

DOCUMENT RESUME

ED 117 648

CS 002 359

AUTHOR Wright, E. W.; Reich, C. M.  
 TITLE Language: A Study of Fundamental Skills. No. 108.  
 INSTITUTION Toronto Board of Education (Ontario). Research Dept.  
 PUB DATE Sep 72  
 NOTE 64p.; Several examples in the appendix may reproduce poorly

EDRS PRICE MF-\$0.83 HC-\$3.50 Plus Postage  
 DESCRIPTORS \*Composition Skills (Literary); Elementary Secondary Education; \*Language Skills; \*Parental Background; Rating Scales; Reading Achievement; \*Reading Habits; Reading Interests; Reading Research; \*Reading Tests  
 IDENTIFIERS Canada; Ontario (Toronto)

ABSTRACT

During the school year 1971-72, a study of language skills was conducted in the city of Toronto, Ontario. Scores on the Gates-MacGinitie Reading Test were analyzed for many students in grades four, six, eight, and nine. Students scored at grade level with reference to the United States norms of this test. The vocabulary and reading subsections of the Canadian Tests of Basic Skills were also administered to groups of students in grades four, six, and eight in order to compare the two tests. The relative performance of students on this test was similar to performance on the Gates-MacGinitie; however, the scores were several months lower. A questionnaire was administered to a sample of sixth graders concerning their reading activities and their parents' reading activities. In general, the sixth graders reported that they and their parents engaged in many reading activities. The favorite themes of the children were mystery, adventure, and horror. Analysis of compositions collected from a sample of eighth graders showed that most of the students can write a coherent narrative of acceptable prose. Parents' occupation was found to be related to all three measures of language ability, with higher occupational status being associated with higher scores. (MM)

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LANGUAGE: A STUDY OF FUNDAMENTAL SKILLS

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#108

September, 1972

Research Service  
issued by the  
Research Department

The Board of Education for the City of Toronto.

05 002 359

TABLE OF CONTENTS

	<u>Page No.</u>
INTRODUCTION .....	1
STANDARDIZED READING TESTS - SOME COMMENTS AND OBSERVATIONS .....	5
READING TEST RESULTS .....	10
<u>Language Background and Reading Scores</u> ...	11
<u>Parents' Occupations</u> <u>and Reading Scores</u> .....	14
<u>City-wide Weighted Average</u> .....	14
<u>Relative Importance of Background</u> <u>Factors</u> .....	19
COMPARISON OF RESULTS FROM THE CANADIAN TESTS OF BASIC SKILLS AND THE GATES-MACGINITIE READING TEST .....	22
THE FUNCTION OF READING .....	27
<u>Reading Habits</u> .....	27
<u>Reading Ability and Reading Activity</u> .....	31
<u>Type of Preferred Reading</u> .....	34
WRITING ABILITY .....	36
<u>Relationship of Writing Ability to</u> <u>Reading and Home Background</u> .....	42
SUMMARY .....	45
REFERENCES AND READING TESTS USED .....	47
APPENDIX .....	48

67

LANGUAGE: A STUDY OF FUNDAMENTAL SKILLS

INTRODUCTION

On April 29, 1971 a motion to undertake a study of reading was made at the Board level. The motion was referred to the Special Committee re Fundamental Skills which was requested to consider the feasibility of conducting the proposed study. On May 6, 1971 this Committee asked for a preliminary report on possible methods of conducting such a study. In consultation with the Language Study Centre, the Research Department prepared a project proposal which was presented to the Fundamental Skills Committee on May 31, 1971. The proposal outlined a procedure for a stratified sampling of about a third of Toronto elementary schools. The students in Grades 4, 6 and 8 from these schools would be given the Gates-MacGinitie Reading Test. All Grade 9 students would also receive the test.

In order to compare the Gates-MacGinitie Test with the Canadian Tests of Basic Skills a substudy involving some 200 students at each of the elementary grade levels was suggested in order to compare the American and Canadian norms. Because a reading test does not adequately reflect a language programme's goals, the proposal suggested two other measures: an indication of Grade 6 students' reading habits and interests, and a study of a sample of Grade 8 students' compositions.

Most of the discussion which was generated when this proposal was presented focused not on any of the project's particulars but on the appropriateness and suitability of standardized reading tests in general and about the utilization of their results in particular. Partly

because of these numerous discussions, it was some months before a final resolution was achieved and presented in the Committee's third report.

On Thursday, September 30, 1971, the Special Committee re Fundamental Skills presented its third report which was adopted, with amendments, by the Board on October 14, 1971. The two relevant motions as amended follow:

"1. Your Committee has reconsidered its Report No. 2, dated June 21, 1971, which was before the Board on July 22, 1971 (page 581), and decided to resubmit the following recommendation contained in the report for approval:

'That the Board oppose any form of testing which would be used for comparison between the schools and encourage teachers to use diagnostic tests only.'

