DOCUMENT RESUME

ED 119 103 CS 002 395

AUTHOR Dilling, H. J.; Farrell, Michelle A.
TITLE An Investigation of Factors Relating to Reading Achievement.
INSTITUTION Scarborough Board of Education (Ontario).
PUB DATE 28 Jun 73
NOTE 148p.

EDRS PRICE MF-$0.83 HC-$7.35 Plus Postage
DESCRIPTORS Economic Factors; Elementary Education; Literature Reviews; Program Effectiveness; *Reading Achievement; *Reading Comprehension; Reading Instruction; *Reading Programs; *Reading Research; *Reading Tests; Social Factors

ABSTRACT

This study attempted to answer the following questions: Are all the concepts that reading tests are attempting to measure being taught in school? What are the characteristics of effective reading programs in school (e.g., amount of time, methods, materials, assistance, and support)? and What community-based variables are related to reading achievement by students in school (e.g., socio-economic and ethnic composition, population mobility, and language difficulty)? Since most previous Scarborough data indicated that the magnitude of the problem in reading achievement was most evident in Grade 6 test scores, this study collected data related to the reading instruction experiences of a group of students in Grade 3 (1968-69), Grade 4 (1967-70), and Grade 5 (1970-71) in an attempt to account for the reading test scores they obtained in Grade 6 (September, 1971). The primary emphasis of the study was placed on the development of comprehension ability. The results of the study indicated that the Gates-MacGinitie Reading Test measures many of the concepts being taught in the schools, and the results of a principal questionnaire, teacher questionnaire, and reading skills questionnaire showed that there are a large number of factors related to student's reading achievement and effective reading programs in school. (TS)

H. J. DILLING[1]

MICHELLE A. FARRELL[2]

Research Report issued by the Research Department
The Board of Education for the Borough of Scarborough

AN INVESTIGATION OF FACTORS RELATED TO READING ACHIEVEMENT

[1]Principal Investigator (Research Director, Scarborough Board of Education)

[2]Project Coordinator

June 28, 1973

ACKNOWLEDGEMENTS

Grateful acknowledgement is hereby made of the financial assistance for this project provided by the Ministry of Education through Grants-in-Aid of Educational Research 1972-73.

Appreciation is also extended to the following people: Mrs. Barbara L. Sprumont, Project Assistant, Mr. William J. Keating, Research Assistant, Scarborough of Education, and Mrs. Joyce M. Owen for their assistance in the design of data-collecting instruments and in the collection and analysis of data; Mr. J. Ryckman, Co-ordinator of Reading, Scarborough Board of Education, and his staff at the Reading Centre, for their assistance in identifying meaningful factors for study and in providing access to some of the data collected; Mrs. Barbara McEvilla, Reading Consultant at the Reading Centre, Scarborough Board of Education, for special assistance in the development of the Principal Questionnaire and the Teacher Questionnaire; and the many Scarborough principals and teachers (both former and present) for their cooperation in completing the questionnaires which provided the central body of data collected in the study.

TABLE OF CONTENTS

LIST OF TABLES

I. INTRODUCTION

It is axiomatic that the ability to read is a major prerequisite to success in society today -- whether success is measured by progress in school, by the acquisition of material goods, or by the development of personal values. Responsibility for the successful development of this ability in any child lies with a number of school personnel: the librarian, the reading consultant, the school nurse, the principal, and, most conspicuously, the teacher. In a broader sense, however, these individuals are part of a system which includes the home, the school, and the community.

In view of the value that society places on reading and the number of individuals who are either directly or indirectly involved in developing this ability, it is easy to understand how the measurement of student achievement in this area has acquired a prominent position in the evaluation of both the progress of the individual student and the effectiveness of the school itself. It has been with a great deal of concern, therefore, that educators have begun to report a decline in standardized reading test scores in recent years. Such a decline has been fully documented by studies conducted in England (Start, 1972) and in Vancouver (Ellis, 1971), and informal communication with various school board officials in Ontario indicates a similar trend in this province.

In Scarborough, the same standardized reading tests (the *Gates-MacGinitie Reading Tests*) were administered at three grade levels (3, 6, and 8) over the five-year period extending from 1967-68 to 1971-72. In

addition, mental ability test results were also available for those years. A longitudinal evaluation of these two types of data permitted one to determine the following:

1. The standing of Scarborough students as a group in relation to the norms group used in the standardization of each of the tests.

2. The trends for Scarborough as a whole, and for individual schools, as evidenced by the five-year profiles of test scores.

3. The relationship between reading test scores and mental ability test scores.

A thorough study of the above observations revealed that there were several areas of concern. For example, Scarborough reading scores declined markedly over the five-year period at each of the three grade levels tested, but most drastically at the Grade 6 level. The average results at the Grade 6 level had dropped so much that, by 1971-72, they were considerably below the level expected on the basis of the performance of the norms group on which the test had been standardized. What caused greater concern, however, was the fact that the Grade 6 reading scores had dropped more sharply than would have been anticipated on the basis of the relationship between reading test scores and mental ability test scores. (Changes in mental ability test scores for the borough as a whole over the five-year period were not great.)

Concern over these general findings for Scarborough provided the catalyst for further analysis of the Grade 6 statistics for individual schools. The results of this investigation indicated that, whereas the profile for the borough as a whole showed a fairly consistent downward

trend in reading scores over the five-year period, many individual school profiles revealed quite erratic variations in average scores from year to year. In some cases, these variations were highly related, as would be expected, to variations in the average mental ability scores of the groups tested each year; in other schools, however, there seemed to be little or no relationship between average reading scores and average mental ability over the five-year period. This was a particularly unusual finding in view of the fact that the general relationship between reading and mental ability in Scarborough was quite high. Considerable variation was also evident within individual schools on the three subtests which comprise the *Gates-MacGinitie Reading Test* at the Grade 6 level (Speed and Accuracy, Vocabulary, and Comprehension). As far as the present study is concerned, however, the most important result of this investigation was the finding that, whereas average reading scores had declined in many individual schools over the five-year period, there were also a number of schools in which these scores had remained relatively constant or had even improved.

When principals were exposed to the results of the five-year evaluation of reading achievement in Scarborough, they offered a number of possible explanations, both for the general decline in reading scores and for the inconsistencies among schools and across years noted above. Many of the ideas they expressed appeared to be quite justifiable as hypotheses to be tested. For example, perhaps the reading tests that were administered do not adequately measure the skills that are being stressed in the classroom today. Perhaps these tests are too speed-

oriented and are, therefore, at variance with the objectives of developing understanding, the ability to locate information, and the capacity to think and organize information logically. Other discussions centered around age and continuous progress, programs for the identification of problem readers, attitudes, interest, and time spent on the language arts. Finally, a plea was made for some flexibility during a period of transition when objectives are being reviewed and restated.

II. LITERATURE REVIEW

Reading has traditionally been and continues to be one of the most widely researched topics in education. After a comprehensive analysis of the research conducted up to 1965, Chall (1967) made the following points in her summary (pp. 83-85):

> 1. The first step in learning to read in one's native language is essentially learning a printed code [phonics] for the speech we possess.
>
> 2. Early stress on code learning, ... not only produces better word recognition and spelling, but also makes it easier for the child eventually to read with understanding ...
>
> 3. Analysis neither proved nor disproved that their [the linguists'] methods (or those of the alphabet reformers) were better than the other code-emphasis methods, e.g. systematic phonics.
>
> 4. [There was] no evidence that either a code or meaning emphasis fosters greater love of reading or is more interesting to children.
>
> 5. There is some experimental evidence that children of below-average and average intelligence and children of lower socio-economic background do better with an early code emphasis.
>
> 6. A stronger code emphasis would help prevent reading failure, although never eliminate it entirely.
>
> 7. Very little of the research evidence tells us about differences in results ... at the end of fourth grade and beyond.

Looking more closely at the specific factors which affect reading achievement, the authors of an extensive study of the Newton, Massachusetts, public schools (Austin *et al.*, 1961) noted the importance of factors within the child (e.g., mental ability, physical attributes, home background, etc.)

and factors within the child's school experience. In the case of school-based factors, they drew the following conclusions about reading achievement at the Grade 3 level (p. 155):

> 1. Children who attended nursery school before entering first grade had significantly higher reading achievement ... than children who had not.
>
> 2. It made no difference at what age the child entered grade 1.
>
> 3. Moves between schools, whether within the city or from outside, appeared to have no effect on the child's reading performance ...
>
> 4. There was no apparent relationship between the pupil's attendance record and his reading success ...
>
> 5. Reading success in relation to mental ability varied significantly from school to school.
>
> 6. Reading success varied significantly from teacher to teacher, even after the effects of school variation per se were eliminated ... The skill of the teacher is probably more important than the amount of teaching experience she has had.... Some evidence pointed to the possibility that the teacher's knowledge of English orthographic principles (sometimes called "phonics") had some relation to her teaching success.

Another summary of the school-based factors associated with reading achievement at the Grade 3 level was provided by Weber (1971) in a study of four U.S. inner-city schools where Grade 3 reading achievement was at or above the national grade level norm. Weber's descriptions of these schools (he presented no statistics in support of his conclusions) indicated that the following factors are associated with successful reading programs in inner-city schools: strong leadership, high expectations, good atmosphere, strong emphasis on reading, additional reading personnel, use of phonics, individualization, and careful evaluation of

pupil progress. Among the characteristics which he classified as "non-essential" were: small class size, achievement grouping, quality of teaching, the ethnic background of the principals and teachers, the existence of preschool education, and elaborate physical facilities.

One of the few studies which has examined school-based factors affecting reading achievement beyond the Grade 3 level was summarized by Morris (1966). In this investigation of the reading comprehension ability of 8,000 English pupils aged 7 to 11 in 60 Primary schools, high test scores were reported to be associated with urban schools, schools in good neighborhoods, a junior-without-infant type of organization, large schools, superior school buildings, and a formal approach to beginning reading instruction. Further analysis was conducted on 10 schools selected for intensive study because the average scores of their pupils deviated significantly (in either a positive or negative direction) from those of a random sample of primary schools. In regard to this further analysis, Morris reported (p. 297):

> Observations in these schools suggested that, after the attributes of their child population and material circumstances had been considered, each school's success or failure ... depended mainly on the quality of its head and staff in that order.

Additional data connecting Grade 6 reading comprehension scores with a variety of factors was provided through a study by the Board of Education for the Borough of North York (1972). Information collected from student questionnaires indicated that reading comprehension test scores are positively related to pupil self-ratings, possession of a library card, the amount of time spent reading for enjoyment at home, the amount of reading

done on an average night for homework assignments, the variety of subjects in which books are read for enjoyment, and homes in which English is the only language spoken.

In summary, then, it can be stated that there are relatively few studies which are even indirectly relevant to the problem of a general decline in standardized reading test scores over the specified five-year period. While there are a number of studies, typically conducted in either England or the United States, in which an attempt was made to isolate the school-based factors having an effect on reading achievement, few of these studies dealt with students beyond the Grade 4 level, and results are often contradictory. What these studies do provide, however, is a number of hypotheses which can be tested in other areas and at other grade levels.

III. PURPOSE OF STUDY

A review of the research on reading, in addition to the longitudinal evaluation and follow-up studies in Scarborough, indicated a need for an exploratory study and pointed toward the following questions as hypotheses to be tested:

1. Are all the concepts that reading tests are attempting to measure being taught today? Conversely, are all the concepts being taught today being measured by reading tests?

2. What are the characteristics of effective reading programs in school (e.g., amount of time, methods, materials, assistance, and support)?

3. What community-based variables are related to reading achievement by students in school (e.g., socio-economic and ethnic composition, population mobility, and language difficulty)?

IV. DELIMITATION OF STUDY

Practical considerations made it necessary to limit the scope of the study in several basic ways. Since the Scarborough data indicated that the magnitude of the problem in reading achievement was most evident in the Grade 6 test scores and, more specifically, in the scores of the Grade 6 students tested in September, 1971, the emphasis of the study was on the particular cohort of Grade 6 students tested at that time. Much of the study was devoted, therefore, to the collection of data related to the reading instruction experiences of this group of students in Grade 3 (1968-69), Grade 4 (1969-70), and Grade 5 (1970-71) in an attempt to account for the reading test scores they obtained in September, 1971. While a complete "history" of the reading instruction experiences of this cohort would have had to include descriptions of their Kindergarten, Grade 1, and Grade 2 years, the difficulty in obtaining data on years so far back in time and the relative abundance of research already available on beginning reading led to the decision to concentrate on the Grade 3, 4, and 5 years. Empirical support for this decision was provided by Scarborough data which indicated that the September, 1968, Grade 3 reading test scores (i.e., the Grade 3 scores of basically the same cohort) were still above the level obtained by the norms group; this fact suggested that at least some portion of the already noted decline in average scores at the Grade 6 level was attributable to experiences in Grades 3, 4, and 5.

In addition, it was assumed that most, if not all, reading skills are involved in comprehension ability. Empirical support for this assumption was provided by the consistently high positive correlations which have been obtained in Scarborough between scores on the Vocabulary and Comprehension Subtests of the *Gates-MacGinitie Reading Tests*. On the basis of this assumption, then, the primary emphasis of the study was placed on the development of comprehension ability.

V. DESIGN

The design of the study entailed two relatively distinct projects. The first project was designed to answer the questions previously posed concerning the relationship between the skills that reading tests measure and the skills which are actually being taught in the classroom. This project consisted of a content analysis of the reading test used at the Grade 6 level in Scarborough and a survey of a sample of Grade 6 teachers in the borough.

The second project was designed to answer those questions concerning the school-based factors and community-based factors related to reading achievement. This project involved collecting data from a variety of sources as part of a comparison of two groups of Scarborough public schools: 15 schools at the upper end of an "effectiveness" continuum, and 15 schools at the lower end of such a continuum. "Effectiveness", in this context, refers to the degree and constancy with which reading achievement in a school has been maintained above the level that would be predicted on the basis of the average mental ability of the students.

VI. PROCEDURE

Analysis of the Test

A Reading Skills Questionnaire was sent to a randomly selected (50 percent) sample of Scarborough Grade 6 teachers for the current (1972-73) school year. On this questionnaire, each of the 114 selected teachers was asked to rate anonymously, on a 5-point scale, the degree to which he or she concentrated on each of 18 designated reading skills in his or her classroom. The reading skills listed on the questionnaire were selected on the basis of a careful review of both a variety of published materials in the field of reading instruction and the experimental literature on the statistical analysis of reading tests; several Grade 6 teachers assisted in the process of phrasing the reading skills in terms which were familiar to teachers at that level and which also constituted mutually exclusive categories. A copy of the Reading Skills Questionnaire is provided in Appendix A.

At the same time, a random (10 percent) sample of Scarborough Grade 6 students during the same year (1972-73) was selected. The principals of the schools that these 605 students were attending were asked to forward to the Research Department the materials on which the students had recorded their responses during the September, 1972, administration of the *Gates-MacGinitie Reading Tests, Survey D, Form 1.* Because each Scarborough public school was given the option of either hand-scoring or machine-scoring the reading tests administered during the current year, the "materials" mentioned previously consisted of either the test booklet itself (in the case of the schools where hand-scoring was chosen) or three

data-processing cards (in the case of the schools where machine-scoring was chosen).

Comparison of Schools

Selection of schools. The selection of schools for more intensive study was based on a further analysis of individual school statistics on the Comprehension Subtest of the *Gates-MacGinitie Reading Test, Survey D*, and on the *Dominion Learning Capacity Test, Junior* (the mental ability test administered throughout Scarborough during February of the Grade 5 year). The specific procedure which was used involved inspection of individual school graphs on which were plotted two sets of data -- mean Grade 6 (September) Comprehension Subtest scores for the five-year period from 1967 to 1971 and mean Grade 5 (February) mental ability test scores for the same five-year period. Three factors were considered in the operational definition of the "effectiveness" of the reading instruction program in each school: a) the pattern of mean Comprehension Subtest scores over the five-year period, b) the school's 1971 rank within the borough with respect to its Comprehension mean, and c) the discrepancy between the 1971 Comprehension mean and the value of that mean that would be expected on the basis of the mental ability test mean obtained by the school's Grade 5 students in the preceding February. Stated more generally, then, each school's reading "effectiveness" was defined in terms of the consistency of its reading scores, the relationship of these scores to those obtained in other Scarborough public schools, and the relationship of the scores to the mental ability of its students.

These three criteria were used in the following specific manner to select two groups of schools at opposite extremes of an "effectiveness" continuum. No school which had been in operation less than three years was considered for possible inclusion in either group. The 15 high-achieving schools (hereafter denoted as the H.A. schools) selected exhibited the following characteristics: a) a fairly consistent pattern of Comprehension means over the five-year period, b) a 1971 Comprehension rank within the borough of 50 (out of the total of 89 schools involved in the testing program) or higher, and c) a 1971 Comprehension mean which closely approximated the value of the mean that would be expected on the basis of the appropriate mental ability test mean (i.e., the Grade 5 mean for the previous February). The 15 low-achieving schools (hereafter denoted as the L.A. schools) selected exhibited the following characteristics: a) a pronounced downward trend in Comprehension means over the five-year period, b) a 1971 Comprehension rank within the borough of 60 or lower, and c) a 1971 Comprehension mean which was far below the value of the mean expected from the mental ability test results.

Principal data. The names of the principals in each of these 30 schools during the school years of 1968-69, 1969-70, and 1970-71 (hereafter denoted as the target years, i.e., the years when the student cohort would have been in Grades 3, 4, and 5) were obtained from local Board of Education directories published each year. A Principal Questionnaire dealing with such topics as school-wide organization and school-wide policies concerning reading methods, materials, and evaluation was sent to each of the 36 principals who had been responsible for one of the 30 schools

at some point during the target years. Two questionnaires, clearly labelled with respect to school name and year(s) under investigation, were sent to each of the two principals who had moved from one to another of the 30 schools within the target period. Although a covering letter explaining the nature of the study and giving instructions for the completion of the questionnaire accompanied each questionnaire, no information was provided concerning either the existence of two groups of schools or the specific reasons for selecting certain schools for inclusion in the study. The principals were assured that all information supplied would be kept completely anonymous with respect to both their own names and the names of their schools. Copies of both the covering letter and the Principal Questionnaire itself are presented in Appendix A.

