains separate subtests in computation, concepts, and problem solving. The subtest scores are summed to yield a total mathematics score.

### *Procedure*

Testing for standardization purposes was carried out by classroom teachers. Level II of the test series was administered to third and fourth standards, Level III to fifth and sixth standards, and Levels IV and V to first year and second year post-primary grades respectively.

Data on performance on standardized measures of attainment in English and mathematics are included in the study to permit comparison between the change in standards in these subjects and the change in Irish standards.

## RESULTS

The mean level of attainment of each of the three separate standardization samples is presented for each grade level in Tables 2 to 6. Although the middle-of-year standardization (between December 1973 and March 1974) was carried out before the beginning-of-year standardization (September to December 1974), the more logical sequence of beginning of year, middle of year and end of year is followed in the tables. The mean scores presented in the tables represent the mean number of items which were answered correctly. The primary purpose of the analysis is simply to determine if the mean number of items answered correctly increased during the period between the middle of the 1973-74 school year and the end of the 1976-77 school year.

Results are also presented in graphical form (Figures 1 to 6). For these, the mean score for the beginning-of-year standardization is set equal to 100 and the scores for the middle and end of year are expressed as percentages of beginning-of-year scores. For example, if the mean score of a particular subtest was 40 at the beginning of the year, 44 at the middle of the year, and 50 at the end of the year, the corresponding percentage scores would be 100, 110 and 125. In interpreting the graphs, attention should be focussed on the direction of the slopes of the lines between mid-1973 and the end of the 1976 school year.

*Third grade* An examination of the data in Table 2 and Figure 1 indicates that the mean level of performance in all subject areas (Irish, English and Mathematics) increased as expected over the three time periods

*Fourth grade* The data for fourth class are summarized in Table 3 and Figure 2. In terms of raw scores, it is apparent that there was a more pronounced increase in English reading and mathematics scores than in the three Irish subtest scores. Part of the levelling off of the rate of increase in Irish spelling scores at the end of the 1976-77 school year can be attributed to the fact that 18% of the pupils answered either 29 or the total of 30 items correctly, thereby exhibiting a 'ceiling effect'. This latter explanation does not explain the levelling off in Irish reading and usage scores.

*Fifth grade* The data presented in Table 4 indicate a general increase in scores for all subject areas. However, the increase in Irish usage scores from middle to end of year was a mere .21 of a raw score. The graphical presentation of the data (Figure 3) shows that the rate of increase in Irish usage scores in particular, and in Irish reading scores to a lesser extent, was somewhat less than that in other subject areas.

*Sixth grade* The most significant findings in Table 5 relate to Irish reading and usage. In both instances, the means for the end of the 1976-77 school year (reading M 47.82, usage M 24.37) are lower than those recorded by pupils in the middle of the 1973-74 school year (reading M 49.35, usage M 24.61). However, the drop in the 1976-77 Irish mean scores does not include Irish spelling; indeed, the mean score for spelling might well have been higher were it not for a ceiling effect which affected 17.75% of the pupils (i.e., pupils who answered all or all but one of the items correctly). In contrast to the scores for Irish reading and usage, the end of year scores for both mathematics and English reading had increased.

*First year post primary* The results for the first year post primary samples, which are outlined in Table 6, represent a trend similar to that observed for sixth standard pupils. The end of year mean scores for both Irish reading (M 51.06) and Irish usage (M 24.02) were lower than those recorded by pupils in the mid 1973-74 standardization group (reading M 52.77, usage M 24.35). An increase in mean score was recorded between mid year and end of year for mathematics, English reading and Irish spelling.

*Second year post-primary* The final set of comparisons is presented in Table 7. The data clearly indicate that the pattern of lower end of year (1976-77) mean scores for Irish reading and usage which was observed at

TABLE 2

MEANS ON ATTAINMENT TESTS AT EACH TIME OF ADMINISTRATION:  
THIRD STANDARD

Test	No. of items	Mean scores		
		1974-75 (Beginning of Year)	1973-74 (Middle of Year)	1976-77 (End of Year)
Irish Reading	70	28.49	35.13	39.52
Irish Usage	25	14.05	15.30	16.40
Irish Spelling	30	14.18	17.16	18.98
English Reading	70	37.06	40.69	45.34
Mathematics	115	49.96	57.21	68.95

TABLE 3

MEANS ON ATTAINMENT TESTS AT EACH TIME OF ADMINISTRATION:  
FOURTH STANDARD

Test	No. of items	Mean scores		
		1974-75 (Beginning of Year)	1973-74 (Middle of Year)	1976-77 (End of Year)
Irish Reading	70	37.99	44.05	45.14
Irish Usage	25	16.15	17.54	17.59
Irish Spelling	30	18.91	21.50	22.08
English Reading	70	45.73	51.02	54.39
Mathematics	115	66.60	73.22	84.08