2. Amended by adding sub-section (b).

(a) That a study of reading levels in a sampling of public schools across the city be undertaken, as outlined in a report presented to your Committee (for details, see minutes of committee); that funds in the amount of approximately \$6,485.00 be provided for this purpose; and that timetables for this study be altered to permit implementation as soon as possible.

(b) That, in keeping with the philosophy enunciated in Section I of the report, the results of the study not be used in any way which would suggest comparisons between the schools within the school system."

(Board Minutes, October 14, 1971,  
pp. 772-773)

In light of the above, it was necessary to make major modifications in the timetabling of the project and minor modifications in the design. In June of 1971, a note had been placed in the Weekly Letter to the schools indicating that the use of standardized tests was to be at the discretion of the local school. Consequently, by October 14th the situation existed where some schools had already finished administering a standardized reading test, other schools had decided not to administer them, and yet other schools had administered the tests to selected students,

or the teacher had decided whether or not to administer the test. Because of this situation, it was decided that all the schools which had administered the Gates-MacGinitie Test or were administering this test would be asked for their results. It seemed to be the only appropriate solution since it was neither fair nor appropriate to impose a second test on students who had already just completed a test, nor to impose tests on schools or classes who, after careful consideration, had decided to plan this year's programme so that standardized tests were not used.

All of this and the later activities were being carried out within the constraints of the regular school year. The summer which had been included in the original study as an important time for planning and preparation, had already passed. It was therefore decided to make the administration of the Canadian Tests of Basic Skills<sup>\*</sup> voluntary, as a random sample was not necessary for this part of the study.

Since the Canadian Tests of Basic Skills has a reusable booklet, the principals who volunteered were promised that they could keep the booklets if they participated in this study and that booklets would be supplied for every student who participated. Only those who had already administered the Gates-MacGinitie Test were allowed to volunteer. The schools were very co-operative and the response was gratifying; as will be seen, a substantial base was provided for a comparison of these two tests, more than four times the minimum number suggested in the proposal.

Because of the time of the year and other demands placed on the secondary schools, the Gates-MacGinitie Test was not administered to Grade 9 students until the first week in February (special vocational schools were not included and two secondary schools were unable to participate).

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\* see references for tests used.

As will be seen later, this almost complete testing of the Grade 9 population provided an accurate reference point against which to reflect the data from Grades 4, 6 and 8 where there could be concerns that some bias existed in the schools which were able to participate.

The Grade 8 compositions and the Grade 6 reading interests and attitude inventory were undertaken as two separate substudies, the results of which were then integrated with the Gates-MacGinitie reading scores.

The project was facilitated by funds provided under the Unemployment Incentives Programme, through which a clerk was hired to code and verify the student I.D. numbers on answer sheets.

The results which are reported in the following sections give some insight into the way in which Toronto children function with respect to a few aspects of language. Participating schools are not identified. The variability of the scores even within specific occupational subgroups makes it not only unwise but absolutely incorrect to make any assumptions about any school or pair of schools. Thus, in keeping with the motion and with the design of the study, results "are not to be used in any way which would suggest comparison between the schools within the school system."

It may not, however, be inappropriate for people to make comparisons on a broader basis, i.e. between the Toronto school system and other systems.

STANDARDIZED READING TESTS - SOME COMMENTS AND OBSERVATIONS<sup>1</sup>

Standardized reading tests as they have existed over the last few decades share many common features, although they vary in specifics, ranging from ease of administration to appropriateness of content. (Many of the materials which have been available on the Canadian market are American tests unmodified to take into account any unique characteristics of the Canadian curricula.) These standardized tests frequently have consisted of two major sections, one labelled "vocabulary" and another labelled "comprehension." Some standardized tests labelled as "diagnostic" have several subtests which are to be used in an attempt to identify weaknesses in specific skills. There are also standardized types of reading tests which purport to test a pupil's readiness to read, ability to follow directions, etc.

Vocabulary is typically tested by giving the pupil a word followed by a list of several other words from which he is to pick a synonym or the "most similar" word. In a few cases, the pupil is asked to pick an antonym. It is worth noting that similar test items are frequently included as a part of the verbal section of group intelligence tests, and vocabulary items are often orally administered as part of individualized intelligence tests.

Vocabulary is then a cornerstone within much standardized testing. An important question is whether the vocabulary being tested is an appropriate sampling either of the vocabulary the student has to face or of the vocabulary the student has had an opportunity to learn.

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1 Many articles have been written detailing the problems of testing and measuring "reading." One such recent article is "The Dependent Variable: Measurement Issues in Reading Research" by Roger Farr & J. Jaap Tuinman, in Reading Research Quarterly, Spring, 1972, pp. 413-423.