Teacher data. The names of the teachers who taught the cohort group of students in Grade 3 (1968-69), Grade 4 (1969-70), and Grade 5 (1970-71) in each of the 30 schools were also obtained from staff directories. This procedure yielded a total of 222 names (94 in the H.A. schools and 128 in the L.A. schools), 24 of which were the duplicate names of teachers who had taught the cohort students during more than one target year, either within the same school or in two different schools. A Teacher Questionnaire dealing with such topics as classroom organization and classroom policies concerning reading methods, materials, and evaluation was sent to each of the 173 teachers (75 in the H.A. schools and 98 in the L.A. schools) who were either still teaching somewhere in Scarborough or for whom a forwarding address was available in

files located in either the Instruction Department or in individual study schools; no questionnaire could be sent to the 25 teachers who had left Scarborough and for whom no forwarding address could be located. A covering letter similar in content to that sent out with the Principal Questionnaire accompanied each Teacher Questionnaire. In the case of those 22 teachers who had taught cohort students in more than one grade level within the same school, only one questionnaire was provided, but, in an additional note, the teacher was asked to indicate any variations in situation or in practice between the various target years. In the case of the two teachers who had taught cohort students in each of two different schools, two questionnaires were sent, and, in an additional note, the individual was asked to fill out both questionnaires in the event that there were extensive variations. Copies of both the covering letter and the Teacher Questionnaire are presented in Appendix A.

A second source of data on teachers in the 30 study schools consisted of responses to the Reading Skills Questionnaire described previously. At the same time this questionnaire was sent to a sample of 1972-73 Grade 6 teachers, it was sent to all 401 teachers listed in the current (1972-73) staff directory as teaching in Grades 1-6 in the 30 schools. Only one questionnaire was sent to those 35 Grade 6 teachers who were at once members of the borough-wide sample and teachers in one of the 30 study schools; their responses were included, however, in the analysis of both sets of data.

Student age and mobility data. Data relating to the mobility of students in the study schools were obtained by comparing Research Department lists of students who took the *Gates-MacGinitie Reading Test, Primary C* (the test administered throughout Scarborough at the Grade 3 level), in September, 1968, with similar lists of the Grade 6 students who took the *Gates-MacGinitie Reading Test, Survey D*, in September, 1971. Grade 3 lists for 1967 and 1969 were also consulted in order to make note of any cohort students who did not take Survey C in 1968 due to either acceleration or failure. These data were used to determine the number, in each of the 30 schools, of cohort students who had attended that school throughout their Grade 3, 4, and 5 years. Also computed from information available in Research Department files were the mean ages of the Grade 5 students tested in each of the study schools on the *Dominion Learning Capacity Test, Junior*, in February, 1971; as noted earlier, it was assumed that this was essentially the same group of students who were tested on the *Gates-MacGinitie Reading Test, Survey D*, seven months later.

Housing and enrollment data. Principal Surveys submitted each year to the Planning Department were examined in order to obtain a quantitative description of the types of housing in which the students in each study school lived during each of the target years. It should be noted, however, that the data obtained are only estimates in the sense that the total enrollment figures computed from the housing data did not always coincide with the official September enrollment figures reported in the

Public School Attendance records also filed with the Planning Department. In addition, principals were not always consistent in their method of supplying the number of students drawn from each housing category (e.g., some principals included Kindergarten and auxiliary students, whereas others did not). From the Public School Attendance records mentioned previously, the following enrollment data were recorded for each study school: Grade 3 enrollment in 1968-69, Grade 4 enrollment in 1969-70, Grade 5 enrollment in 1970-71, and the total school enrollment for each of the target years.

Reading Centre data. Reading Centre lists of referrals and case study files were used to obtain, for each study school, the numbers of students referred to the Centre from each of the grade levels 1 to 6 during each of the years 1966-67 to 1970-71. A major problem encountered in the collection -- and subsequent interpretation -- of these data, however, concerns the distinction between "formal" and "informal" referrals. Formal referrals are those which have gone through the prescribed channels, with all the required testing and paperwork involved. Informal referrals are those which have been brought to the attention of the Reading Centre consultant when this individual was in the school; often the names of students seen on an informal basis never appear in the files, and, if they do, the file may contain incomplete information. The most serious aspect of the problem as far as data collection was concerned, however, was the fact that it was often impossible to distinguish between the files on formal and informal referrals. As a result, all referrals which appeared on the referral list and on which a case file was available were recorded.

A second type of data collected from Reading Centre records concerns the number in each of the study schools of children whose mother tongue was not English. This information was obtained from a Reading Centre survey conducted in December, 1971. It was assumed that data collected at that time would relate most directly to the cohort group of students (i.e., those Grade 6 students tested on the *Gates-MacGinitie Reading Test, Survey D*, in September, 1971). It should be noted, however, that the data presented in the survey are school-wide figures not broken down into specific grade levels because of the relatively small numbers involved.

VII. RESULTS

Analysis of the Test

Reading Skills Questionnaire. A completed Reading Skills Questionnaire was received from 106 of the 114 Grade 6 teachers to whom it had been sent as part of the random sampling of all Scarborough teachers at that grade level. Mean "degree of concentration" ratings were computed for each of the 18 reading skills listed on the questionnaire, and these means were used to rank order the 18 skills according to "degree of concentration". The 18 skills and their respective "degree of concentration means" are presented in this rank order in Table 1.

Inspection of the statistics presented in Table 1 reveals that both of the questionnaire items that are directly associated with vocabulary expansion (i.e., "vocabulary development" and "word attack skills") are located in the top third of the rank-ordered scale, that the other items located in this third of the scale are typically considered comprehension skills, and that all of the skills associated with speed and with oral reading are located in the lower two-thirds of the scale. The fact that most of the questionnaire items had standard deviations close to or exceeding 1.00, however, indicated that there was considerable variation among teachers in their ratings.

Internal analysis. *Gates - MacGinitie Reading Test* materials were obtained for 602 of the 605 Grade 6 students for whom these materials had been requested (3 students' materials had been accidentally discarded). Data on 4 students were not included in the subsequent analyses due to

TABLE 1

"Degree of Concentration" Means and Standard Deviations: Reading Skills Questionnaire Items, 50 Percent Sample of Scarborough Grade 6 Teachers (N=106)

Reading skill	"Degree of concentration" mean	*SD*
Identifying the main idea	4.46	0.65
Vocabulary development	4.46	0.71
Drawing conclusions	4.34	0.70
Word attack skills	4.26	0.94
Making inferences	4.16	0.76
Noting significance details	4.16	0.77
Understanding cause and effect	4.07	0.80
Following sequence	3.96	0.84
Pronunciation and enunciation	3.70	0.91
Predicting outcomes	3.51	1.04
Generalizing	3.36	0.84
Silent reading speed	3.31	0.98
Identifying the author's purpose	3.31	1.08
Use of punctuation in oral reading	3.29	0.95
Expression	3.17	0.92
Classifying	3.16	0.89
Oral reading speed	2.58	0.96
Oral reading volume	2.50	1.00

Note.— These statistics were derived from responses to a 5-point scale ranging in value from 1 (identified as "slightly important") to 5 (identified as "extremely important").

the fact that all three *Gates-MacGinitie* subtests had not been administered to these pupils. The materials for the remaining 598 students (who represent 92 Scarborough public schools) included 390 hand-scored test booklets and 208 sets of machine-scored cards.

The first step taken in the analysis of these data was a comparison of the raw scores obtained by the hand-scored and machine-scored groups. Means and standard deviations were computed and *t*-tests were used to test the significance of differences between these two groups on each of the three *Gates-MacGinitie* subtests and on the test as a whole. A summary of this analysis is presented in Table 2.

TABLE 2

A Comparison of the Scores of Hand- and Machine-Scored Groups on the *Gates-MacGinitie Reading Test, Survey D, Form 1*

	Group					
	Hand-scored (N=390)		Machine-scored (N=208)			
Variable	Mean (X_1)	SD_1	Mean (X_2)	SD_2	X_1-X_2	t
Speed and Accuracy Subtest (36 items)	16.79	5.752	12.23	4.284	4.56	10.04**
Vocabulary Subtest (50 items)	32.14	7.540	30.80	7.535	1.34	2.06*
Comprehension Subtest (52 items)	37.41	8.930	34.26	9.864	3.15	3.96**
Total test (138 items)	84.12	19.706	74.28	18.630	9.84	5.92**

* $p < .05$

** $p < .01$

Inspection of Table 2 reveals that there were statistically significant differences between the hand- and machine-scored groups on all three subtests and on the test as a whole. In each case, this difference favoured the hand-scored group to the extent that, on the test as a whole, the hand-scored group mean was almost 10 points higher than the machine-scored group mean. These differences in raw score means were to be expected on the basis of upward adjustments that have been made on the norms for students using the machine-scoring procedure.

The second phase in the internal analysis of the test was a series of factor analyses conducted on the responses of all 598 students. Factor analysis is a statistical technique in which the correlations between items within a given test (or on several tests or subtests) are examined, with the goal of finding patterns which enable the researcher to explain variations in test performance in terms of a relatively small number of factors (i.e., clusters of correlations to which the researcher has assigned particular labels). For example, in a summary of one of the early studies of this type, Davis (1946) reported that factors which he identified as word knowledge, the ability to see relationships, and comprehension of the author's explicit statements together accounted for 89 percent of the variation in reading test performance.

Because this technique is not appropriate in the analysis of highly speeded tests (i.e., tests or subtests on which a large proportion of students are not expected to complete all items), it was not possible to include the Speed and Accuracy Subtest in the analyses conducted. The first factor analysis conducted, therefore, was an analysis of the

Vocabulary and Comprehension Subtests combined. This analysis yielded one factor, which accounted for approximately 16 percent of the variance, and four factors, each of which accounted for between 1 and 3 percent of the variance; the remaining 77 percent of the variance was distributed over a large number of factors, each of which accounted for less than 1 percent of the variance. Inspection of the correlations between the largest factor and specific test items revealed that the items most clearly related to this factor (i.e., those with factor correlations exceeding .40) were Comprehension Subtest items 31, 35, 37-41, 43, 46, 49, and 50.

Separate factor analyses were also conducted on the Vocabulary and Comprehension Subtests. The factor analysis of the Vocabulary Subtest yielded one factor accounting for 7 percent of the variance and a second factor accounting for 1 percent; the factor analysis of the Comprehension Subtest yielded one factor accounting for 10 percent of the variance and a second factor accounting for 2 percent of the variance. Again, the remaining portions of the variance on each of these subtests were distributed over a large number of factors, each accounting for less than 1 percent of the variance. Detailed summaries of these factor analyses are on file in the Research Department and can be made available for further inspection.

Supplementary data. Additional data relating to the content of the Comprehension Subtest of the *Gates-MacGinitie Reading Test, Survey D, Form 1*, were found in a study conducted by Auerbach (1971). As part of a comparative analysis of the comprehension sections of three widely-used standardized reading tests, Auerbach trained three raters in the use of a

rating scale for "selections", a rating scale for "questions", and a rating scale for "choices". Her rating scale for selections was designed to identify the subject matter of the reading selections included in the comprehension section of each test. The categories used and the percentage of selections on the *Gates-MacGinitie Comprehension Subtest* assigned to each category are presented in Table 3 (adapted from Auerbach, p. 178).

TABLE 3

Percentage of *Gates-MacGinitie Comprehension Subtest*

Selections Assigned to Each Category

(Total Number of Selections = 21)

Category	Percent Selections
Riddle	0
Story	19
Language	5
Math	0
Social Studies	28
Social Science	5
Science	43
Humanities	0

Note.-- Further details concerning the definition of each category are provided by Auerbach (p.85).

Inspection of Table 3 reveals that almost half of the 21 selections on the Comprehension Subtest were assigned to the science category, and

other selections were assigned to the story, language, social studies, and social science categories; no selections were assigned to the riddle, math, and humanities categories.

Auerbach's rating scale for questions was designed to describe the relationship between the correct answer to each comprehension question and the selection on which the question was based. The following descriptions of the question categories were adapted from Auerbach (pp. 86-88):

Rating Scale for Questions: Category Descriptions

1. Recognition: choosing the right answer requires recognizing an identical word that appears in the selection in the same general context.

2. Contextual paraphrase: choosing the right answer requires recognizing an identical word that appears in the selection in a different linguistic context.

3. Grammatical paraphrase: choosing the right answer requires recognizing a grammatical variant (different number, voice, tense, etc.) of a word that appears in the selection in a different linguistic context.

4. Semantic paraphrase: choosing the right answer requires recognizing a semantical variant (synonym, translation, paraphrase, etc.) of a word or phrase that appears in the selection in a different linguistic context.

5. Definite concepts: choosing the right answer requires identifying a "common" concept that (a) is not stated in the selection, (b) definitely applies to the instances or attributes mentioned in the selection, and (c) is the only choice that meets the above conditions.

6. Probable concepts: choosing the right answer requires identifying a "common" concept that (a) is not stated in the selection, (b) applies with a certain degree of appropriateness to the set of attributes or instances mentioned in the selection, and (c) is the choice that best meets the above conditions.

7. Language concepts: choosing the right answer depends upon semantic and/or syntactic constructions such as: cliches, colloquialisms, antonyms, relatives, antecedents, etc. which are not stated in the selection, but are suggested by the general theme and/or contextual implications of the selection.

8. Previous knowledge: choosing the right answer requires previous knowledge, usually obtained in a formal setting, of specific facts such as dates, names, relationships, places, etc.

9. Word-picture matching: choosing the right answer requires matching a word to its corresponding picture.

The percentage of questions (items) on the *Gates-MacGinitie Comprehension Subtest* assigned to each category are presented in Table 4 (adapted from Auerbach, p. 179).

TABLE 4

Percentage of *Gates-MacGinitie Comprehension Subtest* Items Assigned to Each Category

(Total Number of Items = 52)

Category	Percent Items
Recognition	0
Contextual paraphrase	15
Grammatical paraphrase	14
Semantic paraphrase	6
Definite concept	0
Probable concept	19
Language concept	17
Previous knowledge	29
Matching	0

Inspection of Table 4 reveals that, while previous knowledge was the most popular category with 29 percent of the items, there were no items in the recognition, definite concept, and matching categories; the other items were distributed relatively evenly across the remaining five categories.

The rating scale for choices was designed to describe the relationship between the incorrect answers (often called distractors) and the selection, the question, and the correct answer. The following descriptions of the choice categories were adapted from Auerbach (p.89):

Rating Scale for Choices: Category Descriptions

1. Textual: the distractor is stated in the selection (possibly in a different number, tense, etc.). If there are a number of words, the distractor is rated textual when: a) some of the words are stated explicitly in the selection and some are paraphrased, or b) most of the content words are stated explicitly in the selection.

2. Grammatical: the distractor fits the grammatical context of the question. Lexical constraints on this category include: a verb that can only have an animate subject or object, an adjective that can only modify animate nouns, etc.

3. Categorical: the distractor fits the same general category of descriptors, objects, events, etc. as the correct choice. This category is determined by the word meaning as well as its context in the question, and selection. Where appropriate this refers to distractors that are coordinates, synonyms or antonyms of the correct choice.

4. Associative: the distractor has "associative value" to either the general theme of the selection or the meaning of the correct choice. This category is not as close to the meaning of the right choice as "categorical" above, yet it is not irrelevant. Where appropriate this refers to distractors that are superordinate, subordinate, functions or features of the correct answer.

5. Other: the distractor is irrelevant and thus unrelated to either the general theme of the selection or the meaning of the correct choice. It is not found in the reading selection, nor would it be a grammatical answer to the question.

The percentages of choices on the *Gates-MacGinitie Comprehension Subtest* assigned to each category are presented in Table 5.

TABLE 5

Percentage of *Gates-MacGinitie Comprehension Subtest* Choices (Distractors) Assigned to Each Category

(Total Number of Distractors = 208)

Category	Percent Distractors
Other	14
Grammatical	33
Associative	8
Grammatical - associative	28
Categorical	0
Grammatical - categorical	6
Textual	3
Grammatical - textual	3
Associative - textual	1
Grammatical - associative - textual	3
Categorical - textual	0
Grammatical - categorical - textual	0

Inspection of Table 5 revealed that a third of the distractors were assigned to the grammatical category, almost another third were assigned to the grammatical - associative category, and the remaining distractors were distributed over seven other categories and category combinations.

Comparison of Schools

Principal Questionnaire. Completed Principal Questionnaires were received from 34 of the 36 principals to whom they had been sent. The two unreturned questionnaires had been sent to principals responsible for particular schools (one H.A. school and one L.A. school) for the entire three-year period under investigation in this phase of the study. Thus, the data reported in this section refer to 14 H.A. schools and 14 L.A. schools during the target years 1968-69, 1969-70, and 1970-71. The Principal Questionnaire data are presented in Tables 6-28 with an abbreviated or slightly altered version of an individual question forming the title of each table. In all cases where possible, only those data relevant to the Grade 3 (1968-69), Grade 4 (1969-70), and Grade 5 (1970-71) experiences of the particular cohort of students under investigation are presented. Due to statistical problems arising from the extremely small number of respondents, the fact that many principals left certain items blank, and the fact that many principals gave multiple answers to questions where the instructions called for only one, no tests of statistical significance were performed on these data. These considerations, together with the fact that principals varied greatly in their

ability to recall the information requested and to report it in an objective form conducive to straightforward data analysis, made the coding, analysis, and interpretation of the Principal Questionnaire data extremely difficult. What has been done, essentially, is to present the data in tabular form on the pages that follow and to point out, in the text, those areas in which inspection of the data suggested that important differences between the two groups of schools may exist. Because these differences are based on such small numbers of responses, however, the reader is cautioned against making broad generalizations without making a careful study of the appropriate table(s).

TABLE 6

How would you characterize your Grade ___ classes during the _____ school year? (Question # 1)

	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
Type of class	1968-69 (Grade 3)	1969-70 (Grade 4)	1970-71 (Grade 5)	1968-69 (Grade 3)	1969-70 (Grade 4)	1970-71 (Grade 5)
Homogeneous	2	3	4	6	3	2
Heterogeneous	9	8	8	5	8	8
Combination[a]	3	3	2	3	3	4

[a]Combination programs usually involved an acceleration program or some other type of streaming for extremely high achieving students only.

Inspection of Table 6 reveals that, while heterogeneous grouping was more popular in the H.A. schools than in the L.A. schools during the cohort students' Grade 3 year, the breakdowns for the Grade 4 and 5 years were very similar.