TABLE 4

MEANS ON ATTAINMENT TESTS AT EACH TIME OF ADMINISTRATION:  
FIFTH STANDARD

Test	No. of items	Mean scores		
		1974-75 (Beginning of Year)	1973-74 (Middle of Year)	1976-77 (End of Year)
Irish Reading	72	33.94	39.85	41.43
Irish Usage	35	20.45	22.32	22.53
Irish Spelling	30	16.04	18.51	19.89
English Reading	80	48.87	54.45	58.58
Mathematics	107	52.76	62.01	67.05

TABLE 5

MEANS ON ATTAINMENT TESTS AT EACH TIME OF ADMINISTRATION  
SIXTH STANDARD

Test	No of items	Mean scores		
		1974 75 (Beginning of Year)	1973 74 (Middle of Year)	1976 77 (End of Year)
Irish Reading	72	42 04	49 35	47 82
Irish Usage	35	22 77	24 61	24 37
Irish Spelling	30	19 37	21 63	22 08
English Reading	80	58 63	62 56	64 55
Mathematics	107	67 28	74 90	77 31

TABLE 6

MEANS ON ATTAINMENT TESTS AT EACH TIME OF ADMINISTRATION  
FIRST YEAR POST PRIMARY

Test	No of items	Mean scores		
		1974 75 (Beginning of Year)	1973 74 (Middle of Year)	1976 77 (End of Year)
Irish Reading	80	49 66	52 77	51 06
Irish Usage	35	23 60	24 35	24 02
Irish Spelling	40	25 57	26 00	26 79
English Reading	78	53 52	55 57	58 06
Mathematics	93	51 14	53 20	58 48

TABLE 7

MEANS ON ATTAINMENT TESTS AT EACH TIME OF ADMINISTRATION  
SECOND YEAR POST PRIMARY

Test	No of items	Mean scores		
		1974-75 (Beginning of Year)	1973 74 (Middle of Year)	1976 77 (End of Year)
Irish Reading	65	43 1	45 56	44 22
Irish Usage	32	24 87	26 29	25 22
Irish Spelling	40	24 56	25 37	26 74
English Reading	105	67 23	69 55	72 28
Mathematics	92	54 29	55 90	60 01

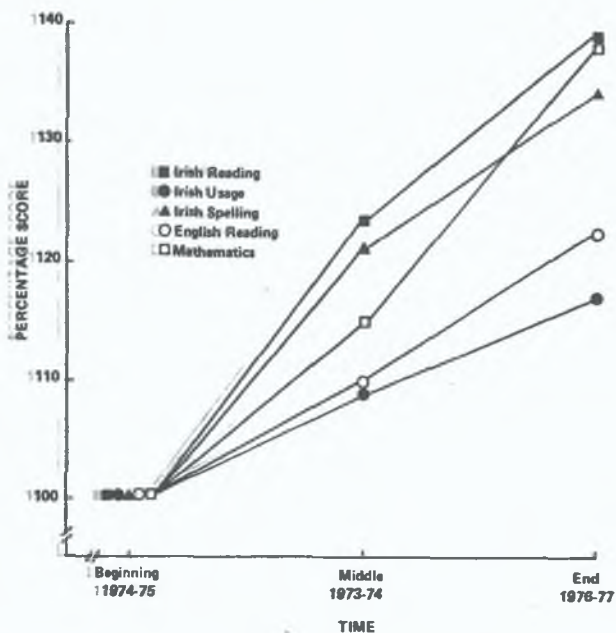


FIGURE 1. THIRD STANDARD MEAN TEST SCORE CHANGES OVER TIME.

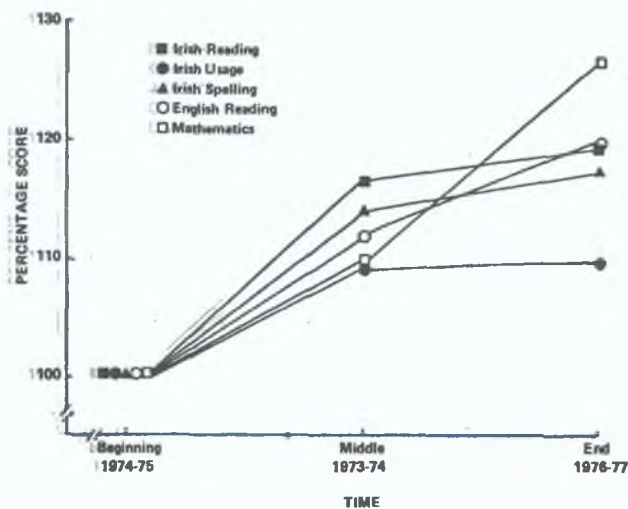


FIGURE 2. FOURTH STANDARD MEAN TEST SCORE CHANGES OVER TIME.