Within comprehension tests there is much more variety in the type of material presented and, although considerations of content still play as important a role, there is also the matter of the ways in which comprehension is tested. On the Gates-MacGinitie Test, for instance, brief paragraphs of increasing difficulty are presented from which a couple of words have been omitted. The appropriate missing word must be selected from a list provided below the paragraph. This in essence is a form of vocabulary testing where the vocabulary is presented in context rather than as an isolated definition. The ability of a person to fill in a missing blank in running text, the "cloze" procedure, is believed to be a very good indication of the degree to which the reader has comprehended the surrounding text. Many other comprehension tests present a brief passage of material and ask questions about it. The types of questions vary from those which require rereading to search out a specific detail, to those in which inferences must be made about a brief piece of poetry.

Although tests vary greatly in length and amount of time taken, few, if any, require more than an hour. Typically, neither the vocabulary nor the comprehension tests are speeded and an attempt is made to give the student ample time to complete as many questions as he is able.

In order to provide for a wide variety of students, a typical test has a wide range of difficulty levels with several items which even the poorest reader in the class is able to do and a few items which are very difficult for even the best readers in the classroom. Also it does not have a large number of questions because even when using multiple-choice format, there is a lot of reading to be done and a lot of time must be provided if the students are to be allowed to work at their own



pace and not under speeded conditions. Given the wide variety of content presented, it frequently takes the reader a moment or two to "change gears"

in order to cope with the new passage or the new item that is being presented.

Probably the major quarrel which we all have with this aspect of reading tests is the limited sample of material which can be presented at one sitting: a small sample is a very restricted basis on which to judge a person's overall reading competency. Furthermore, the testing situation is far removed from either sitting in an easy chair reading an interesting book or following the directions that come with a new piece of equipment. The other concern has to do with content. As mentioned, the content of a given reading test is usually independent of the particular reading and vocabulary experiences that various individual children have been exposed to, either within the classroom or within the culture.

It is in reporting the scores which the students have received on reading tests that the problems really begin to mount, and it is in this area where we may see some improvement and breakthrough in testing, as time goes by.

A classroom teacher, when she prepares a little test, usually wants to see whether or not the students have mastered the material which she has presented. In many instances, the teacher is delighted when all the students in the classroom get all the questions correct, because she or he feels that the material has been well presented and the students have been successful in mastering it to the level expected. This, in an over-simplified fashion, can be referred to as "criterion-referenced measurement." Obviously, attempts to build criterion-referenced tests on a marketable scale have been fraught with many difficulties due to the large number of criteria and specific skills that teachers would like to test and assess as they move through various curricula at various

\*grade levels in various parts of the country. After all, the test manufacturer is aiming at a national or international market and cannot afford to prepare materials for marketing to a few schools or classrooms. At present, standardized tests are very general, designed for use in a wide variety of settings. Their norms provide for comparisons among students but results are not directly related to specific programmes.

At present, most tests are accompanied by a manual which contains a table of norms providing for "normative measurement." These norms have been prepared on the basis of a sample of students. Thus, a very small percentage of Grade 3, Grade 4, etc. pupils were sampled across the United States by Professors Gates and MacGinitie. The norms are essentially a report of the way in which this national sample performed. What the tables provide is a reference group so that a teacher can see roughly how his or her students compare to American students at large. In the case of the Canadian Tests of Basic Skills, it is a comparison with Canadian students, but again, the comparison is with a sample of students from the whole country. As is to be expected, because of the tests' design, some students had many test questions correct, some students only a few questions correct, and many students fell between. The norms describe this variation, because the tests are built to "spread out" the students.

The grade norm is a way of describing the middle student. When a raw score (e.g., 18) is obtained on the test, it is looked up in the table, and a grade norm of 3.5 (Grade 3, 5th month) is discovered, this means that half the students in the 5th month of Grade 3 got fewer questions than 18 correct and half got more than 18 questions correct.

Eighteen was then the score of the middle student among all the students in Grade 3 at the 5th month. Because of the relatively small number of questions and their wide range of difficulty, a difference of a few questions right or wrong will make a difference of one or even two grade levels.

There are many factors which affect students' scores. Most of these factors -- fatigue, distractions, illness, attitude towards tests and testing, etc. -- function to depress a student's score. Test-taking skill is another important variable. Students who are familiar with the format of standardized tests and who have had practice in test situations are better able to obtain a higher score. On the other hand, students for whom tests have regularly signalled failure cannot be expected to work well when presented with yet another test. Various situations and students are present in the standardization situation. Thus, while a standardized test may give one a good sense of a group's pattern of performance, a single score is a crude and not necessarily reliable indicator of a single pupil's performance.

In brief, a child who cannot read will not do well on a standardized reading test and many children who can read well under natural conditions may not display their full potential. Few factors can inflate the scores except such things as teaching the specific vocabulary on the test, or incorrect administration. Having a good day or teaching pupils how to take tests gives the individual a chance to put his best foot forward.