TABLE 7

What was the primary criterion used in the assignment of your Grade _____ students to classrooms during the _____ school year? (Question #2)

	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
Response	1968-69 (Grade 3)	1969-70 (Grade 4)	1970-71 (Grade 5)	1968-69 (Grade 3)	1969-70 (Grade 4)	1970-71 (Grade 5)
An ability measure	4	5	5	7	5	6
An achievement measure	3	1	1	2	2	2
A combination	4	5	5	5	5	4
No response	3	3	3	0	2	2

Inspection of Table 7 reveals that, while ability measures were a more popular criterion in the L.A. schools than in the H.A. schools during the Grade 3 year, the breakdowns for the Grade 4 and 5 years were extremely similar.

TABLE 8

Was a specific time block set aside, during the _____ school year, for reading instruction each day at the Grade _____ level? (Question #3)

	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
Response	1968-69 (Grade 3)	1969-70 (Grade 4)	1970-71 (Grade 5)	1968-69 (Grade 3)	1969-70 (Grade 4)	1970-71 (Grade 5)
Yes	7	6	6	2	3	4
No	7	8	8	12	11	10

Inspection of Table 8 reveals that more H.A. schools than L.A. schools set aside a specific time block for reading instruction in all three grade-level-years.

TABLE 9

How long was the specific time block set aside for reading instruction in Grade _____ during the _____ school year? (Question #3)

	H.A. schools			L.A. schools		
Statistic	1968-69 (Grade 3)	1969-70 (Grade 4)	1970-71 (Grade 5)	1968-69 (Grade 3)	1969-70 (Grade 4)	1970-71 (Grade 5)
Mean minutes per day	65	56	56	108	80	84
N	7	6	6	2	3	4

Note.-- Only the responses of those principals who answered "yes" to the previous question and gave a specific time block were included in these calculations.

Inspection of Table 9 reveals that, although the mean length of time set aside each day for reading instruction was greater in the L.A. schools than in the H.A. schools, all the means were based on too few responses to make generalization possible.

TABLE 10

During the _____ school year, reading groups at the Grade _____ level were typically composed of ... (Question #4)

Response	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
	1968-69 (Grade 3)	1969-70 (Grade 4)	1970-71 (Grade 5)	1968-69 (Grade 3)	1969-70 (Grade 4)	1970-71 (Grade 5)
Students within a single class	7	9	9	11	9	10
Students from more than one class within a single grade	1	0	0	1	3	2
Students from more than one grade level	6	5	5	2	2	2

Inspection of Table 10 reveals that the H.A. schools employed cross-grade grouping somewhat more often than did the L.A. schools and that the L.A. schools used cross-class grouping within a grade level more often than did the H.A. schools.

TABLE 11

What type(s) of double grade(s), if any, included students from Grade ____ during the _____ school year? (Question #5)

Response	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
	1968-69 (Grade 3)	1969-70 (Grade 4)	1970-71 (Grade 5)[a]	1968-69 (Grade 3)	1969-70 (Grade 4)	1970-71 (Grade 5)[a]
Double grade(s) -- with lower grade	0	4	4	2	5	4
Double grade(s) -- with higher grade	3	4	5	3	2	4
None	11	5	5	9	7	8
No response or not scorable	9	1	1	0	0	0

[a]The sum of the figures in this column exceeds 14 due to the fact that some schools had both types of split grades (i.e., both a 4-5 class and a 5-6 class).

Inspection of Table 11 reveals no pronounced differences in either the number, grade level, or type of double grades in the two groups of schools.

TABLE 12

What type of special classes were in your school during the _____ school year? (Question #6)

	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
Type of class	1968-69	1969-70	1970-71	1968-69	1969-70	1970-71
Opportunity	3	4	3	16	7	6
Perceptually handicapped	3	3	4	2	1	2
Multiple handicapped	1	1	0	0	1	2
TESL	1	0	1	0	0	1
Emotionally disturbed	0	0	0	2	2	3
No special classes	7	7	7	6	5	4

Inspection of Table 12 reveals that the L.A. schools had slightly more different types of special classes within individual schools than did the H.A. schools and that this trend became more pronounced over the three-year period under investigation.

Answers to questions related to whether reading scores from special class students were included in the school average (Questions #7 and #8) revealed generally that they were not used and, consequently, that they could not have influenced the average.

TABLE 13

Was there a single basal reader series used throughout Grades 3, 4, and 5 during the school years 1968-69, 1969-70, and 1970-71? (Question #9)

Response	H.A. schools (*N*=14)	L.A. schools (*N*=14)
Yes	4	1
No	10	13

Inspection of Table 13 reveals that slightly more H.A. schools than L.A. schools used a single basal reader throughout Grades 3, 4, and 5 during the target years.

TABLE 14

In what specific ways were the results of the Gates-MacGinitie Reading Test, Primary C (normally given in Grade 3), used in your school during the 1968-69 school year? (Question #10)

Use	H.A. schools (*N*=14)	L.A. schools (*N*=14)
School-wide evaluation	2	4
Pupil evaluation	5	5
Reporting to parents	1	0
Grouping	9	9
Identification of pupils needing remedial reading	9	7
No response or too vague to code	1	1

Note.-- The sum of the figures in each column exceeds 14 due to the fact that many principals indicated multiple uses.

Inspection of Table 14 reveals no pronounced differences between the two groups of schools in the ways in which the results of the *Gates-MacGinitie Reading Test, Primary C*, were used in 1968-69.

TABLE 15

What standardized reading tests other than the required Gates-MacGinitie Reading Tests were routinely given, as a result of school policy, to students in Grades 3, 4, and 5 during the target years? (Question #11)

	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
Response	Grade 3	Grade 4	Grade 5	Grade 3	Grade 4	Grade 5
Parallel form of the *Gates-MacGinitie*	1	1	0	2	1	1
Other reading test(s)	3	5	6	2	2	2
Both of the above	1	1	0	0	0	0
No additional tests	9	7	8	10	11	11

Inspection of Table 15 reveals that the H.A. schools gave more standardized reading tests, in addition to the required *Gates-MacGinitie Reading Tests*, than did the L.A. schools during both the Grade 4 and Grade 5 years; in each case, the additional testing took the form of another series of tests rather than a parallel form of the *Gates-MacGinitie* itself.

TABLE 16

What was the title of the individual responsible for identifying the Grade 3, 4, and 5 students in need of remedial reading help during the target years? (Question #12)

Individual	H.A. schools (*N*=14)	L.A. schools (*N*=14)
Individual teacher	12	12
Principal, vice principal or chairman	5	5
Remedial reading teacher or Reading Centre consultant	0	2
No specific staff member was mentioned	2	1

Note.-- The sum of the figures in each column exceeds 14 due to the fact that some principals named individuals in more than one category.

Inspection of Table 16 reveals that there were no pronounced differences in the title of the individual responsible for identifying students needing remedial reading help in the two groups of schools.

TABLE 17

What criteria were considered in the identification of Grade 3, 4, and 5 pupils needing remedial reading help during the specified three-year period? (Question #12)

Criteria	H.A. schools (*N*=14)	L.A. schools (*N*=14)[a]
Mental ability test results	0	3
Gates-MacGinitie Test score	5	5
Results of other standardized reading tests	5	5
General evaluation (no specific criteria were mentioned)	4	4

[a]The sum of the figures in this column exceeds 14 due to the fact that every principal who mentioned mental ability also mentioned a reading test.

Inspection of Table 17 reveals that the only difference in the criteria that the two groups of schools used in the identification of pupils needing remedial reading help was in the use of mental ability test results; more L.A. school principals mentioned that such results were considered than did H.A. school principals.

TABLE 18

What proportion of his (her, their) time did your remedial reading teacher(s) responsible for Grade _____ devote to remedial reading instruction during the _____ school year? (Question #13)

	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
	1968-69	1969-70	1970-71	1968-69	1969-90	1970-71
Personnel	(Grade 3)	(Grade 4)	(Grade 5)	(Grade 3)	(Grade 4)	(Grade 5)
Individual(s) working a total of 3/4 time or more	3	3	4	3	1	2
Individual(s) working a total of 1/4 to 3/4 time	2	4	2	2	3	5
Individual(s) working a total of 1/4 time or less	4	3	2	1	1	2
No such personnel working at this grade level	5	4	6	8	9	5

Inspection of Table 18 reveals that there were more remedial reading personnel responsible for Grades 3 and 4 during the years under investigation in the H.A. schools and that the personnel who were available in the H.A. schools devoted a somewhat greater proportion of their time to remedial reading than did their counterparts in the L.A. schools.

TABLE 19

What was the average amount of time that the Reading Centre consultant(s) assigned to your school spent in your school during the _____ school year? (Question #15)

	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
Statistic	1968-69	1969-70	1970-71	1968-69	1969-70	1970-71
Mean hours per month	2.55	2.37	2.46	3.71	2.85	3.01
Number of schools upon which this mean was based	9	8	8	11	11	11

Inspection of Table 19 reveals that Reading Centre consultants spent slightly more time in the L.A. schools than in the H.A. schools during the years under investigation. It should be noted, however, that the differences are extremely small and are based on relatively small proportions of the total number of schools included in the study. The differences may indeed simply reflect the fact that the reading consultants had identified the schools in need of greatest assistance.

TABLE 20

What percentage of his (her, their) time within regular school hours in your school did your Reading Centre consultant(s) devote to each of the following activities during the specified three-year period? (Question #16)

Activities	H.A. schools (*N*=11)	L.A. schools (*N*=12)
Mean percentage of time devoted to working with or testing individual students or small groups of students	54.54	44.58
Mean percentage of time devoted to working with an entire class or consulting with a single teacher	26.36	36.25
Mean percentage of time devoted to consulting with groups of teachers or other staff members	18.18	20.83
Mean percentage of time devoted to other forms of consultation	.90	2.50

Note.-- The responses of the principals in the 3 H.A. schools and 2 L.A. schools who did not respond to this question were not included in the computation of means.

Inspection of Table 20 reveals that the Reading Centre consultant spent a somewhat greater percentage of time working with individual students or small groups of students in the H.A. schools. In the L.A. schools, however, a somewhat greater percentage of time was spent working with an entire class or a single teacher. It must be emphasized at this point

that these data, like all the information gained from the Principal Questionnaire, are based on the principal's memory of conditions that existed two, three, and four years ago in a school where he (she) may no longer be principal; in many instances, principals indicated that their responses to this question were "pure guesswork."

TABLE 21

What was the title of the individual primarily responsible for the selection of new reading materials to be purchased at the Grade 3, 4, and 5 levels during the _____ school year? (Question #17)

	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
Person responsible	1968-69	1969-70	1970-71	1968-69	1969-70	1970-71
Principal	10	8	8	10	10	9
Vice-principal	1	1	2	5	5	5
Chairman	2	5	5	4	4	4
Teacher	8	6	4	8	8	9
Remedial reading teacher or Reading Centre consultant	0	0	0	0	0	0
Librarian	1	1	2	0	0	0
No response	0	0	0	1	1	1

Note.-- The sum of the figures in each column exceeds 14 due to the fact that many principals listed more than one individual.

Inspection of Table 21 reveals that more L.A. school principals mentioned the vice-principal in connection with the selection of new reading materials than did H.A. school principals and, during the 1970-71 year only,

more teachers were mentioned by L.A. school principals than H.A. school principals.

TABLE 22

What was the title of the individual primarily responsible for the selection of particular reading materials to be used in a given classroom at the Grade 3, 4, and 5 levels during the specified three-year period? (Question #17)

	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
Person responsible	1968-69	1969-70	1970-71	1968-69	1969-70	1970-71
Principal	7	5	5	5	6	5
Vice-principal	1	0	0	2	1	2
Chairman	1	3	3	3	4	4
Teacher	11	11	11	12	12	12
Remedial reading teacher or Reading Centre consultant	1	1	1	0	0	0
Librarian	0	0	0	0	0	0
No response	0	0	0	1	1	1

Note.-- The sum of the figures in each column exceeds 14 due to the fact that many principals listed more than one individual.

Inspection of Table 22 reveals no pronounced differences between the two groups of schools with respect to the delegation of responsibility for the selection of specific materials to be used in a given classroom.

TABLE 23

What was the title of the individual primarily responsible for the supervision of teachers at the Grade 3, 4, and 5 levels during the specified three-year period? (Question #17)

Person responsible	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
	1968-69	1969-70	1970-71	1968-69	1969-70	1970-71
Principal	14	14	14	14	14	13
Vice-principal	4	5	5	7	8	8
Chairman	0	0	0	2	2	2
Teacher	0	0	0	0	0	0
Remedial reading teacher or Reading Centre consultant	0	0	0	0	0	0
Librarian	0	0	0	0	0	0
No response	0	0	0	0	0	0

Note.-- The sum of the figures in each column exceeds 14 due to the fact that many principals listed more than one individual.

Inspection of Table 23 reveals that principals in the L.A. schools more often than principals in the H.A. schools mentioned either the vice-principal or the chairman in connection with the responsibility for teacher supervision.

TABLE 24

What was the title of the individual primarily responsible for the coordination of skills emphasized at various points in the reading program at the Grade 3, 4, and 5 levels during the specified three-year period? (Question #17)

	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
Person responsible	1968-69	1969-70	1970-71	1968-69	1969-70	1970-71
Principal	8	9	8	6	6	5
Vice-principal	2	1	1	3	3	4
Chairman	3	3	3	4	4	5
Teacher	10	10	8	8	8	8
Remedial reading teacher or Reading Centre consultant	0	0	0	0	0	1
Librarian	0	0	0	0	0	0
No response	0	0	0	2	2	2

Note.-- The sum of the figures in each column exceeds 14 due to the fact that many principals listed more than one individual.

Inspection of Table 24 reveals that principals in the L.A. schools mentioned either the vice-principal or the chairman in connection with the coordination of the reading program more often than did the principals in the H.A. schools.

TABLE 25

Were there any additions or major renovations made in your school during the specified three-year period? (Question #18)

Response	H.A. schools (*N*=14)	L.A. schools (*N*=14)
Major renovations or additions	3	4
Minor renovations or additions	3	2
No renovations or additions	8	8

Inspection of Table 25 reveals that there were no pronounced differences between the two groups of schools with respect to the number of additions or renovations made in the school during the specified three-year period.

TABLE 26

Please check which of the following alternatives best describes the size of the school library or resource centre during the _____ school year.

(Question #19)

Size	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
	1968-69	1969-70	1970-71	1968-69	1969-70	1970-71
Two classrooms or larger	1	0	1	2	4	5
One classroom	7	7	7	7	6	4
Half of one classroom	3	4	4	2	2	2
Smaller than half of one classroom	3	2	2	3	2	3
No school library	0	1	0	0	0	0

Inspection of Table 26 reveals that school libraries in the L.A. schools tended to be larger than libraries in the H.A. schools during the 1969-70 and 1970-71 school years.

TABLE 27

What personnel were attached to your school library or resource centre during the _____ school year ? (Question #20)

Personnel	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
	1968-69	1969-70	1970-71	1968-69	1969-70	1970-71
Full-time librarian	7	7	7	5	8	11
Other staff member working part-time	2	4	3	3	4	1
Parent volunteers	9	7	8	7	4	3

Note.-- The sum of the figures in each column exceeds 14 due to the fact that many principals listed individuals in more than one category. Original plans were to provide summaries of the numbers of individuals in each category plus the amount of time each individual devoted to the library or resource centre, but this information was too seldom available to make such summaries useful.

Inspection of Table 27 reveals no pronounced differences in the number of schools utilizing various categories of personnel in the school library or resource centre, except for the fact that, during the 1969-70 and 1970-71 school years, more H.A. schools used parent volunteers than did L.A. schools.

TABLE 28

Please indicate which of the following statements about the use of the library or resource centre were true during the _____ school year. (Question #21)

Statement	H.A. schools (*N*=14)			L.A. schools (*N*=14)		
	1968-69	1969-70	1970-71	1968-69	1969-70	1970-71
Students were allowed to visit this area before and/or after school hours	10	10	10	8	10	13
A specific time period was set aside for each class to visit this area	13	13	12	12	12	11
Students were free to visit this area at any time during school hours	5	6	8	3	6	8
Specific lessons were given in this area in the use of reference materials	10	11	11	6	10	12
This area was set up primarily as a resource centre for teachers	0	0	0	1	0	0
More emphasis was placed on developing individual classroom libraries than on developing the central library or resource centre	2	1	1	2	1	0

Note.-- The sum of the figures in each column exceeds 14 due to the fact that principals were instructed to check all statements which were applicable.

Inspection of Table 28 reveals two pronounced differences in the way in which the library or resource centre was used in the two groups of schools: more L.A. schools than H.A. schools permitted students to visit this area before and/or after school hours during the 1970-71 school year; and, during the 1968-69 school year, more H.A. schools gave specific lessons in the use of reference materials in this area than did L.A. schools.

Additional (open-ended) questions instructed principals to describe the organization of the remedial reading program in their schools (Question #14) and to discuss any additional factors which they believed to have contributed to the success of their reading program in Grades 3, 4, and 5 during the target years (Question #22). Responses to the former question typically repeated information given in response to other questionnaire items or there was an implication that responsibility for the remedial reading program had been given to either the remedial reading teacher or the regular classroom teacher. Responses to the latter question typically focused on variables measured by other means and reported in later sections of this report (e.g., teacher experience, type of student housing as an indicator of socio-economic status, student mobility, and the number of students for whom English is a second language).

Teacher Questionnaire. Completed Teacher Questionnaires were received from 124 teachers (60 teachers in H.A. schools and 64 teachers in L.A. schools[1]) out of the total of 173 teachers to whom a questionnaire had been sent. The greater number of teachers representing the L.A. schools is consistent with the higher student enrollment in the L.A. schools. For example, cohort students in the H.A. schools numbered 878 in September, 1971, while the corresponding figure for the L.A. schools was 1151.

For purposes of analysis, the responses of those teachers who had taught cohort students during more than one target year were included in the statistics computed for each grade level taught. As a result, the analysis of the Teacher Questionnaire data was based on 69 sets of responses from teachers in the H.A. schools and 77 sets of responses from teachers in the L.A. schools.