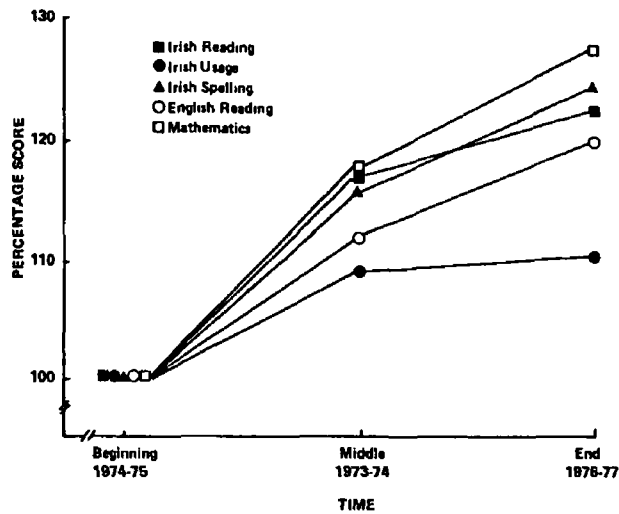


FIGURE 3 FIFTH STANDARD MEAN TEST SCORE CHANGES OVER TIME

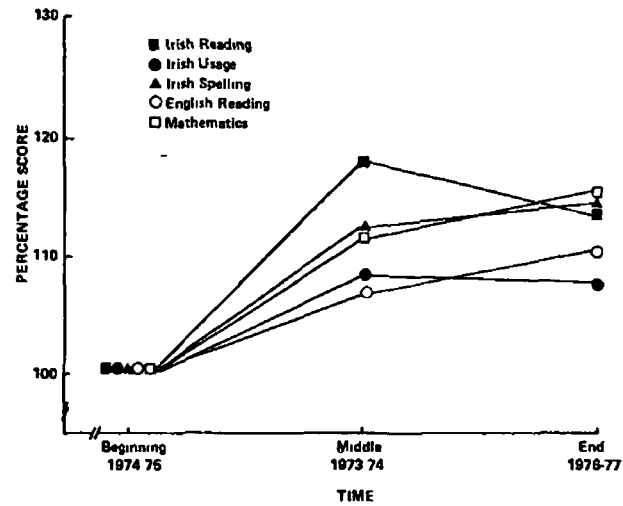


FIGURE 4 SIXTH STANDARD MEAN TEST SCORE CHANGES OVER TIME

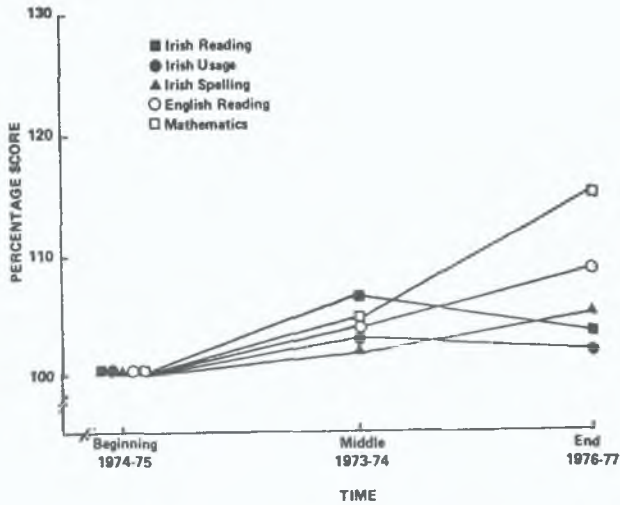


FIGURE 5. FIRST YEAR POST-PRIMARY MEAN TEST SCORE CHANGES OVER TIME.

