

## A SURVEY OF READING COMPREHENSION IN DUBLIN CITY SCHOOLS\*

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In 1964 the Teachers Study Group carried out a survey of reading attainment in Dublin city schools. The findings of the study provided a base line for reading comprehension level against which the results of subsequent surveys at five yearly intervals might be compared. The present study, conducted in 1969, sought to establish what changes had occurred in the average level of attainment in English comprehension of eleven year olds in Dublin between 1964 and 1969. Pupils (N=1405) in a representative sample of Dublin city schools took the NFER NS6 Reading Attainment Test. No significant difference between the 1964 and 1969 samples was recorded.

In the present system of education reading may justifiably be regarded as the bedrock of the curriculum (7) and the key to much of the learning that comes later (6). It is not surprising, therefore, that measurement of reading attainment has been an integral part of the educational systems of most advanced countries for a considerable number of years. The establishment of levels of reading attainment has provided some yardstick with which to measure changes in standards as well as providing objective evidence on which to base decisions concerning educational developments.

One facet of reading attainment is that of reading comprehension described by Thorndike in 1917 as

a very elaborate procedure involving a weighing of each of many elements in a sentence, their organisation in the proper

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relations one to another, the selection of certain of their connotations and the rejection of others, and the co-operation of many forces to determine final response (14)

Reading comprehension implies not merely knowledge of the meanings of words but also the understanding of the relationship of words in sentences and paragraphs. The comprehension process is, in essence, the mental operations carried out by a person while reading. It is inferred through an examination of the comprehension product.

The most widely used approach to measuring reading comprehension in research involves the use of standardized reading comprehension tests. National surveys of reading comprehension have been carried out in England and Wales by the Ministry of Education at almost four-yearly intervals since 1948. On each successive testing, results have indicated an increase in the level of reading comprehension for both eleven- and fifteen-year olds. By 1964, standards had improved by 17 months of reading age (5). This represented a fairly uniform gain of 4½ months of reading comprehension age for each succeeding cohort of eleven-year olds taking the test. The National Foundation for Educational Research (NFER) surveys of attainments in 1955 and 1960 (11) and Morris's (9, 10) first and second Kent enquiries also provide evidence of a steady increase in reading levels in Britain. In the United States Gates (4) reported in 1961 that, despite the difficulties in making comparisons with surveys carried out in the early part of this century, there seemed to have been a continuous gain in reading abilities from 1921 to 1957. In 1957, for instance, Gates posited that children were at least six 'months' ahead in reading of children of similar age and ability in 1937.

There is also some recent evidence to support the claim that standards in reading might actually have decreased—or, in a more positive interpretation, that gains may not have been consolidated—in the latter part of the sixties. The *Black Papers* (2, 3) pinpointed a fear that reading levels in Britain might be on a downward trend while Burt (1) has cited data from the earlier part of this century which seems to indicate that the reading gains from 1948 may be less spectacular when adjudged against a background of data spanning a longer period of time or against a base-line other than 1948. In a recent review of thirty years of reading standards in England—which included the findings of the 1970/71 National Foundation study (13)—Start noted that the trend for

improvement had eased and may have declined since the middle sixties (12)

In Ireland, a recognition of the dearth of empirical data on reading comprehension gave the impetus to the Teachers' Study Group to conduct a survey in Dublin city national schools in 1964. The NS 6 Reading Attainment Test (which had previously been used in a number of British studies) was administered to a sample of Dublin children in the age range 10 years 9 months to 11 years 8 months. It was found that the mean score for Dublin children was 87.14 as compared with the British mean of 100. On this basis, it was suggested that there was a 'difference of approximately 26 months of "reading-age" between the children of the two populations (8)'. In the light of these findings, the present investigation was planned to estimate the average level of attainment in English reading comprehension in 1969 among Dublin children of a similar age range to that tested in 1964 and to see what changes, if any, had occurred since 1964.

#### METHOD

##### *Sample*

The population consisted of all primary schools within Dublin city area as defined by the Department of Education in February 1969 (N 221). All known special or hospital schools, non-aided primary schools and schools which were known to be exclusively infant were excluded from the sampling frame. On further examination twelve additional schools were eliminated because they did not have children in the relevant age range. This left a total of 209 schools in the population. These schools were then categorized according to size. The criterion of size used was the number of teachers who were teaching second or a higher standard in a school. Table 1 lists the number of schools in each category. A number of schools was randomly selected within each category (cf. Table 1), altogether 26 schools were selected.