Summaries of the Teacher Questionnaire data are presented in Tables 41-65 in Appendix C with an abbreviated or slightly altered version of an individual question forming the title of each table. In each case, separate statistics are provided for each of the three grade levels of teachers within each of the two groups of schools, as well as statistics representing the total group of H.A. teachers and the total group of L.A. teachers. Due to statistical problems arising from the large number of multiple responses given to many questionnaire items, the fairly large number of items left blank, and the relatively small size of the groups of teachers at any one grade level in each of the two groups of schools,

[1]Refer to "Procedure" section for a description of the H.A. and L.A. schools.

no formal statistical tests were conducted on these data.

Presented in the tables in Appendix C are two types of data: a) percentages of teachers responding to each alternative in the case of the items where specific alternatives were listed on the questionnaire, and b) means and standard deviations of the responses given to items where teachers were asked to supply a particular number in answer to a specific question. In regard to the first type of data, past experience with differences in proportions, when those differences are based upon sample sizes similar to the "total" numbers of teachers involved in this study, suggests that a difference of 10 percentage points may be considered significant. For this reason, then, only those differences between the <u>total</u> group of H.A. teachers and the <u>total</u> group of L.A. teachers which exceed 10 percentage points have been considered important enough for commentary in the text that follows. In the case of the second type of data, careful inspection of the means, the standard deviations, and the numbers of responses upon which these statistics were based provided the criteria for commentary. Interested readers will wish also to inspect differences between the H.A. and L.A. groups at each grade level. In this case, personal judgments will be required to determine whether differences are great enough to be considered significant. It should be kept in mind, however, that such differences, to be significant, must be larger if sample sizes are smaller.

Data concerning teacher experience are presented in Tables 41 and 42. These data indicate that, while the total group of L.A. teachers have had slightly more teaching experience in either Grade 1 or Grade 2, the total

group of H.A. teachers have had slightly more experience in Grades 3, 4, and 5 (i.e., the levels with which this study is most directly concerned).

Data relevant to the locus of responsibility for setting the goals of the reading program are presented in Table 43; inspection of these data reveals no pronounced differences between the two "total" groups of teachers.

Data concerning the homogeneity (or heterogeneity) of ability within the classroom are presented in Table 44; inspection of these data reveals no pronounced differences.

Data relevant to the average weekly amount of time devoted to reading instruction are presented in Table 45; inspection of these data reveals no pronounced differences. Data concerning the percentage of time devoted to various types of classroom activities (e.g., whole class activities, group activities, etc.) are presented in Table 46; inspection of these data also reveals no pronounced differences.

Data concerning the frequency with which the teacher heard individual pupils read aloud are presented in Table 47. Inspection of these data reveals that, although more H.A. teachers than L.A. teachers checked the "once a week" alternative, percentages of responses given to all other alternatives were quite similar.

Data relevant to the practice of either cross-class or cross-grade grouping (often called the Joplin Plan) are presented in Table 48. Inspection of these data reveals that, although similar percentages of the two groups of teachers used neither practice, cross-class grouping was used more frequently by the L.A. teachers than by the H.A. teachers,

and cross-grade grouping was used more often by the H.A. teachers than by the L.A. teachers.

Data concerning the number of reading groups within the classroom are presented in Table 49. Inspection of these data reveals that, although more H.A. teachers than L.A. teachers checked the "2 groups" alternative, the percentages of responses given to all other alternatives were quite similar. Data relevant to the basis for forming these groups are presented in Table 50; inspection of these data reveals no pronounced differences.

Data concerning the relationship between reading instruction and instruction in the other language arts are presented in Table 51. Inspection of these data reveals that more L.A. teachers than H.A. teachers checked the alternative which indicates a high degree of separation between these two types of instruction; conversely, more H.A. teachers than L.A. teachers checked the alternative which indicates a great deal of overlap.

Data relevant to the method used to introduce new vocabulary are presented in Table 52; inspection of these data reveals no pronounced differences between the two groups of teachers.

Data concerning the use of a single basal reader series are presented in Table 53; inspection of these data reveals no pronounced differences in the numbers of teachers using such a series in the two groups of schools. Data relevant to the frequency with which the teachers used each of eight types of reading materials are presented in Table 54. Inspection of these data reveals that, although the differences in mean ratings

were generally quite small, the H.A. teachers rated "material accompanying the basal reader," "reading kits," "teacher-made materials," "pupil-made materials," "library books," and "other" materials more highly than did the L.A. teachers; the L.A. teachers, in turn, rated "phonics workbooks" more highly than did the H.A. teachers.

Data concerning the individual responsible for choosing the reading materials used in the classroom are presented in Table 55. Inspection of these data reveals that, although more H.A. teachers than L.A. teachers checked the "teacher" alternative, the percentages of responses given all other alternatives were quite similar.

Data concerning the number of volumes in the classroom library are presented in Table 56. Inspection of these data reveals that more L.A. teachers than H.A. teachers checked both the "fewer than 50" and "50-99" alternatives; conversely, more H.A. teachers than L.A. teachers checked the "100-200" alternative.

Data relevant to the rules governing the use of the classroom library are presented in Table 57. Inspection of these data reveals that, although more L.A. teachers than H.A. teachers checked the "other" alternative, indicating a variety of rules in addition to those listed, the percentages of responses given to the other alternatives were very similar. Data concerning the use of the school library are presented in Table 58. Inspection of these data reveals that, although more H.A. teachers than L.A. teachers checked the "Pupils were permitted to use the library whenever their regular work was completed" alternative, the percentages of teachers in the two groups responding to the other alternatives were very similar.

Data relevant to the frequency with which the teachers were assisted in the reading program by various other personnel are presented in Table 59. Inspection of these data reveals that, although the mean ratings given by the two groups of teachers are quite similar, the H.A. teachers rated their use of the remedial reading teacher, the Reading Centre consultant, and "other" personnel more highly than did the L.A. teachers; on the other hand, the L.A. teachers rated their use of teacher aides and tutorial teachers more highly than did the H.A. teachers.

Data concerning the use made of various techniques for evaluating programs in reading are presented in Table 60. Inspection of these data reveals the following pronounced differences: a) more H.A. teachers than L.A. teachers used standardized tests for diagnosis, b) more L.A. teachers than H.A. teachers made "progress in formal reading text(s)" part of the formal (written) record, and c) more H.A. teachers than L.A. teachers used the "teacher's subjective assessment" in the selection of materials. Data relevant to the individual(s) to whom a report of a pupil's reading progress was typically given are presented in Table 61. Inspection of these data reveals that, although more H.A. teachers than L.A. teachers checked the "teacher" alternative, the percentages of responses made to the other alternatives were very similar.

Data concerning the procedures which would have been followed if a child was reading either one or two grade levels below that expected for his age are presented in Tables 62 and 63; inspection of these tables reveals no pronounced differences in the procedures that the two groups of

teachers would have followed.

Data relevant to the means used to communicate pupils' reading evaluation to their parents are presented in Table 64. Inspection of these data reveals two pronounced differences: more H.A. teachers than L.A. teachers checked the "report card or letter" alternative, whereas more L.A. teachers than H.A. teachers listed "interview and report card" under the "other" alternative.

Data concerning each teacher's participation in various types of professional development in reading within the last five years are presented in Table 65. Inspection of these data reveals that, although the differences between the two groups of teachers are extremely small in most cases, the H.A. teachers indicated that they had attended more reading conferences than the L.A. teachers did.

Reading Skills Questionnaire. A completed Reading Skills Questionnaire was received from 384 of the 401 Grade 1-6 teachers to whom it had been sent as part of the survey of teachers at those grade levels in the 30 study schools during the 1972-73 academic year. The first analysis conducted on these data was a comparison of all the responding teachers in the H.A. schools with all the responding teachers in the L.A. schools; mean "degree of concentration" ratings were computed separately for each group of teachers for each of the 18 reading skills listed in the questionnaire. To determine whether significant differences existed between the two groups with respect to any specific reading skill, t-tests were then conducted. These statistics are summarized in Table 29 where the 18 reading skills are listed in their order of presentation on the questionnaire itself.

TABLE 29

"Degree of Concentration" Means and Standard Deviations: Reading Skills Questionnaire Items, Two Groups of Scarborough Teachers in Grades 1-6

Reading skill	Teachers in H.A. schools (N=169) Mean ($\bar{X}_1$)	N	SD	Teachers in L.A. schools (N= 215) Mean ($\bar{X}_2$)	N	SD	$\bar{X}_1-\bar{X}_2$	t
Generalizing	3.18	162	.90	3.16	202	1.00	.02	
Oral reading speed	2.73	168	.89	2.75	214	.94	-.02	
Drawing conclusions	3.92	169	.77	3.93	214	.87	-.01	
Vocabulary development	4.66	169	.58	4.59	214	.60	.07	
Use of punctuation in oral reading	3.58	168	.98	3.58	215	.99	.00	
Identifying the author's purpose	2.93	168	1.18	2.75	214	1.21	.18	1.45
Predicting outcomes	3.55	168	.82	3.49	215	.90	.06	
Oral reading volume	2.75	165	1.11	2.88	214	1.04	-.13	
Following sequence	4.06	167	.77	3.98	215	.79	.08	
Word attack skills	4.63	168	.74	4.60	215	.72	.03	
Classifying	3.31	168	.91	3.05	206	.99	.26	2.65**
Pronunciation and enunciation	3.83	169	.85	3.88	213	.87	-.05	
Identifying the main idea	4.27	169	.89	4.23	214	.90	.04	
Silent reading speed	3.12	169	1.00	3.19	212	.93	-.07	
Noting significant details	4.17	168	.76	4.09	207	.75	.08	
Making inferences	3.85	168	.82	3.65	212	.96	.20	2.19*
Understanding cause and effect	3.64	169	.99	3.66	213	.97	-.02	
Expression	3.38	169	.87	3.40	215	.93	-.02	

Note.-- These statistics were derived from responses to a 5-point scale ranging in value from 1 (identified as "slightly important") to 5 (identified as "extremely important"). The number of teachers responding to each item has been included in the table because teachers who did not respond to a given item were not considered in the computation of the mean for that item.

* $p < .05$
** $p < .01$

Inspection of Table 29 reveals that there were two significant differences between the responses of the two groups of teachers; teachers in the H.A. schools tended to rate both "classifying" and "making inferences" higher than teachers in the L.A. schools.

The second analysis performed on this body of data was a series of comparisons of the responding teachers in the two groups of schools at each of the six grade levels. Mean "degree of concentration" ratings were again computed, at each of the six grade levels, for each of the 18 reading skills, and t-tests were used to locate significant differences. These six sets of means are presented in Tables 35, 36, 37, 38, 39, and 40 in Appendix B; a summary of the significant differences noted in this analysis is presented in Table 30.

TABLE 30

Significant Differences Noted in the Analysis of Differences Between H.A. and L.A. Teachers at Individual Grade Levels

Grade Level	Reading skill	$\bar{X}_{H.A.} - \bar{X}_{L.A.}$	t
1	Making inferences	.64	2.60*
2	Understanding cause and effect	-.59	2.16*
5	Oral reading speed	-.50	2.05*
5	Oral reading volume	-.58	2.18*
5	Making inferences	.60	2.53*
5	Predicting outcomes	.67	2.71**
6	Understanding cause and effect	-.39	2.00*

*$p < .05$
**$p < .01$

Inspection of Table 30 reveals that five of the seven significant differences noted followed a particular pattern, i.e., teachers in H.A. schools rated comprehension items higher and oral reading items lower than teachers in L.A. schools. It should be noted, however, that the probability of obtaining significant results purely by chance increases in direct proportion to the number of significance tests performed; in view of the large number of comparisons (108) which were made in order to obtain these seven significant differences, therefore, extreme caution should be used in their interpretation.

Student mobility. Data concerning the mobility of the particular cohort of students under investigation are presented in Table 31.

Inspection of Table 31 reveals that, although the percentages of cohort students who had completed their Grade 3, 4, and 5 years in a single study school were very similar for the two groups of schools (62.4 percent in the H.A. schools and 67.3 percent in the L.A. schools), there was somewhat more mobility of students in the H.A. schools.

Student age. Analysis of the Research Department data concerning the ages of the Grade 5 students tested on the *Dominion Learning Capacity Test* in May, 1971, permitted a comparison of the mean ages of the Grade 5 students in the two groups of schools. The mean ages were extremely similar (128.269 months in the H.A. schools and 128.257 months in the L.A. schools), with the difference of .012 months favouring the H.A. schools. Although the method of collecting these data did not make possible a test of statistical significance, it seems highly unlikely that a difference between means of approximately one-third of a day has had any educational

TABLE 31

Summary of Data Collected on the Mobility of

Grade 6 students in 1971-72 in

Two Groups of Schools

Statistic	H.A. schools (*N*=15)	L.A. schools (*N*=15)
Total number of Grade 6 students who took the *Gates-MacGinitie Reading Test, Survey D*, in September, 1971.	878	1151
Number of Grade 6 students who took *Survey D* in September, 1971, and *Primary C* in September, 1968.	482	713
Number of Grade 6 students who took *Survey D* in September, 1971, and *Primary C* in September, 1969 (i.e., those who took two years to complete the work of three grades).	51	34
Number of Grade 6 students who took *Survey D* in September, 1971, and *Primary C* in September, 1967, (i.e., those who took four years to complete the work of three grades).	15	28
Number of Grade 6 students who took *Survey D* in September, 1971, and *Primary C* in either 1967, 1968, or 1969 (i.e., all those cohort students who had spent their Grade 3, 4, and 5 years in the same school where they took *Survey D* in September, 1971.	548	775
Percentage of Grade 6 students who took *Survey D* in September, 1971, who had also spent their Grade 3, 4, and 5 years in one school.	62.4%	67.3%

significance.

Student housing. The analysis of data on student housing was based on the assumption that type of housing is one indicator of socio-economic status. The percentages of total school enrollment drawn from each of seven types of housing over the target years in both the H.A. and L.A. schools are presented in Table 32. It should be noted that these data are not broken down by grade level and are, therefore, not as directly relevant to a study of the cohort students as have been other types of data presented earlier in this report.

TABLE 32

Percentage of Total Student Enrollment Drawn from Each of Seven Types of Housing in Two Groups of Schools

Type of housing	H.A. schools (*N*=15)			L.A. schools (*N*=15)		
	1968-69	1969-70	1970-71	1968-69	1969-70	1970-71
Single-family house	86.9	87.4	85.8	85.2	83.3	78.3
Semi-detached house	0.4	1.0	1.8	5.9	6.6	6.4
Conventional maisonette	1.8	0.9	1.7	0.9	0.7	0.9
OHC maisonette					0.7	0.5
Conventional apartment	8.2	8.5	9.1	6.1	6.7	9.3
OHC apartment		2.2	1.6		0.4	2.9
Limited dividend apartment	2.7	0.0	0.1	1.9	1.5	1.7

Note.-- Cells in which no figure has been recorded indicate that a particular type of housing was not included in the principals' breakdown for a given year.

Inspection of Table 32 reveals that high proportions (over 75 percent in all cases) of students in both groups of schools were drawn from single-family housing during each of the three years studied. It is clear, first, that proportions in each type of housing remained remarkably similar from year to year in the H.A. schools. However, there was, in the L.A. schools, a slight decrease in the proportion of single-family housing; on the other hand, there were slight increases in the proportions of both conventional and OHC apartments for this group of schools over the three-year period.

Reading Centre referrals. The numbers of students in Grades 1 through 5 referred to the Reading Centre by each of the two groups of schools over the period from 1966-67 to 1970-71 are presented in Table 33.

Extreme caution was exercised in the treatment of the data presented in Table 33 because of the serious difficulties encountered in the collection of these data and as previously outlined in the "Procedure" section of this report. Inspection of this table reveals that the numbers of students referred to the Reading Centre were, in all cases, extremely small. The total number of cohort students referred from the H.A. schools in Grades 1 through 5 was 36 or .041 percent of the students tested in those schools on the *Gates-MacGinitie Reading Test, Survey D*, in September, 1971; the comparable total for the L.A. schools was 43 and the comparable percent .037. While these data do not meet the assumptions for a test of statistical significance, it seems unlikely that a difference in percentages of .004 was educationally significant.

TABLE 33

Number of Students Referred to the Reading Centre

Over a Five-year Period by Two Groups of Schools

	Grade	1966-67	1967-68	1968-69	1969-70	1970-71
H.A. schools (N=15)	1	0[a]	4	4	4	11
	2	6	6[a]	6	23	20
	3	3	5	11[a]	26	12
	4	7	4	2	10[a]	8
	5	8	4	2	7	9[a]
L.A. schools (N=15)	1	2[b]	5	0	6	6
	2	3	10[b]	6	9	3
	3	4	17	10[b]	11	7
	4	4	12	8	9[b]	9
	5	5	3	7	3	4[b]

[a]Cohort students in the H.A. schools.

[b]Cohort students in the L.A. schools.

ESL students. The December, 1971, survey of students for whom English was a second language (ESL) divided such students into the following five categories:

> Category I: An immigrant student in Grades 2 through 13 whose first language is not English, and who has been in a Canadian school three years or less.
>
> Category II: An immigrant student from an English-speaking country in Grades 2 through 13 who speaks a dialect different from that used in an urban Ontario classroom.
>
> Category III: A French-Canadian, Eskimo, or Indian student in Grades 2 through 13 whose first language is not English.
>
> Category IV: A student in Grades 2 through 13 whose first language is not English, and who immigrated to Canada more than three years ago.
>
> Category V: A student in Grades JK through 1 whose mother tongue is not English, and who EITHER immigrated to Canada recently, or was born here of immigrant parents, or was born here of French-Canadian, Indian, or Eskimo parents; OR who immigrated to Canada from an English-speaking country, and who speaks a dialect different from standard Canadian English.

Additional criteria for each category described the specific language problems necessary for inclusion in that category. The number of students listed in each category by the two groups of schools in the December, 1971, survey is presented in Table 34. It should be noted that these data are not broken down by grade level and apply only to the 1971-72 school year; they are, therefore, not as directly relevant to a study of the cohort students as have been other types of data presented earlier in this report.

TABLE 34

Number of ESL Students from Two Groups of Schools in Each of Five Categories in the December, 1971, Survey

	I	II	III	IV	V	Total	Percentage of 1971-72 enrollment
H.A. schools (N=15)	82	69	179	3	43	376	4.89%
L.A. schools (N=15)	80	108	194	13	45	440	4.71%

Inspection of Table 34 reveals that, while there were more ESL students in the L.A. schools than in the H.A. schools (a difference due largely to a sizeable difference in Category II), the percentages of ESL students in the two groups of schools were extremely comparable. Again, it seems unlikely that a difference of .18 percent was educationally significant.