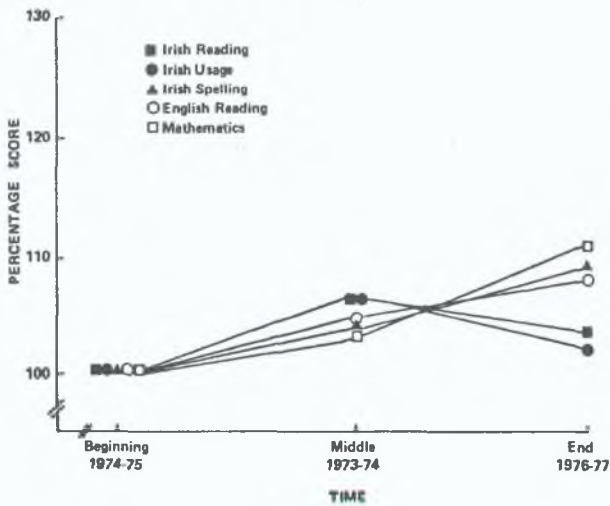


FIGURE 6. SECOND YEAR POST-PRIMARY MEAN TEST SCORE CHANGES OVER TIME.

the sixth class primary and first year post-primary grades, also applies to the second year post primary sample (for 1976-77, the reading mean was 44.22 and usage mean, 25.22, for 1973-74, the reading mean was 45.56 and usage mean, 26.29). Similarly, the expected pattern of increased scores in mathematics, English reading and Irish spelling, which was observed in the previous two analyses, emerged again in this instance.

#### DISCUSSION

Our results for third grade indicate that the 1976-77 end-of-year mean scores for Irish reading, usage and spelling, as expected, were greater than the mid-year (1973-74) mean scores. At the fourth and fifth grade levels, the 1976-77 end-of-year mean scores for Irish reading and usage were in general marginally greater than the mid-year mean scores. The results for sixth grade, however, indicate that the 1976-77 end-of-year mean performance was below the 1973-74 mid-year mean performance in both Irish reading and usage but not in Irish spelling. A similar pattern of lower 1976-77 end-of-year than mid-year (1973-74) mean scores in Irish reading and usage, but not spelling, was recorded at both the first and second year post-primary levels.

It might be argued that the apparent decline in Irish standards, which is evident especially among the more senior class levels, might be attributable to an overall decline in educational standards at both the primary and post-primary levels. However, the scores recorded by the same pupils on tests of attainment in English and mathematics, which were administered at approximately the same time as the Irish tests, do not support this argument. In these latter instances, the highest scores, as expected, were recorded by pupils tested at the end of the school year.

The criterion for acceptance of a decline in standards in the present study was conservative and may, in fact, have resulted in an underestimate of the overall extent of the decline in Irish reading and usage. Whenever a mean score recorded at the end of the 1976-77 school year was marginally greater than the corresponding score for the middle of the 1973-74 school year, it was accepted that a decline had not taken place. However, one might argue that the absence of evidence of a substantial increase over time could be taken as indicative of a decline. Had it been possible to contrast performance in the middle of the 1973-74 school year with performance in the middle of the 1976-77 school year, it is possible that the trend of falling standards in Irish reading and usage, which was evident among the senior grade levels, would have manifested itself also at lower grade levels.

The decline in standards may, of course, be a reflection of events that go back much further than the three and a half years over which our evidence was obtained. It seems reasonable to assume, for example, that the level of Irish attainment recorded by the second year post-primary sample, which was tested during the 1973-74 school year, represented the cumulative effects of pupils' experience in learning Irish from the time they first attended school (around 1964).

Viewed against a background of changes in the status of the Irish language over the past twenty years, the decline in scores we noted is perhaps not surprising. These changes have been in evidence in society in general (3), as well as in schools. For example, in schools, there has been a decline in the number of pupils attending all-Irish schools (19), in the number of pupils studying subjects through the medium of Irish in post-primary schools (11,12), as well as in the amount of time devoted to Irish in primary schools (16,19). One would expect such changes to be reflected in standards of Irish.

Unfortunately, no evidence is available on standards prior to 1973, so we can say nothing of possible declines before this time. For the time covered in our investigation (1973 to 1977), while we have recorded a decline at several grade levels, the extent of this decline should not be exaggerated. At grade levels at which a decrease in score was evident, the differences between the mean scores are never more than two points in raw score. True, one would have expected an increase rather than a drop, though what a reasonable increase over the time period in question would be is not clear.

We noted that the decline in mean scores was evident in sixth class in the primary school and in post-primary classes. In standards 3, 4 and 5, an increase, or at least a levelling off, of scores was found for each Irish achievement area. Since pupils in the lower classes entered the system at a later date than pupils in higher classes, this might be taken as indicating that standards are improving in recent years. Or, it may be that there is greater emphasis on Irish in lower than in higher grades. However, it may also be that the baseline in 1973 was low to begin with; this would be so if the attainment of pupils in lower grades was affected most by the reduction in the amount of time given to Irish in these grades following the introduction of new curricular approaches into the primary school (10, 20). The data we have at present cannot resolve these issues. Information from surveys over the coming years would be helpful in elucidating relationships between attainment levels and changes in the conditions under which Irish is taught in schools as well as in determining whether the present pattern of attainments in Irish persists.

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