TABLE 1  
NUMBER OF SCHOOLS ACCORDING TO SIZE IN POPULATION  
AND IN SURVEY SAMPLE

Size of school (No. of teachers in the school)	Schools in Dublin area	Schools in sample
1-2	30	4
3-6	84	10
7-12	71	9
13+	24	3
	209	26

All children aged 10 years 9 months to 11 years 8 months attending these schools were selected for inclusion in the survey (N 1,440), this being the age range which the 1964 survey had investigated. A total of 1,338 (623 boys and 715 girls) were present on the day of testing. A further 67 absentees (48 boys and 19 girls) were tested later. Thus, altogether 1,405 children took part in the investigation.

#### *Test*

The NS 6 Reading Test was designed and standardized by the National Foundation for Educational Research in England and Wales. It consists of 60 incomplete sentences. The appropriate word necessary to complete each sentence is selected from five possible alternatives. The time allotted is 20 minutes. Despite the lower performance of Dublin children when compared with British children on the test, Kelly and McGee (8) regarded the test as suitable for Irish children. This position was supported by the findings of an item analysis which revealed only three items which might be considered to discriminate in favour of children in Britain.

#### *Administrative procedure*

Test administrators were appointed in each school to give the test. The majority were members of the Teachers' Study Group, the remainder were specially selected by the Survey Committee. They attended two preliminary meetings at which the background of the test and the procedure for its administration were explained. The test was administered in all schools within two weeks of 20th May 1969. Testing in the majority of schools was carried out on Tuesday, 20th May 1969, between 10.00 a.m. and 11.00 a.m.

### RESULTS

The findings from the present survey were compared with those reported for 1964 by Kelly and McGee (8), who had provided the basis for subsequent comparisons when they re-standardized the NS 6 for a Dublin population. The new norms were built around a mean of 100 and a standard deviation of 15. The 1969 mean score was 99.12 (SD 15.47) and did not differ significantly from the mean (100.00) for 1964 ( $t=1.50$   $df\ 2,755$ ,  $p > 0.5$ ).

A comparison of the frequencies of scores in different score ranges

provides further evidence of the absence of change in test performance between 1964 and 1969 (Table 2) ( $\chi^2=2.37$ ,  $df\ 2$ ,  $p>0.05$ ) The mean score for boys (n 671) in the present survey was 98.93 (SD 16.6) and for girls (n 734), 99.28 (SD 14.4), the difference is not statistically significant ( $t=4.2$ ,  $df\ 1,403$ ) It was found that the performance of absentees ( $M\ 94.75$ ) was significantly different from the performance of the total sample ( $M\ 99.12$ ) which included absentees ( $t=2.54$ ,  $df\ 1,470$ ,  $p<0.05$ )

TABLE 2  
FREQUENCIES OF SCORES IN THREE SCORE RANGES,  
1964 AND 1969

Score Range	Percentage scoring within range	
	1964	1969
115+	15.87	15.62
85-114	69.10	69.29
-84	15.03	15.09

Finally, differences in the performance of children in schools of different sizes were examined Schools had been categorized into the following four school size groupings small school (1-2 teachers), medium (3-6 teachers), moderately large (7-12 teachers), and large school (13 teachers or more) While there were large differences between individual schools in all categories (as much as 22 points in mean score) an analysis of variance of score by school size revealed no significant difference between the four categories of school size ( $F=0.3$ ,  $df\ 3,1401$   $p>0.05$ )

#### DISCUSSION

The present survey did not reveal a significant difference in the performance of children in 1964 and in 1969 The scope of the study did not extend to examining the reasons why standards had not improved Therefore, any observations must be necessarily based on information extrinsic to the study The most positive interpretation of the results is that the level of comprehension of eleven-year olds in Dublin between 1964 and 1969 has been maintained, at a time when, in Britain at any rate, there were some signs of a return to a standard that prevailed in the early sixties However, this interpretation tends to ignore the comparatively lower level of performance by Dublin children in 1964, as compared with British children

There was some optimism in 1969 among educators and teachers that

improvements in performance might be recorded at successive test intervals. This was so, not only because of a climate of expectation that standards were improving elsewhere, but also because of the emphasis given to English in the new primary school curriculum. The hypothesis that gave rise to this climate of expectation has not, however, been confirmed. In retrospect, it was perhaps too early to expect that the changed emphasis on English in the curriculum would produce an immediate effect on standards of comprehension among children of the age range in the test.

Whatever interpretation is drawn from the results of the present study is less important than the fact that objective measures of reading comprehension now exist for Dublin city eleven-year olds, in 1964 and 1969. These data should be of use for comparative purposes in the 1974 and subsequent surveys, and they may also provide an incentive for analytic and research projects on specific aspects of attainment and its correlates.

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