VIII. SUMMARY AND CONCLUSIONS

The purpose of this study was stated in terms of three sets of questions:

1. Are all the concepts that reading tests are attempting to measure being taught today? Conversely, are all the concepts being taught today being measured by reading tests?

2. What are the characteristics of effective reading programs in school (e.g., amount of time, methods, materials, assistance, and support)?

3. What community-based variables are related to reading achievement by students in school (e.g., socio-economic and ethnic composition, population mobility, and language difficulty)?

Subsequent delimitation of the study led to decisions to concentrate on: a) the development of comprehension ability at the Grade 6 level; b) a particular cohort of students tested on the *Gates-MacGinitie Reading Tests, Survey D*, in September, 1971; and c) the reading instruction experiences of this cohort in Grade 3 (1968-69), Grade 4 (1969-70), and Grade 5 (1970-71).

The design of the study entailed two relatively distinct projects. The first project, designed to answer the first set of questions posed above, consisted of a statistical analysis of the *Gates-MacGinitie Reading Test, Survey D, Form 1*, and a survey of a sample of Grade 6 teachers on a Reading Skills Questionnaire. The results of this statistical analysis, supplemented by content analysis data reported by Auerbach (1971), indicated that the test under investigation measures a large number of relatively discrete skills rather than a small number of easily labelled factors. The analysis of the Reading Skills Questionnaire data indicated that Scarborough Grade 6 teachers do indeed concentrate on a large number of skills. The extent to which these skills overlap with, or are synonymous with, the categories used in

the Auerbach analysis is a question which can perhaps best be answered in discussions of these data by teachers, principals, and reading consultants.

The second project included in the study was designed to answer those questions posed earlier concerning the school-based and community-based factors related to reading achievement. This project entailed a comparative study of 15 high-achieving (H.A.) schools and 15 low-achieving (L.A.) schools where a school's reading "achievement" was defined in terms of the consistency of its reading scores, the relationship of these scores to those obtained in other Scarborough public schools, and the relationship of these scores to the mental ability of its students.

A Principal Questionnaire dealing with school-wide policies relevant to reading instruction was sent to all of the principals in the 30 study schools over the three-year period. Analysis of the Principal Questionnaire suggested that the following factors distinguish the H.A. schools from the L.A. schools: a) the type of grouping employed at the Grade 3 level; b) the criteria used in the assignment of students to classrooms at the Grade 3 level; c) the policy of setting aside a specific time block for reading instruction each day; d) the use of cross-classroom or cross-grade grouping for reading instruction; e) the number of different types of special classes within the school; f) the use of a single basal reader series throughout Grades 3, 4, and 5; g) the use of standardized reading tests in addition to those required in the borough; h) the number of remedial teachers at the Grade 3 and 4 levels, and the proportion of time devoted by remedial

reading teachers to remedial reading; i) the amount and distribution of time devoted by Reading Centre consultants; j) the staff member responsible for the selection of new reading materials to be purchased, for the supervision of teachers, and for the coordination of skills in the reading program; k) the size of the school library; and l) the policies governing student access to the school library. It should be noted, however, that, in all cases, the differences between the two groups of schools are very small and are based on the principals' memories of conditions that existed two, three, and four years ago.

A Teacher Questionnaire dealing with classroom policies relevant to reading instruction was sent to all teachers who had taught the cohort students in Grades 3, 4, and 5 in the 30 schools. Analysis of the Teacher Questionnaire data suggested that the following factors distinguished teachers in the H.A. schools from teachers in the L.A. schools: a) the teacher's experience; b) the frequency with which the teacher heard individual pupils read aloud; c) the use of cross-classroom or cross-grade grouping; d) the number of reading groups in the classroom; e) the relationship between reading instruction and instruction in the other language arts; f) the frequency with which various types of reading materials were used; g) the staff member responsible for choosing the reading materials used in the classroom; h) the number of volumes in the classroom library; i) the policies governing the use of the school library; j) the frequency with which the teacher was assisted in the reading program by various other personnel; k) the specific uses made of various techniques for evaluating progress in reading; l) the individual(s) to whom a report of a pupil's reading progress was typically

given; m) the means used to communicate pupils' reading evaluation to their parents; and n) the teacher's attendance at reading conferences. Reading Skills Questionnaire data collected from teachers currently teaching in the study schools indicated that teachers in the H.A. schools tended to rate their concentration on several comprehension skills more highly than did teachers in the L.A. schools.

Additional data collected from various Scarborough Board of Education offices was concerned with student mobility, student age, student housing, the number of Reading Centre referrals, and the number of students for whom English is a second language in each of the 30 study schools. The analysis of these data indicated the following pronounced differences: a) student mobility was higher in the H.A. schools than in the L.A. schools, and b) there was an increase in the proportion of students in L.A. schools drawn from apartments (both conventional and OHC) over the specified three-year period that was not observed in the H.A. schools. It should be emphasized, at this point, that the fact that no pronounced differences were noted with respect to the other measured variables does not mean these variables are irrelevant to reading achievement; it simply means that the measurement of these variables did not help to account for the observed differences between the two groups of schools which were the focus of this study.

REFERENCES

Auerbach, I. T. *An Analysis of Reading Comprehension Tests. Final Report.* Washington, D.C.: U.S. Department of Health, Education, and Welfare, Office of Education, Bureau of Research, 1971.

Austin, M. C., Bush, C. L., & Huebner, M. H. *Reading Evaluation: Appraisal Techniques for School and Classroom.* New York.: Ronald Press, 1961.

Board of Education for the Borough of North York. *Report of the Task Force in Reading.* North York: Board of Education for the Borough of North York, 1972.

Chall, J. S. *Learning to Read: The Great Debate.* New York: McGraw-Hill Book Company, 1967.

Davis, F. B. "The Factorial Composition of Two Tests of Comprehension in Reading," *Journal of Educational Psychology,* XXXVII, No. 8, (November, 1946), pp. 481-86.

Ellis, E. N. *Survey of Achievement in Reading in Grade 6 of Vancouver Schools, November 2-6, 1970.* Vancouver: Vancouver Board of School Trustees, 1971.

Morris, J. M. *Standards and Progress in Reading.* New York: New York University Press, 1966.

Start, K. B. "Thirty Years of Reading Standards in England," *Educational Researcher,* I, No. 11, (November, 1972), pp. 8-9.

Weber, G. *Inner-City Children Can Be Taught To Read: Four Successful Schools.* Washington, D. C.: Council for Basic Education, Occasional Papers, No. 18, 1971.

APPENDIX A

READING SKILLS QUESTIONNAIRE

I teach Grade _____

In connection with our Reading Study, we are interested in finding out how teachers rate the importance of teaching a number of specific reading skills. Please indicate the degree to which you concentrate on each of the following reading skills in your reading program at your grade level. Circle one number on each scale according to the following description of scale categories:

1. Slightly important	2. Somewhat important	3. Moderately important	4. Very important	5. Extremely important

Reading skills:

Generalizing	1	2	3	4	5
Oral reading speed	1	2	3	4	5
Drawing conclusions	1	2	3	4	5
Vocabulary development	1	2	3	4	5
Use of punctuation in oral reading	1	2	3	4	5
Identifying the author's purpose	1	2	3	4	5
Predicting outcomes	1	2	3	4	5
Oral reading volume	1	2	3	4	5
Following sequence	1	2	3	4	5
Word attack skills	1	2	3	4	5
Classifying	1	2	3	4	5
Pronunciation and enunciation	1	2	3	4	5
Identifying the main idea	1	2	3	4	5
Silent reading speed	1	2	3	4	5
Noting significant details	1	2	3	4	5
Making inferences	1	2	3	4	5
Understanding cause and effect relationships	1	2	3	4	5
Expression	1	2	3	4	5

Please return this questionnaire to the Research Department through the courier service on or before _____.

Please sign here so that we can determine that your questionnaire has been returned. This section will be detached to ensure the anonymity of your responses.

81

Signed, _____

COVERING LETTER--PRINCIPAL QUESTIONNAIRE

Dear Mr.

The Research Department of the Scarborough Board of Education is currently conducting a Ministry of Education-funded study of factors related to reading achievement. The design of our study involves collecting detailed information on 30 Scarborough public schools from the principals and a sample of teachers who were in each of those schools during a specific three-year period (1968-69, 1969-70, and 1970-71). From this information, we hope to reconstruct a "history" of reading instruction in each of the 30 schools during this period and ultimately to draw conclusions concerning the relationship between certain aspects of the reading program and student achievement in reading.

Although we had originally planned to interview each principal individually, we found that these interviews were so time-consuming for the principal and, thus, so difficult to schedule that we have decided to rely on information collected from questionnaires. We ask your cooperation, therefore, in completing the enclosed questionnaire. We hope that your responses will be as candid and as thoughtful as we found those of the few principals we interviewed to be, for it is only with such cooperation that valid generalizations can be made.

According to our records, you were the principal of during the school year(s) of . In completing the questionnaire, would you please concentrate on <u>that</u> school alone during <u>that</u> (or those) particular year(s). Parts of some questions may request information about a school year either before or after your stay in this school; please do not be concerned about supplying this type of information as we will be contacting the individual who was the principal during each of the specified three years.

Our purpose in designing this questionnaire was to gain a picture of <u>school-wide policies</u> which may have had an influence on the reading program during the designated three-year period. We ask, therefore, that you rely on <u>your own memory</u> as principal to answer each question; we will be asking a sample of teachers from the 30 schools to describe the procedures used in individual classrooms. We recognize the difficulty that you may have in answering several questions which call for approximate numbers, but we feel that in such instances <u>your best guess</u> is exactly the kind of information we want. In the event that a particular question deals with an area in which there was no general school policy (i.e., the classroom teacher was entirely responsible for developing the policy in his/her classroom) simply indicate this fact in your answer. We ask, however, that you give some response to each question, even if that response is only a brief explanation of why the question is not applicable to your particular school situation.

You will note that at no point on the questionnaire do we ask for either your name or the names of any of your staff members. The final report of this project will consist entirely of summary statistics (at no point will the names of the schools included in the study be listed), and all information you supply in the course of the study will be kept completely anonymous.

One final suggestion has been supplied by a principal who was kind enough to read through an early draft of the questionnaire. He suggests that you read through all the questionnaire items, put the questionnaire aside for a day or two, and then re-read this letter and answer the questions at your leisure.

In the event that you have any difficulty in completing the questionnaire or simply wish to expand on your answers, please do not hesitate to call Miss Michelle Farrell, the project coordinator, at 491-9660.

Sincerely,

PRINCIPAL QUESTIONNAIRE

1. How would you characterize your Grade 3, 4, and 5 classes during the specified three-year period (1968-69, 1969-70, and 1970-71)?

   (a) homogeneous with respect to ability
   (b) heterogeneous with respect to ability

   Please indicate any exceptions, either at specific grade levels or during particular years within the specified three-year period.

2. If ability was considered at all in the assignment of your Grade 3, 4, and 5 students to classrooms during this period, the primary measure of ability used was:

   (a) an I.Q. or other general ability test score
   (b) the previous teacher's estimate of general ability
   (c) a reading test score
   (d) the previous teacher's estimate of reading level
   (e) other (please specify)

   Please indicate any exceptions, either at specific grade levels or during particular years within the three-year period.

3. In some schools, it is school policy that reading will be taught during a specific time period each day (e.g., 9:15-9:45); this enables the school to adopt a Joplin Plan or some similar approach to reading. In your school, was a specific time block set aside for reading instruction each day at the Grade 3, 4, and 5 levels during the three-year period?

   (a) no
   (b) yes (how long? _____ minutes per day)

4. Which of the following statements best describes the organization of reading instruction at the Grade 3, 4, and 5 levels during the three-year period? (Please do not consider classes conducted by a remedial reading teacher or consultant in making your selection.)

   (a) all reading instruction was carried on in the student's "home" classroom
   (b) reading groups were composed of students from more than one classroom within a single grade level
   (c) reading groups were composed of students from more than one grade level

   Please indicate any exceptions, either at specific grade levels or during particular years within the specified three-year period.

5. Please list, for each of the following years, all double grades which included students from Grades 3, 4, and 5 (e.g., 3-4, 5-6).

1968-69:
1969-70:
1970-71:

6. Please list for each of the following years, all special classes (e.g., opportunity class, TESL class, perceptually handicapped class) which were in your school.

1968-69:
1969-70:
1970-71:
1971-72:

7. Referring to the special classes listed for the 1971-72 school year above, please indicate whether the *Gates-MacGinitie Reading Test, Survey D* (normally given at the Grade 6 level), was administered to each class and whether these scores were included in the school average.

special class	tested?	included in average?

8. Please list any reasons why *Gates-MacGinitie Reading Test* scores were not reported for all Grade 6 students during the 1971-72 school year, giving the approximate number of students in each category.

reason	approximate number of students

9. Was there a single basal reader series (i.e., a complete set of readers published by one company; e.g., the Nelson series - *Treats and Treasures, Driftwood and Dandelions*, etc.) used throughout Grades 3, 4, and 5 during the specified three-year period (1968-69, 1969-70, and 1970-71)?

   (a) no
   (b) yes (please name the publisher)

10. Please list the specific ways in which the results of the *Gates-MacGinitie Reading Test, Primary C* (normally given at Grade 3,) were used in your school during this period.

Please indicate any exceptions to this procedure during the 1968-69 school year.

11. In some schools, it is school policy to give standardized reading tests, other than the *Gates-MacGinitie Tests*, to certain groups or grade levels of students. Please list, in the following chart, the titles of any other standardized reading tests that were given as a result of school policy in Grades 3, 4, and 5 during the specified three-year period, the specific grade level at which given, the month of administration, and the specific uses to which these results were put.

title	grade	month	uses of results

12. Please outline, in as specific detail as possible, the procedure that was used to identify Grade 3, 4, and 5 students in need of remedial reading help during this period. If there was no school-wide policy, simply indicate that responsibility for developing this procedure was left to individual teachers.

Please indicate any exceptions to this procedure, either at specific grade levels or during particular years within the specified three-year period.

13. Please list, in the chart below, the following information about all remedial reading teachers (excluding Reading Centre personnel) who worked in your school during this period: the grade levels with which worked, and the proportion of time devoted to remedial reading (e.g., 1/4, 1/2).

		grades	proportion of time
1968-69	teacher A		
	teacher B		
1969-70	teacher A		
	teacher B		
1970-71	teacher A		
	teacher B		

14. Even if there were no remedial reading teachers on your staff, please outline the organization of your remedial reading program for students in Grades 3, 4, and 5 during the specified three-year period. Depending on your individual approach, you may want to include details concerning:

(a) number and size of groups worked with
(b) amount of time spent in individual and group sessions
(c) special materials
(d) use of teacher aides, parent volunteers, and older child tutors
(e) method of coordinating the remedial reading program with the regular classroom program

15. Please estimate the average amount of time that the Reading Centre consultant(s) assigned to your school spent in your school during each of the following years.

1968-69: _____ hours per month
1969-70: _____ hours per month
1970-71: _____ hours per month

16. Referring again to the Reading Centre consultant(s) assigned to your school during the three-year period, please complete the following statements in regard to time within regular school hours.

(a) _____% of her/his time was devoted to working directly with students, either on an individual or small-group basis.

(b) _____% of her/his time was devoted to working with an entire class or consulting with a single teacher.

(c) _____% of her/his time was devoted to consulting with groups of teachers, the chairman, the vice-principal and/or the principal.

(d) _____% of her/his time was devoted to other forms of consultation. (please specify)

100% total

Please indicate any large changes in these percentages which occurred during the specified three-year period.

17. Listed in the chart below are a number of administrative tasks connected with the reading program. For each of the following years, please indicate the title (e.g., principal, vice-principal, chairman, individual teacher) of the individual primarily responsible for each task at the Grade 3, 4, and 5 level.

	1968-69	1969-70	1970-71
(a) selection of new reading materials to be purchased			
(b) selection of particular materials to be used in a given classroom			
(c) supervision of teachers			
(d) coordination of skills emphasized at various points in the program			

18. Were there any additions or major renovations made in your school during the specified three-year period?

(a) no
(b) yes (please specify, indicating the extent, if any, to which regular classroom activities were disrupted)

19. For each of the three years listed below, please check which of the following alternatives best describes the size of the school library or resource centre during that year.

	1968-69	1969-70	1970-71
(a) the size of two average classrooms or larger			
(b) the size of one average classroom			
(c) half the size of an average classroom			
(d) smaller than half the size of an average classroom			
(e) there was no school library			

20. For each of the following three years, please list, from memory, the personnel attached to the school library or resource centre, indicating the title of the position (e.g., full-time librarian, teacher, parent volunteer), the approximate number of individuals in that position, and the approximate number of hours per week each individual devoted to the library.

	title	approximate number of individuals	approximate number of hours/week
1968-69:			
1969-70:			
1970-71:			

21. Please indicate which of the following statements about the use of the library or resource centre were true during each of the specified three years by placing check marks in the appropriate columns when a given statement was true. (For any given year, check as many statements as are appropriate.)

	1968-69	1969-70	1970-71
(a) Students were allowed to visit this area before and/or after school hours.			
(b) A specific time period was set aside for each class to visit this area.			
(c) Students were free to visit this area at any time during school hours.			
(d) Specific lessons were given in this area in the use of reference materials.			
(e) This area was set up primarily as a resource centre for teachers.			
(f) More emphasis was placed on developing individual classroom libraries than on developing the central library or resource centre			

22. In developing this questionnaire, we were forced to eliminate questions about many topics which we felt were either too complex to be dealt with adequately in a questionnaire of this type or not applicable to all situations. On the next page and a half, however, we would like you to indicate any additional factors which you believe to have contributed to the success of your reading program in Grades 3, 4, and 5 during the years of 1968-69, 1969-70, and 1970-71. Please be as specific as possible, indicating the grade levels and years associated with each factor. Depending on your individual situation, you may want to include details concerning:

(a) extensive in-service training in reading conducted in your school
(b) special supervision given to inexperienced teachers
(c) materials which were found to be particularly helpful

Please feel free, however, to discuss <u>any</u> aspect of the reading program which you feel has not been adequately covered in the rest of the questionnaire.

COVERING LETTER--TEACHER QUESTIONNAIRE

Dear

The Research Department of the Scarborough Board of Education is currently conducting a Ministry of Education-funded study of factors related to reading achievement. The design of our study involves collecting detailed information on 30 Scarborough public schools from the principals and a sample of teachers who were in each of those schools during a specific three-year period (1968-69, 1969-70, and 1970-71). From this information, we hope to reconstruct a "history" of reading instruction in each of the 30 schools during this period and ultimately to draw conclusions concerning the relationship between certain aspects of the reading program and student achievement in reading.

Our records indicate that you were teaching Grade at during the school year. In the enclosed questionnaire, this is the year referred to as "the target year". We would like you to try to remember conditions as they existed for that time period and to answer the questions as they apply to that year. If you are unable to remember exactly how things were then, your best estimate is acceptable. We ask that you give some response to each question, even if that response is only a brief explanation of why the question is not applicable to your particular classroom situation.

You will note that at no point on the questionnaire itself do we ask for either your name or the name of the school in which you were teaching during the target year. The final report of this project will consist entirely of summary statistics (at no point will the names of the schools or teachers included in the study be listed), and all information you supply in the course of the study will be kept completely anonymous. A code number has been marked on each questionnaire for the purposes of data analysis and tracing lost questionnaires.

One final suggestion has been supplied by a teacher who was kind enough to read through an early draft of the questionnaire. He suggests that you read through all the questionnaire items, put the questionnaire aside for a day or two, and then re-read this letter and answer the questions at your leisure.

We sincerely hope that you will take the time to complete this questionnaire as conscientiously as possible. This is the first time such a comprehensive study on reading has been undertaken in Scarborough, and we are looking forward to some interesting and useful results. We would like to take this opportunity to express our thanks for your vital assistance in this important research project.

If you have any questions or problems related to this questionnaire or the study in general, please feel free to contact the Research Department at 491-9660.

We ask that you complete the questionnaire and return it to the Research Department on or before April 27.

Sincerely,

No. _____ TEACHER QUESTIONNAIRE

1. Please specify the number of years you have taught at each of the following grade levels, including (if applicable) the present year as one year.

Grade	No. of years
1.	
2.	
3.	
4.	
5.	

Multiple Grades (e.g., 3-4, 1 to 8, etc.) (please specify) _____

2. Please check the title of the individual who was primarily responsible for setting the goals of the reading program in your classroom in the target year.

1) you, the teacher . . . . . .
2) the principal . . . . . .
3) the superintendent . . . . . .
4) the chairman . . . . . .
5) the Reading Centre consultant . . . . . .
6) the remedial reading teacher . . . . . .
7) other (please specify) _____

3. Please check below the alternative which best describes your class during the target year.

   1) homogeneous with respect to ability . . . . . .

   2) heterogeneous with respect to ability . . . . . .

4. Please estimate the average weekly amount of time devoted to reading instruction in your classroom during the target year.

   _____ minutes per week

5. Consider the reading instruction time of the average pupil in your classroom during the target year. Please estimate the percentage of that time spent in each of the following activities.

   1) whole class activities . . . . . ____%

   2) group activities . . . . . ____%

   3) receiving individual instruction from the teacher . . ____%

   4) working on his own . . . . . ____%

   5) other (please specify) _____ ____%

   Total 100 %

6. Please estimate how often you as the teacher heard individual pupils read aloud. (Choose the option which best describes your usual routine.)

   1) every day (a few pupils) . . . . . .

   2) every day (majority of pupils - better readers less often)

   3) every day (all pupils) . . . . . .

   4) three times per week (all or majority of pupils) . . . . .

   5) twice a week (all or majority of pupils) . . . . . .

   6) once a week (all or majority of pupils) . . . . . .

   7) less than once a week (all or majority of pupils) . . . .

   8) other (please specify) . . . . . .

7. Which of the following statements best describes the organization of reading instruction in your classroom during the target year? (Please do not consider special classes conducted by a remedial reading teacher or Reading Centre consultant in making your selection.)

   1) All reading instruction was carried on in the student's home classroom . . . . . .

   2) Reading groups were composed of students from more than one classroom within a single grade level . . . . . .

   3) Reading groups were composed of students from more than one classroom and grade level.

8. Please check the number of reading groups you usually had within your classroom during the target year.

   1) total class (1 group) . . . . . .

   2) 2 groups . . . . . .

   3) 3 groups . . . . . .

   4) 4 groups . . . . . .

   5) 5 groups . . . . . .

   6) 6 groups . . . . . .

   7) completely individualized program (no groups) . . . . . .

   8) other (please specify) _____

9. If grouping was used at all in your classroom during the target year, please indicate the primary basis for forming these groups.

   1) an I.Q. or other test of general ability . . . . . .

   2) the previous teacher's estimate of general ability . . . .

   3) a reading test score . . . . . .

   4) the previous teacher's estimate of reading level . . . . .

   5) interest . . . . . .

   6) other (please specify) _____

10. Listed below are two descriptions of the way in which reading instruction could conceivably be related to instruction in other language arts areas (e.g., spelling, writing, listening). Please select the description which more closely approximates what happened in your classroom during the target year.

1) Most instruction in other language arts areas was carried out in separate periods, distinct from reading instruction time . . . . . .

2) Instruction in other language arts areas overlapped a great deal with reading instruction time . . . . . .

11. In the target year, how were new words typically introduced and vocabulary extended?

1) before a new reading lesson was begun . . . . . .

2) as the need arose within a reading period . . . . . .

3) other (please specify) _____

12. Was a single basal reader series (i.e., a complete set of readers published by one company; e.g., the Nelson series - *Treats and Treasures, Driftwood and Dandelions, etc.*) used throughout your classroom during the target year?

1) no . . . . . .

2) yes (please name publisher) _____.

13. We are interested in how often you used <u>each</u> of the following materials in your reading program. After each type of material, please indicate a <u>number</u>, selected from the following scale, which best describes how often you used it.

0	1	2	3	4
never	rarely	occasionally	frequently	very often

1) basal readers . . . . . .

2) material accompanying the basal reader . . . . . .

3) phonics workbook . . . . . .

4) reading kits . . . . . .

5) teacher-made materials . . . . . .

6) pupil-made materials . . . . . .

7) library books . . . . . .

8) other (please specify) _____ . .

14. Who was <u>primarily</u> responsible for choosing the materials which were used in the reading program in your classroom during the <u>target year</u>?

1) the teacher . . . . . .

2) the principal . . . . . .

3) the vice-principal . . . . . .

4) the reading consultant . . . . . .

5) the chairman . . . . . .

6) other (please specify) _____ . .

15. Please estimate the approximate number of volumes in your classroom library during the target year.

1) fewer than 50 . . . . . .

2) 50-99 . . . . . .

3) 100-200 . . . . . .

4) more than 200 . . . . . .

5) there was no classroom library . . . . . .

16. Please check those of the following statements which describe the rules governing the use of the classroom library. (Check more than one if applicable.)

1) Pupils were free to use the library whenever their work was done . . . . . .

2) The library was used during special library periods. . . .

3) Students were able to take books home. . . . . .

4) other (please specify) _____ . . .

17. What were the rules governing the use of the school library (or resource centre) during the target year? (Check more than one if applicable.)

1) Pupils, as a class, were scheduled to use the library during prescribed periods . . . . . .

2) Pupils, as small groups, were permitted to use the library at any time during school hours . . . . . .

3) Pupils, as individuals, were permitted to use the library at any time during school hours . . . . . .

4) Pupils could use the library before school started . . . .

5) Pupils could use the library after school finished . . . .

6) Pupils could use the library at lunch time . . . . . .

7) Pupils were permitted to use the library whenever their regular work was completed . . . . . .

8) other (please specify) _____ . . .

9) There was no library/resource centre . . . . . .

18. Please rate how often each of the following people assisted you in your reading program during the target year.

	never	occasionally	very often	not available
1) remedial reading teacher				
2) Reading Centre consultant				
3) teacher aide				
4) tutorial teacher				
5) other (please specify)				

19. Listed in the left hand column of the chart below are a number of techniques which are sometimes used to evaluate progress in reading programs. Please consider each of these techniques in turn and check as many boxes as are necessary to indicate the ways in which you as a teacher employed each technique. Please indicate in the last column which of these evaluation techniques become part of the formal (written) record of individual students.

Techniques	Diagnosis of problems	Marks and/or letter grades	Promotion	Selection of materials	Other (please specify)	Part of formal (written) record
Standardized tests						
Teacher-made tests						
Record of non-prescribed books read						
Progress in formal reading text(s)						
Teacher's subjective assessment						
Other (please specify) _____						

20. To whom was any form of evaluation of an individual pupil's progress in reading typically given? (Check as many as apply.)

1) the teacher . . . . . .

2) the principal . . . . . .

3) the area superintendent . . . . . .

4) the reading consultant . . . . . .

5) the parents . . . . . .

6) the pupil . . . . . .

7) central office officials . . . . . .

8) other (please specify) _____

21. Suppose a child was reading at one grade level below that expected for his age; what procedure(s) would have been followed during the target year? (Check more than one if appropriate.)

1) place the child in a class group reading at a level more consistent with his reading ability . . . . . .

2) devote more time to individualized assistance . . . . . .

3) refer the child to remedial reading teacher in the school.

4) refer the child to the Reading Centre . . . . . .

5) inform the parents about the situation . . . . . .

6) other (please specify) _____ . .

22. Suppose a child was reading at two grade levels below that expected for his age; what procedure(s) would have been followed during the target year? (Check more than one if appropriate.)

1) place the child in a class group reading at a level more consistent with his reading ability . . . . . .

2) devote more time to individualized assistance . . . . . .

3) refer the child to remedial reading teacher in the school .

4) refer the child to the Reading Centre . . . . . .

5) inform the parents about the situation . . . . . .

6) other (please specify) _____ .

23. How were the results of your pupils' reading evaluation communicated to parents? Check the option that best describes the situation during the target year.

1) routinely communicated via report card or letter . . . . . .

2) typically available only on parental request . . . . . .

3) typically not communicated . . . . . .

4) other (please specify) _____ . . .

24. Please indicate the approximate number of times you have participated in each of the following types of professional development in reading within the last five years.

Type	Number of times
1) formal course conducted by the Reading Centre	
2) formal course taken elsewhere	
3) in-service training conducted by the Reading Centre personnel in your school . .	
4) conference on reading.	
5) other (please specify) _____ . .	

APPENDIX B

TABLE 35

"Degree of Concentration" Means and Standard Deviations: Reading Skills Questionnaire Items, Two groups of Grade 1 Teachers

Reading skill	Teachers in H.A. schools (N=33) Mean ($\bar{X}_1$)	N	SD	Teachers in L.A. schools (N=35) Mean ($\bar{X}_2$)	N	SD	$\bar{X}_1-\bar{X}_2$	t
Generalizing	2.97	30	0.81	2.91	33	1.13	0.06	
Oral reading speed	2.76	33	0.79	2.89	35	0.99	-0.13	
Drawing conclusions	3.70	33	0.77	3.63	35	1.03	0.07	
Vocabulary development	4.67	33	0.82	4.86	35	0.36	-0.19	
Use of punctuation in oral reading	3.27	33	0.88	3.43	35	1.01	0.16	
Identifying the author's purpose	2.30	33	1.31	2.06	35	1.28	0.24	
Predicting outcomes	3.55	33	0.90	3.57	35	0.88	-0.02	
Oral reading volume	2.97	32	1.15	3.06	34	1.10	-0.09	
Following sequence	4.12	33	0.82	4.23	35	0.73	-0.11	
Word attack skills	4.79	33	0.78	4.80	35	0.53	-0.01	
Classifying	3.52	33	0.91	3.25	32	0.98	0.27	
Pronunciation and enunciation	3.85	33	0.76	3.94	35	1.11	-0.09	
Identifying the main idea	3.97	33	1.19	3.66	35	1.26	0.31	
Silent reading speed	3.12	33	1.05	2.97	35	1.04	0.15	
Noting significant details	4.09	32	0.78	3.83	35	0.86	0.26	
Making inferences	3.76	33	0.94	3.12	34	1.04	0.64	2.40*
Understanding cause and effect	3.52	33	1.00	3.09	34	0.97	0.43	1.76
Expression	3.52	33	0.91	3.66	85	0.91	0.14	

*$p < .05$

TABLE 36

"Degree of Concentration" Means and Standard Deviations: Reading Skills Questionnaire Items, Two Groups of Grade 2 Teachers

Reading skill	Teachers in H.A. schools (N=26) Mean ($\bar{X}_1$)	N	SD	Teachers in L.A. schools (N=35) Mean ($\bar{X}_2$)	N	SD	$\bar{X}_1-\bar{X}_2$	t
Generalizing	3.00	26	0.94	3.18	34	0.83	-0.18	
Oral reading speed	2.08	26	0.89	2.91	34	0.93	0.17	
Drawing conclusions	3.77	26	0.65	3.63	35	0.88	0.14	
Vocabulary development	4.77	26	0.43	4.74	35	0.51	0.03	
Use of punctuation in oral reading	3.85	26	0.78	3.57	35	0.88	0.27	
Identifying the author's purpose	3.31	26	0.93	3.40	35	0.88	-0.09	
Oral reading volume	2.88	25	1.05	3.29	35	0.99	-0.41	1.51
Following sequence	4.00	26	0.69	4.14	35	0.69	-0.14	
Word attack skills	4.96	26	0.20	4.83	35	0.38	0.13	
Classifying	3.54	26	0.86	3.19	32	0.82	0.35	
Pronunciation and enunciation	3.92	26	0.69	4.03	35	0.82	-0.11	
Identifying the main idea	4.04	26	0.96	4.03	35	0.79	0.01	
Silent reading speed	3.12	26	0.91	3.14	35	0.85	-0.02	
Noting significant details	4.12	26	0.71	4.09	34	0.71	0.03	
Making inferences	3.54	26	0.95	3.46	35	0.89	0.06	
Understanding cause and effect	3.04	26	1.28	3.63	35	0.81	-0.59	2.16*
Expression	3.31	26	0.79	3.34	35	0.91	-0.03	

*$p < .05$

TABLE 37

"Degree of Concentration" Means and Standard Deviations: Reading Skills Questionnaire Items, Two Groups of Grade 3 Teachers

Reading skill	Teachers in H.A. schools (N=29) Mean ($\bar{X}_1$)	N	SD	Teachers in L.A. schools (N=35) Mean ($\bar{X}_2$)	N	SD	$\bar{X}_1-\bar{X}_2$	t
Generalizing	3.00	29	0.96	2.81	31	1.14	2.19	
Oral reading speed	2.69	29	0.97	2.83	35	0.89	-0.14	
Drawing conclusions	3.83	29	0.89	3.97	34	0.83	-0.14	
Vocabulary development	4.62	29	0.56	4.86	35	0.36	-0.24	
Use of punctuation in oral reading	3.76	29	0.91	3.83	35	0.89	-0.07	
Identifying the author's purpose	2.86	29	1.03	3.03	34	1.11	-0.17	
Predicting outcomes	3.69	29	0.71	3.71	35	0.83	-0.02	
Oral reading volume	2.93	29	1.28	2.80	35	1.11	0.13	
Following sequence	4.07	29	1.00	4.06	35	0.76	0.01	
Word attack skills	4.86	29	0.44	4.91	35	0.28	-0.05	
Classifying	3.03	29	1.09	3.06	34	1.01	-0.03	
Pronunciation and enunciation	3.79	29	0.90	4.06	35	0.84	-0.27	
Identifying the main idea	4.48	29	0.87	4.31	35	0.76	0.17	
Silent reading speed	2.90	29	1.18	3.18	33	0.98	-0.28	1.00
Noting significant details	4.24	29	0.74	4.29	34	0.52	-0.05	
Making inferences	3.71	28	0.81	3.77	35	0.84	-0.06	
Understanding cause and effect	3.59	29	0.95	3.57	35	1.07	0.02	
Expression	3.31	29	0.97	3.40	35	0.95	-0.11	

TABLE 38

"Degree of Concentration" Means and Standard Deviations: Reading Skills Questionnaire Items, Two Groups of Grade 4 Teachers

Reading skill	Teachers in H.A. schools (N=29) Mean ($\bar{X}_1$)	N	SD	Teachers in L.A. schools (N=39) Mean ($\bar{X}_2$)	N	SD	$\bar{X}_1-\bar{X}_2$	t
Generalizing	3.26	27	0.81	3.20	35	0.72	0.06	
Oral reading speed	2.86	28	0.80	2.67	39	0.93	0.19	
Drawing conclusions	3.83	29	0.76	3.85	39	0.74	-0.02	
Vocabulary development	4.66	29	0.48	4.53	38	0.51	0.13	
Use of punctuation in oral reading	4.03	29	0.91	3.79	39	1.17	0.24	
Identifying the author's purpose	3.21	29	0.94	2.82	39	1.05	0.39	1.57
Predicting outcomes	3.34	29	0.61	3.38	39	0.71	-0.04	
Oral reading volume	2.79	29	0.98	2.92	39	1.06	-0.13	
Following sequence	4.07	28	0.54	3.97	39	0.78	0.10	
Word attack skills	4.62	29	0.68	4.46	39	0.64	0.16	
Classifying	3.21	28	0.50	2.89	38	1.03	0.32	1.50
Pronunciation and enunciation	3.83	29	0.76	3.90	39	0.88	-0.07	
Identifying the main idea	4.24	29	0.83	4.41	39	0.72	-0.17	
Silent reading speed	3.10	29	0.94	3.37	38	1.02	-0.27	
Noting significant details	4.28	29	0.65	4.16	37	0.76	0.12	
Making inferences	3.69	29	0.66	3.69	39	0.83	0.00	
Understanding cause and effect	3.76	29	0.83	3.59	39	0.94	0.17	
Expression	3.62	29	0.78	3.31	39	0.95	0.31	

TABLE 39

"Degree of Concentration" Means and Standard Deviations:

Reading Skills Questionnaire Items, Two Groups of

Grade 5 Teachers

Reading skill	Teachers in H.A. schools (N=24) Mean ($\bar{X}_1$)	N	SD	Teachers in L.A. schools (N=35) Mean ($\bar{X}_2$)	N	SD	$\bar{X}_1-\bar{X}_2$	t
Generalizing	3.58	24	1.02	3.41	34	1.05	0.17	
Oral reading speed	2.33	24	0.92	2.83	35	0.89	-0.50	2.05*
Drawing conclusions	4.29	24	0.62	4.09	35	0.78	0.20	
Vocabulary development	4.67	24	0.48	4.31	35	0.68	0.36	
Use of punctuation in oral reading	3.33	24	1.20	3.74	35	0.78	-0.41	
Identifying the author's purpose	3.46	24	1.06	2.83	35	1.04	0.37	
Predicting outcomes	3.96	23	0.82	3.29	35	0.96	0.67	2.71**
Oral reading volume	2.25	24	1.07	2.83	35	0.92	-0.58	2.18*
Following sequence	4.00	23	0.80	3.66	35	0.91	0.34	
Word attack skills	4.09	23	0.95	4.43	35	0.81	-0.34	
Classifying	3.17	24	1.05	2.94	34	1.10	0.23	
Pronunciation and enunciation	3.79	24	1.10	3.88	34	0.73	-0.09	
Identifying the main idea	4.46	24	0.51	4.49	35	0.78	-0.03	
Silent reading speed	3.08	24	0.88	3.31	35	0.68	-0.23	
Noting significant details	3.96	24	1.00	3.94	31	0.81	0.02	
Making inferences	4.25	24	0.68	3.65	34	0.98	0.60	2.53*
Understanding cause and effect	4.17	24	0.76	3.79	34	0.95	0.38	
Expression	3.29	24	0.91	3.46	35	0.85	-0.17	

*$p < .05$
**$p < .01$

TABLE 40

"Degree of Concentration" Means and Standard Deviations: Reading Skills Questionnaire Items, Two Groups of Grade 6 Teachers

Reading skill	Teachers in H.A. schools (N=28) Mean ($\bar{X}_1$)	N	SD	Teachers in L.A. schools (N=36) Mean ($\bar{X}_2$)	N	SD	$\bar{X}_1-\bar{X}_2$	t
Generalizing	3.35	26	0.75	3.43	35	0.98	0.08	
Oral reading speed	2.61	28	0.92	2.39	36	0.93	0.23	
Drawing conclusions	4.21	28	0.74	4.39	36	0.77	-0.18	
Vocabulary development	4.61	28	0.57	4.25	36	0.81	0.36	1.97
Use of punctuation in oral reading	3.22	27	0.93	3.08	36	0.97	0.14	
Identifying the author's purpose	3.48	27	1.09	3.28	36	1.26	0.20	
Predicting outcomes	3.54	28	0.84	3.58	36	1.11	-0.04	
Oral reading volume	2.58	26	0.99	2.42	36	0.94	0.16	
Following sequence	4.07	28	0.72	3.83	36	0.74	0.24	
Word attack skills	4.36	28	0.83	4.19	36	1.06	0.17	
Classifying	3.36	28	0.91	3.00	36	0.96	0.36	1.50
Pronunciation and enunciation	3.82	28	0.94	3.49	35	0.74	0.33	
Identifying the main idea	4.46	28	0.64	4.49	35	0.74	0.03	
Silent reading speed	3.39	28	1.03	3.17	36	0.97	0.22	
Noting significant details	4.32	28	0.67	4.19	36	0.71	0.13	
Making inferences	4.18	28	0.61	4.17	35	0.89	0.01	
Understanding cause and effect	3.86	28	0.76	4.25	36	0.77	-0.39	2.00*
Expression	3.21	28	0.88	3.25	36	1.00	0.04	

*$p < .05$

APPENDIX C

TABLE 41

How many years have you taught in either Grade 1 or Grade 2? (Question #1)

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	2.13	0.50	0.40	0.84
H.A. teachers	*SD*	3.46	1.11	1.32	2.06
	N	16	28	28	69
	Mean	2.00	1.19	0.20	1.14
L.A. teachers	*SD*	3.21	3.37	0.50	2.78
	N	26	26	25	77

TABLE 42

How many years have you taught in either Grade 3, Grade 4, or Grade 5? (Question #1)

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	6.75	6.54	4.84	5.97
H.A. teachers	*SD*	4.96	4.76	3.48	4.41
	N	16	28	25	69
	Mean	5.96	6.08	4.28	5.45
L.A. teachers	*SD*	3.67	6.04	3.94	4.69
	N	26	26	25	77

TABLE 43

What was the title of the individual who was primarily responsible for setting the goals of the reading program in your classroom in the target year? (Question #2)

	Individual	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
	Teacher	81.3%	85.7%	76.0%	81.2%
	Principal	6.3%	3.6%	8.0%	5.8%
	Superintendent	0.6%	0.0%	0.0%	0.0%
H.A. teachers	Chairman	6.3%	3.6%	12.0%	7.2%
	Reading Centre consultant	0.0%	0.0%	0.0%	0.0%
	Remedial reading teacher	0.0%	0.0%	0.0%	0.0%
	Other	6.3%	7.1%	4.0%	5.8%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
	Teacher	92.3%	80.8%	84.0%	85.7%
	Principal	3.8%	11.5%	8.0%	7.8%
	Superintendent	0.0%	0.0%	0.0%	0.0%
L.A. teachers	Chairman	0.0%	3.8%	0.0%	1.3%
	Reading Centre consultant	0.0%	3.8%	4.0%	2.6%
	Remedial reading teacher	0.0%	0.0%	4.0%	1.3%
	Other	3.8%	0.0%	0.0%	1.3%

TABLE 44

Please check below the alternative which best describes your class during the target year. (Question #3)

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
H.A. teachers	Homogeneous with respect to ability	37.5%	21.4%	16.0%	23.2%
	Heterogeneous with respect to ability	62.5%	71.4%	70.0%	71.0%
	No response	0.0%	7.1%	8.0%	5.8%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
L.A. teachers	Homogeneous with respect to ability	30.8%	23.1%	28.0%	27.2%
	Heterogeneous with respect ability	69.2%	76.9%	72.0%	72.7%
	No response	0.0%	0.0%	0.0%	0.0%

TABLE 45

Please estimate the average weekly amount of time in minutes devoted to reading instruction in your classroom during the target year.

(Question #4)

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	343.75	277.14	269.40	289.78
H.A. teachers	*SD*	143.14	89.25	149.49	128.35
	N	16	28	25	69
	Mean	374.42	283.46	253.20	304.35
L.A. teachers	*SD*	119.19	143.00	100.53	131.46
	N	26	26	25	77

TABLE 46

Consider the reading instruction time of the average pupil in your classroom during the target year. Please estimate the percentage of that time spent in each of the following activities. (Question #5)

1. *whole class activities*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	14.69	20.54	25.00	20.80
H.A. teachers	*SD*	11.03	14.74	14.93	14.39
	N	16	28	25	69
	Mean	23.00	18.42	24.76	22.03
L.A. teachers	*SD*	20.89	15.55	22.62	19.79
	N	26	26	25	77

2. *group activities*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	30.31	31.96	28.24	30.23
H.A. teachers	*SD*	15.22	16.24	15.53	15.61
	N	16	28	25	69
	Mean	31.27	33.96	35.00	33.39
L.A. teachers	*SD*	19.46	14.79	21.02	18.40
	N	26	26	25	77

TABLE 46 (CONTINUED)

3. *receiving individual instruction from the teacher*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	20.00	13.25	15.80	15.74
H.A. teachers	*SD*	13.54	8.68	9.97	10.60
	N	16	28	25	69
	Mean	12.27	13.46	12.20	12.65
L.A. teachers	*SD*	8.65	10.37	5.97	8.46
	N	26	26	25	77

4. *working on his own*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	27.50	29.64	28.96	28.90
H.A. teachers	*SD*	12.91	11.86	13.46	12.54
	N	16	28	25	69
	Mean	28.00	29.92	26.20	28.06
L.A. teachers	*SD*	17.04	16.67	20.63	17.99
	N	26	26	25	77

TABLE 46 (CONTINUED)

5. *other*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	0.94	0.86	2.00	1.29
H.A. teachers	*SD*	2.74	2.32	5.59	3.88
	N	16	28	25	69
	Mean	1.62	0.38	1.80	1.26
L.A. teachers	*SD*	3.67	1.96	4.76	3.64
	N	26	26	25	77

TABLE 47

Please estimate how often you as the teacher heard individual pupils read aloud. (Question #6)

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
H.A. teachers	Every day (a few pupils)	25.0%	21.4%	28.0%	24.6%
	Every day (majority of pupils)	31.3%	17.9%	16.0%	20.3%
	Every day (all pupils)	12.5%	0.0%	0.0%	2.9%
	Three times per week	18.8%	17.9%	12.0%	15.9%
	Twice a week	12.5%	10.7%	16.0%	13.0%
	Once a week	0.0%	21.4%	16.0%	14.5%
	Less than once a week	0.0%	7.1%	4.0%	4.3%
	Other	0.0%	3.6%	8.0%	4.3%
		(*N*=25)[a]	(*N*=26)	(*N*=25)	(*N*=76)[a]
L.A. teachers	Every day (a few pupils)	32.0%	42.3%	24.0%	32.5%
	Every day (majority of pupils)	16.0%	11.5%	12.0%	13.0%
	Every day (all pupils)	16.0%	7.7%	0.0%	7.8%
	Three times per week	20.0%	23.1%	20.0%	20.8%
	Twice a week	12.0%	11.5%	24.0%	15.6%
	Once a week	4.0%	0.0%	8.0%	3.9%
	Less than once a week	0.0%	3.8%	12.0%	5.2%
	Other	0.0%	0.0%	0.0%	0.0%

[a]Percentages in this column do not add up to 100 due to the fact that there was one "no response."

TABLE 48

During the target year, reading groups were typically composed of ...

(Question #7)

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
H.A. teachers	Students within a single class	81.3%	82.1%	76.0%	79.7%
	Students from more than one class within a single grade	12.5%	3.6%	0.0%	4.3%
	Students from more than one grade level	6.3%	14.3%	24.0%	15.9%
		(*N*=25)	(*N*=25)	(*N*=25)	(*N*=7)
L.A. teachers	Students within a single class	65.4%	76.9%	84.0%	75.3%
	Students from more than one class within a single grade	26.9%	19.2%	8.0%	18.2%
	Students from more than one grade level	3.8%	0.0%	8.0%	3.9%
	No response	3.8%	3.8%	0.0%	2.6%

TABLE 49

Please check the number of reading groups you usually had within your classroom during the target year. (Question #8)

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
H.A. teachers	Total class (1 group)	0.0%	0.0%	4.0%	1.4%
	2 groups	18.8%	21.4%	24.0%	21.7%
	3 groups	56.3%	46.4%	48.0%	49.3%
	4 groups	6.3%	17.9%	8.0%	11.6%
	5 groups	0.0%	3.6%	8.0%	4.3%
	6 groups	0.0%	0.0%	4.0%	1.4%
	Completely individualized program	0.0%	7.1%	4.0%	4.3%
	Other	18.8%	3.6%	0.0%	5.8%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
L.A. teachers	Total class (1 group)	3.8%	0.0%	8.0%	3.9%
	2 groups	7.7%	16.0%	8.0%	10.4%
	3 groups	61.5%	61.5%	48.0%	57.1%
	4 groups	16.0%	11.5%	20.0%	15.6%
	5 groups	7.7%	7.7%	0.0%	5.2%
	6 groups	0.0%	0.0%	4.0%	1.3%
	Completely individualized program	0.0%	0.0%	8.0%	2.6%
	Other	3.8%	3.8%	4.0%	3.9%

TABLE 50

If grouping was used at all in your classroom during the target year, please indicate the primary basis for forming these groups. (Question #9)

	Alternative	GRADE 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
H.A. teachers	General ability test score	12.5%	0.0%	8.0%	5.8%
	Teacher's estimate --ability	0.0%	0.0%	8.0%	2.9%
	Reading test score	31.3%	46.4%	60.0%	47.8%
	Teacher's estimate --reading level	18.8%	17.9%	4.0%	13.0%
	Interest	0.0%	7.1%	4.0%	4.3%
	Other	37.5%	28.6%	12.0%	24.6%
	No response	0.0%	0.0%	4.0%	1.4%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
L.A. teachers	General ability test score	3.8%	19.2%	20.0%	14.3%
	Teacher's estimate --ability	3.8%	3.8%	0.0%	2.6%
	Reading test score	34.6%	50.0%	40.0%	41.6%
	Teacher's estimate --reading level	19.2%	7.7%	8.0%	11.7%
	Interest	0.0%	0.0%	4.0%	1.3%
	Other	38.5%	19.2%	16.0%	24.7%
	No response	0.0%	0.0%	12.0%	3.9%

TABLE 51

Regarding the relationship between reading instruction and instruction in the other language arts, please select the description which more closely approximates what happened in your classroom during the target year:

1. *Most instruction in other language arts areas was carried out in separate periods, distinct from reading instruction time.*

2. *Instruction in other language arts areas overlapped a great deal with reading instruction time.* (Question #10)

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
H.A. teachers	1.	37.5%	46.4%	52.0%	46.4%
	2.	62.5%	53.6%	48.0%	53.6%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
L.A. teachers	1.	62.3%	61.5%	73.1%	62.3%
	2.	37.7%	38.5%	26.9%	37.7%

TABLE 52

During the target year, how were new words typically introduced and vocabulary extended? (Question #11)

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
H.A. teachers	Before a reading lesson	56.3%	64.3%	56.0%	59.4%
	As the need arose	37.5%	28.6%	40.0%	34.8%
	Other	6.3%	7.1%	4.0%	5.8%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
L.A. teachers	Before a reading lesson	73.1%	65.4%	48.0%	62.3%
	As the need arose	15.4%	34.6%	52.0%	33.8%
	Other	11.5%	0.0%	0.0%	3.9%

TABLE 53

Was a single basal reader series used during the target year? (Question #12)

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
H.A. teachers	Yes	31.3%	60.7%	72.0%	58.0%
	No	68.8%	39.3%	24.0%	40.6%
	No response	0.0%	0.0%	4.0%	1.4%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
L.A. teachers	Yes	50.0%	69.2%	72.0%	63.6%
	No	50.0%	26.9%	28.0%	35.1%
	No response	0.0%	3.8%	0.0%	1.3%

TABLE 54

Please rate, using a number selected from the following scale, how often you used <u>each</u> of the following materials in your reading program during the <u>target year</u>. (Question #13)

0	1	2	3	4
never	rarely	occasionally	frequently	very often

1. *basal readers*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	3.81	3.36	3.36	3.51
H.A. teachers	*SD*	0.40	0.74	0.64	0.66
	N	16	28	25	69
	Mean	3.85	3.50	3.20	3.51
L.A. teachers	*SD*	0.37	0.58	1.04	0.75
	N	26	26	25	77

2. *material accompanying the basal reader*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	3.31	2.61	2.79	2.84
H.A. teachers	*SD*	0.79	1.13	1.10	1.07
	N	16	28	24	68
	Mean	3.04	2.58	2.39	2.68
L.A. teachers	*SD*	0.96	1.03	1.27	1.10
	N	26	26	23	75

TABLE 54 (CONTINUED)

3. *phonics workbook*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	1.75	1.75	1.83	1.77
H.A. teachers	*SD*	1.29	1.46	1.17	1.30
	N	16	28	24	68
	Mean	2.12	2.27	1.43	1.96
L.A. teachers	*SD*	1.24	1.25	1.27	1.29
	N	25	26	23	74

4. *reading kits*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	2.06	2.11	1.96	2.04
H.A. teachers	*SD*	1.29	1.34	1.34	1.31
	N	16	27	25	68
	Mean	1.60	1.68	2.20	1.83
L.A. teachers	*SD*	1.08	1.38	1.26	1.26
	N	25	25	25	75

5. *teacher-made materials*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	3.00	2.82	2.50	2.75
H.A. teachers	*SD*	0.89	0.86	0.98	0.92
	N	16	28	24	68
	Mean	3.08	2.23	2.46	2.59
L.A. teachers	*SD*	0.80	1.03	1.28	1.10
	N	26	26	24	76

TABLE 54 (CONTINUED)

6. *pupil-made materials*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	1.93	1.70	1.54	1.70
H.A. teachers	*SD*	1.10	0.78	0.93	0.91
	N	15	27	24	66
	Mean	1.64	1.29	1.35	1.43
L.A. teachers	*SD*	0.76	0.81	1.03	0.87
	N	25	24	23	72

7. *library books*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	3.07	2.93	1.96	2.97
H.A. teachers	*SD*	0.88	0.90	0.75	0.83
	N	15	28	24	67
	Mean	2.58	2.44	2.76	2.59
L.A. teachers	*SD*	0.81	0.87	0.72	0.82
	N	26	25	25	76

8. *other*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	2.75	2.70	2.17	2.55
H.A. teachers	*SD*	0.96	0.95	1.17	1.00
	N	4	10	6	20
	Mean	2.25	3.00	2.17	2.47
L.A. teachers	*SD*	1.22	1.21	1.11	1.21
	N	12	12	12	36

TABLE 55

Who was primarily responsible for choosing the materials which were used in the reading program in your classroom during the target year?

(Question #14)

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
	Teacher	87.5%	92.9%	96.0%	92.8%
H.A. teachers	Principal	12.5%	3.6%	4.0%	5.8%
	Vice-principal	0.0%	0.0%	0.0%	0.0%
	Reading consultant	0.0%	0.0%	0.0%	0.0%
	Chairman	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	3.6%	0.0%	1.4%
		(*N*=26)	(*N*=26)	(*N*=27)	(*N*=77)
	Teacher	84.6	65.4%	76.0%	75.3%
L.A. teachers	Principal	7.7%	19.2%	0.0%	9.1%
	Vice-principal	3.8%	3.8%	8.0%	5.2%
	Reading consultant	0.0%	0.0%	4.0%	1.3%
	Chairman	0.0%	7.7%	0.0%	2.6%
	Other	3.8%	3.8%	4.0%	3.9%
	No response	0.0%	0.0%	8.0%	2.6%

TABLE 56

Please estimate the approximate number of volumes in your classroom library during the target year. (Question #15)

	Alternative	Grade 3 (*N*=15)[a]	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=68)[a]
	Fewer than 50	6.3%	17.9%	20.0%	15.9%
H.A. teachers	50-99	25.0%	25.0%	24.0%	24.6%
	100-200	50.0%	28.6%	28.0%	33.3%
	More than 200	0.0%	17.9%	28.0	17.4%
	No classroom library	12.5%	10.7%	0.0%	7.2%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
	Fewer than 50	30.8%	23.1%	24.0%	26.0%
L.A. teachers	50-99	30.8%	50.0%	32.0%	37.7%
	100-200	15.4%	7.7%	28.0%	10.9%
	More than 200	15.4%	11.5%	12.0%	13.0%
	No classroom library	7.7%	7.7%	4.0%	6.5%

[a]Percentages in these columns do not total 100 due to the fact that there was one "no response."

TABLE 57

Please check those of the following statements which describe the rules governing the use of the classroom library. (Question #16)

1. *Pupils were free to use the library whenever their work was done.*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	68.8% (*N*=16)	92.9% (*N*=28)	88.0% (*N*=25)	85.5% (*N*=69)
L.A. teachers	92.3% (*N*=26)	88.5% (*N*=26)	88.0% (*N*=25)	89.6% (*N*=77)

2. *The library was used during special library periods.*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	12.5 (*N*=16)	14.3% (*N*=28)	12.0% (*N*=25)	14.5% (*N*=69)
L.A. teachers	34.6% (*N*=26)	7.7% (*N*=26)	28.0% (*N*=25)	23.4% (*N*=77)

3. *Students were able to take books home.*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	75.0% (*N*=16)	75.0% (*N*=28)	56.0% (*N*=25)	68.1% (*N*=69)
L.A. teachers	46.2% (*N*=26)	69.2% (*N*=26)	76.0% (*N*=25)	63.6% (*N*=77)

TABLE 57 (CONTINUED)

4. *Other*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	18.8% (*N*=16)	10.7% (*N*=28)	12.0% (*N*=25)	13.0% (*N*=69)
L.A. teachers	30.8% (*N*=26)	26.9% (*N*=26)	20.0% (*N*=25)	26.0% (*N*=77)

TABLE 58

Please check those of the following statements which describe the use of the school library (or resource centre) during the target years.
(Question #17)

1. *Pupils, as a class, were scheduled to use the library during prescribed periods.*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	93.8% (*N*=16)	89.3% (*N*=28)	80.0% (*N*=25)	87.0% (*N*=69)
L.A. teachers	96.2% (*N*=26)	100.0% (*N*=26)	80.0% (*N*=25)	92.0% (*N*=77)

TABLE 58 (CONTINUED)

2. *Pupils, as small groups, were permitted to use the library at any time during school hours.*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	37.5% (*N*=16)	57.1% (*N*=28)	56.0% (*N*=25)	52.2% (*N*=69)
L.A. teachers	38.5% (*N*=26)	42.3% (*N*=26)	52.0% (*N*=25)	44.2% (*N*=77)

3. *Pupils, as individuals, were permitted to use the library at any time during school hours.*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	31.3% (*N*=16)	50.0% (*N*=28)	56.0% (*N*=25)	47.8% (*N*=69)
L.A. teachers	38.5% (*N*=26)	42.3% (*N*=26)	52.0% (*N*=25)	44.2% (*N*=77)

4. *Pupils could use the library before school started.*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	37.5% (*N*=16)	60.7% (*N*=28)	36.0% (*N*=25)	46.4% (*N*=69)
L.A. teachers	57.7% (*N*=26)	46.2% (*N*=26)	52.0% (*N*=25)	51.9% (*N*=77)

TABLE 58 (CONTINUED)

5. *Pupils could use the library after school finished.*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	62.5%	78.6%	56.0%	66.7%
	(*N*=16)	(*N*=28)	(*N*=25)	(*N*=69)
L.A. teachers	69.2%	65.4%	64.0%	66.2%
	(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)

6. *Pupils could use the library at lunch time.*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	12.5%	53.6%	20.0%	31.9%
	(*N*=16)	(*N*=28)	(*N*=25)	(*N*=69)
L.A. teachers	38.5%	26.9%	40.0%	35.1%
	(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)

7. *Pupils were permitted to use the library whenever their regular work was completed*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	31.3%	35.7%	28.0%	31.9%
	(*N*=16)	(*N*=28)	(*N*=25)	(*N*=69)
L.A. teachers	15.4%	15.4%	20.0%	16.9%
	(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)

TABLE 58 (CONTINUED)

8. *Other*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	18.8%	14.3%	12.0%	14.5%
	(*N*=16)	(*N*=28)	(*N*=25)	(*N*=69)
L.A. teachers	23.1%	11.5%	12.0%	15.6%
	(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)

9. *There was no library/resource centre.*

	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	0.0%	0.0%	4.0%	1.4%
	(*N*=16)	(*N*=28)	(*N*=25)	(*N*=69)
L.A. teachers	0.0%	3.8%	4.0%	2.6%
	(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)

TABLE 59

Please rate, on the following scale, how often each of the following people assisted you in your reading program during the target year. (Question #18)

1 never — 2 occasionally — 3 very often

1. *remedial reading teacher*

	Statistic	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	Mean	1.77	1.81	1.75	1.78
	SD	0.83	0.87	0.79	0.82
	N	13	21	20	54
L.A. teachers	Mean	1.56	1.63	1.65	1.61
	SD	0.62	0.68	0.81	0.70
	N	18	19	20	57

2. *Reading Centre consultant*

	Statistic	Grade 3	Grade 4	Grade 5	Total
H.A. teachers	Mean	1.44	1.58	1.60	1.55
	SD	0.51	0.50	0.58	0.53
	N	16	26	25	67
L.A. teachers	Mean	1.56	1.36	1.50	1.47
	SD	0.65	0.49	0.67	0.60
	N	25	25	22	72

TABLE 59 (CONTINUED)

3. *teacher aide*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	1.00	1.00	1.00	1.00
H.A. teachers	*SD*	0.00	0.00	0.00	0.00
	N	10	12	14	36
	Mean	1.06	1.13	1.06	1.08
L.A. teachers	*SD*	0.25	0.50	0.25	0.35
	N	16	16	16	48

4. *tutorial teacher*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	1.00	1.00	1.00	1.00
H.A. teachers	*SD*	0.00	0.00	0.00	0.00
	N	10	12	13	37
	Mean	1.00	1.18	1.17	1.12
L.A. teachers	*SD*	0.00	0.53	0.53	0.44
	N	15	17	17	49

5. *other*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	2.00	1.80	1.67	1.80
H.A. teachers	*SD*	0.82	0.45	1.03	0.77
	N	4	5	6	15
	Mean	1.83	1.55	1.55	1.65
L.A. teachers	*SD*	0.83	0.82	0.69	0.77
	N	12	11	11	34

TABLE 60

For each of the following evaluation techniques, please indicate the ways you as a teacher employed each technique. (Question #19)

1. *standardized tests*

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
	Diagnosis	18.8%	82.1%	88.0%	84.1%
	Grading	37.5%	35.7%	40.0%	37.7%
H.A. teachers	Promotion	18.8%	14.3%	24.0%	18.8%
	Selection of materials	25.0%	46.4%	48.0%	42.0%
	Other	0.0%	3.6%	4.0%	2.9%
	Part of formal record	43.8%	64.3%	56.0%	56.5%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
	Diagnosis	76.9%	69.2%	76.0%	74.0%
	Grading	30.8%	34.6%	36.0%	33.8%
L.A. teachers	Promotion	30.8%	26.9%	20.0%	26.0%
	Selection of materials	46.2%	34.6%	44.0%	41.6%
	Other	11.5%	0.0%	8.0%	6.5%
	Part of formal record	73.1%	38.5%	56.0%	55.8%

TABLE 60 (CONTINUED)

2. *teacher-made tests*

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
	Diagnosis	93.8%	75.0%	64.0%	75.4%
	Grading	68.8%	82.1%	92.0%	82.6%
H.A. teachers	Promotion	62.5%	67.9%	60.0%	63.8%
	Selection of materials	56.3%	42.9%	36.0%	43.5%
	Other	0.0%	3.6%	0.0%	1.4%
	Part of formal record	81.3%	67.9%	48.0%	63.8%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
	Diagnosis	84.6%	76.9%	68.0%	76.6%
	Grading	76.9%	92.3%	88.0%	85.7%
L.A. teachers	Promotion	73.1%	61.5%	60.0%	64.9%
	Selection of materials	57.7%	23.1%	24.0%	35.1%
	Other	7.7%	0.0%	0.0%	2.6%
	Part of formal record	50.0%	76.9%	64.0%	63.6%

TABLE 60 (CONTINUED)

3. *record of non-prescribed books read*

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
	Diagnosis	25.0%	14.3%	8.0%	14.5%
	Grading	12.5%	14.3%	20.0%	15.9%
H.A. teachers	Promotion	12.5%	7.1%	4.0%	7.2%
	Selection of materials	81.3%	50.0%	52.0%	58.0%
	Other	12.5%	10.7%	16.0%	13.0%
	Part of formal record	25.0%	28.6%	24.0%	26.1%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
	Diagnosis	11.5%	11.5%	4.0%	9.1%
	Grading	15.4%	15.4%	24.0%	18.2%
L.A. teachers	Promotion	7.7%	3.8%	12.0%	7.8%
	Selection of materials	46.2%	42.3%	56.0%	48.1%
	Other	7.7%	3.8%	0.0%	3.9%
	Part of formal record	23.1%	15.4%	20.0%	19.5%

TABLE 60 (CONTINUED)

4. *progress in formal reading text(s)*

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
	Diagnosis	62.5%	39.3%	36.0%	43.5%
	Grading	62.5%	57.1%	76.0%	65.2%
H.A. teachers	Promotion	68.8%	46.4%	56.0%	55.1%
	Selection of materials	43.8%	39.3%	36.0%	39.1%
	Other	0.0%	3.6%	0.0%	1.4%
	Part of formal record	68.8%	57.1%	40.0%	53.6%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
	Diagnosis	53.8%	42.3%	28.0%	41.6%
	Grading	50.0%	61.5%	64.0%	58.4%
L.A. teachers	Promotion	65.4%	53.8%	48.0%	55.8%
	Selection of materials	42.3%	30.8%	24.0%	32.5%
	Other	0.0%	0.0%	0.0%	0.0%
	Part of formal record	73.1%	65.4%	68.0%	68.8%

TABLE 60 (CONTINUED)

5. *teacher's subjective assessment*

	Alternative	Grade 3 (N=16)	Grade 4 (N=28)	Grade 5 (N=25)	Total (N=69)
	Diagnosis	75.0%	60.7%	68.0%	66.7%
	Grading	56.3%	35.7%	64.0%	50.7%
	Promotion	68.8%	64.3%	80.0%	71.0%
H.A. teachers	Selection of materials	62.5%	64.3%	60.0%	62.3%
	Other	0.0%	0.0%	0.0%	0.0%
	Part of formal record	43.8%	50.0%	56.0%	50.7%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
	Diagnosis	73.1%	69.2%	52.0%	64.9%
	Grading	42.3%	57.7%	72.0%	57.1%
L.A. teachers	Promotion	76.9%	57.7%	76.0%	70.1%
	Selection of materials	57.7%	46.2%	40.0%	48.1%
	Other	3.8%	0.0%	4.0%	2.6%
	Part of formal record	42.3%	50.0%	52.0%	48.1%

TABLE 60 (CONTINUED)

6. *other*

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
	Diagnosis	6.3%	7.1%	4.0%	5.8%
	Grading	6.3%	7.1%	4.0%	5.8%
H.A. teachers	Promotion	0.0%	3.6%	4.0%	2.9%
	Selection of materials	12.5%	7.1%	4.0%	7.2%
	Other	0.0%	0.0%	0.0%	0.0%
	Part of formal record	12.5%	7.1%	4.0%	7.2%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
	Diagnosis	3.8%	0.0%	0.0%	1.3%
	Grading	0.0%	0.0%	0.0%	0.0%
L.A. teachers	Promotion	3.8%	0.0%	0.0%	1.3%
	Selection of materials	3.8%	3.8%	0.0%	2.6%
	Other	7.7%	0.0%	0.0%	2.6%
	Part of formal record	3.8%	0.0%	0.0%	1.3%

TABLE 61

To whom was any form of evaluation of an individual pupil's progress in reading typically given? (Check as many as apply.) (Question #20)

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
	Teacher	81.3%	85.7%	88.0%	85.5%
H.A. teachers	Principal	68.8%	78.6%	72.0%	73.9%
	Area superintendent	0.0%	3.6%	8.0%	4.3%
	Reading consultant	6.3%	14.3%	4.0%	8.7%
	Parents	100.0%	82.1%	84.0%	87.0%
	Pupil	68.8%	71.4%	72.0%	71.0%
	Central office officials	6.3%	7.1%	0.0%	4.3%
	Other	6.3%	0.0%	0.0%	1.4%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
	Teacher	80.8%	61.5%	80.0%	74.0%
L.A. teachers	Principal	80.8%	57.7%	56.0%	64.9%
	Area superintendent	3.8%	0.0%	0.0%	1.3%
	Reading consultant	23.1%	0.0%	12.0%	11.7%
	Parents	80.8%	92.3%	80.0%	84.4%
	Pupil	50.0%	73.1%	76.0%	66.2%
	Central office officials	3.8%	7.7%	4.0%	5.2%
	Other	11.5%	0.0%	4.0%	5.2%

TABLE 62

Suppose a child was reading at <u>one</u> grade level below that expected for his age; what procedure(s) would have been followed during the <u>target year</u>? (Check more than one if appropriate.) (Question #21)

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
	Place child in reading group	81.3%	85.7%	88.0%	85.5%
H.A. teachers	Individual assistance	100.0%	85.7%	80.0%	87.0%
	Refer to school's remedial reading teacher	31.3%	28.6%	16.0%	24.6%
	Refer to Reading Centre	18.8%	14.3%	12.0%	14.5%
	Inform parents	87.5%	89.3%	84.0%	87.0%
	Other	25.0%	3.6%	8.0%	10.1%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
	Place child in reading group	92.3%	92.3%	72.0%	85.7%
L.A. teachers	Individual assistance	80.8%	80.8%	92.0%	84.4%
	Refer to school's remedial reading teacher	30.8%	23.1%	32.0%	28.6%
	Refer to Reading Centre	7.7%	15.4%	12.0%	11.7%
	Inform parents	76.9%	84.6%	76.0%	79.2%
	Other	11.5%	11.5%	16.0%	13.0%

TABLE 63

Suppose a child was reading at <u>two</u> grade levels below that expected for his age; what procedure(s) would have been followed during the <u>target year</u>? (Check more than one if appropriate.) (Question #22)

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
	Place child in reading group	68.8%	71.4%	76.0%	72.5%
H.A. teachers	Individual assistance	93.8%	89.3%	72.0%	84.1%
	Refer to school's remedial reading teacher	56.3%	50.0%	52.0%	52.2%
	Refer to Reading Centre	43.8%	53.6%	36.0%	44.9%
	Inform parents	87.5%	92.9%	92.0%	91.3%
	Other	25.0%	7.1%	12.0%	13.0%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
	Place child in reading group	84.6%	88.5%	72.0%	81.8%
L.A. teachers	Individual assistance	84.6%	84.6%	84.0%	84.4%
	Refer to school's remedial reading teacher	50.0%	57.7%	64.0%	57.1%
	Refer to Reading Centre	38.5%	38.5%	48.0%	41.6%
	Inform parents	88.5%	88.5%	88.0%	88.3%
	Other	23.1%	15.4%	24.0%	20.8%

TABLE 64

How were the results of your pupils' reading evaluation communicated to parents? Check the option that best describes the situation during the target year. (Question #23)

	Alternative	Grade 3 (*N*=16)	Grade 4 (*N*=28)	Grade 5 (*N*=25)	Total (*N*=69)
H.A. teachers	Report card or letter	75.0%	64.3%	76.0%	71.0%
	On parental request only	0.0%	0.0%	0.0%	0.0%
	Interview and report card	25.0%	32.1%	24.0%	27.5%
	Other	0.0%	3.6%	0.0%	1.4%
	Not communicated	0.0%	0.0%	0.0%	0.0%
		(*N*=26)	(*N*=26)	(*N*=25)	(*N*=77)
L.A. teachers	Report card or letter	53.8%	61.5%	60.0%	58.4%
	On parental request only	0.0%	0.0%	0.0%	0.0%
	Interview and report card	46.2%	38.5%	40.0%	41.6%
	Other	0.0%	0.0%	0.0%	0.0%
	Not communicated	0.0%	0.0%	0.0%	0.0%

TABLE 65

Please indicate the approximate numbers of times you have participated in each of the following types of professional development in reading within the last five years. (Question #24)

1. *formal course conducted by the Reading Centre*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	0.44	0.32	1.00	0.59
H.A. teachers	*SD*	0.51	0.61	1.87	1.24
	N	16	28	25	69
L.A. teachers	Mean	0.69	0.54	0.40	0.55
	SD	1.05	0.99	0.64	0.91
	N	26	26	25	77

2. *formal course taken elsewhere*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	0.25	0.29	0.32	0.29
H.A. teachers	*SD*	0.45	0.53	0.63	0.55
	N	16	28	25	69
	Mean	0.38	0.27	0.12	0.26
L.A. teachers	*SD*	0.80	0.45	0.33	0.57
	N	26	26	25	77

TABLE 65 (CONTINUED)

3. *in-service training conducted by Reading Centre personnel in your school*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	1.44	1.11	1.16	1.20
H.A. teachers	*SD*	2.50	1.42	1.14	1.63
	N	16	28	25	69
	Mean	1.50	0.85	1.36	1.23
L.A. teachers	*SD*	1.84	0.92	1.73	1.55
	N	26	26	25	77

4. *conference on reading*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	1.94	0.50	1.48	1.19
H.A. teachers	*SD*	5.01	1.91	2.90	3.21
	N	16	28	25	69
	Mean	0.92	0.88	1.08	0.96
L.A. teachers	*SD*	1.44	1.61	1.78	1.59
	N	26	26	25	77

TABLE 65 (CONTINUED)

5. *other*

	Statistic	Grade 3	Grade 4	Grade 5	Total
	Mean	0.88	0.29	0.20	0.39
H.A. teachers	*SD*	1.63	0.66	0.50	0.96
	N	16	28	25	69
	Mean	0.50	0.35	0.32	0.39
L.A. teachers	*SD*	1.48	0.85	0.75	1.07
	N	26	26	25	77