### READING TEST RESULTS

As noted previously, the reading scores, as they were obtained, are not precisely representative of the City. In order to obtain representative scores and also to examine the relationship between reading scores and background factors, the data from the Every Student Survey were used. These data which include information on parents' occupations and students' language backgrounds, make it possible to adjust the data for bias resulting from the way test scores were collected. The use of these data limits the results to those students who were in the Toronto system in May, 1970. This exclusion of recent arrivals in the school system probably raises the averages because some of the arrivals were non-English speaking. Approximately 15 percent of the students who took the reading tests in Grades 4, 6 and 8 were new to the system and thus not included. In Grade 9, about one-third of the students tested had not been included in the Every Student Survey; some, of course, had been in separate schools. It can be argued that excluding these students makes the data more accurately reflect the performance of the Toronto school system.

Following the categories used in the Every Student Survey, the data are presented several ways. For each grade the data are first presented in terms of whether or not the student was born in Canada and whether or not English was his mother tongue. Secondly, the data are presented in terms of the occupation of the head of household. These data must be viewed very cautiously when examining some of the small groups.

Language Background and Reading Scores

Tables 1 to 4 present the data for students in terms of whether or not they were born in Canada and whether or not English was their mother tongue. The patterns for Grades 4, 6 and 8 are similar, with students who learned English as a mother tongue but not born in Canada, obtaining higher scores than English-speaking students who were born in Canada. Both groups perform close to the average American student at that grade.

The students who learned English as a second or additional language do less well in Grades 4, 6 and 8 but those who were born in Canada have caught up by Grade 9. The student not born in Canada speaking English as a second language continues, not surprisingly, to obtain lower reading test scores than all other students.

It is important to notice the standard deviation for these groups. For example, in Grade 6 the standard deviation varies from 1 1/2 to 2 1/2 grade levels among the various groups. In other words, the students' scores are widely dispersed. A standard deviation of 2 1/2 means that 1/6 of the students had scores 1 1/2 grade levels or more above the average and 1/6 of the students had scores 2 1/2 grade levels or more below the average. Thus, while the average scores show a pattern, the individual students within the groups vary greatly.

TABLE 1

GATES-MACGINNIE READING SCORES EXPRESSED  
AS GRADE LEVELS FOR GRADE 4\* CATEGORIZED  
BY WHETHER OR NOT ENGLISH WAS THEIR  
MOTHER TONGUE AND WHETHER OR NOT  
THEY WERE BORN IN CANADA

Student Background	N	Vocabulary		Comprehension <sup>o</sup>	
		Average	s.d.	Average	s.d.
Born in Canada					
English	1640	3.96	1.50	3.88	1.63
Non-English	851	3.67	1.22	3.56	1.29
Not Born in Canada					
English	140	4.25	1.58	4.01	1.70
Non-English	458	3.30	1.19	<del>3.20</del>	1.24

\* Tested in Fall 1971

TABLE 2

GATES-MACGINNIE READING SCORES EXPRESSED  
AS GRADE LEVELS FOR GRADE 6\* CATEGORIZED  
BY WHETHER OR NOT ENGLISH WAS THEIR  
MOTHER TONGUE AND WHETHER OR NOT  
THEY WERE BORN IN CANADA

Student Background	N	Vocabulary		Comprehension	
		Average	s.d.	Average	s.d.
Born in Canada					
English	1650	6.30	2.11	6.24	2.45
Non-English	891	5.74	1.86	5.62	2.16
Not Born in Canada					
English	142	6.51	2.28	6.41	2.50
Non-English	519	4.77	1.54	<del>4.71</del>	1.90

\* Tested in Fall 1971

TABLE 3

GATES-MACGINITIE READING SCORES EXPRESSED  
AS GRADE LEVELS FOR GRADE 8\* CATEGORIZED  
BY WHETHER OR NOT ENGLISH WAS THEIR  
MOTHER TONGUE AND WHETHER OR NOT  
THEY WERE BORN IN CANADA

Student Background	N	Vocabulary		Comprehension	
		Average	s.d.	Average	s.d.
Born in Canada					
English	1684	8.08	2.47	9.75	2.71
Non-English	832	7.67	2.29	7.40	2.57
Not Born in Canada					
English	166	8.19	2.63	7.92	2.89
Non-English	692	6.68	2.24	6.46	2.54

\* Tested in Fall 1971

TABLE 4

GATES-MACGINITIE READING SCORES EXPRESSED  
AS GRADE LEVELS FOR GRADE 9\* CATEGORIZED  
BY WHETHER OR NOT ENGLISH WAS THEIR  
MOTHER TONGUE AND WHETHER OR NOT  
THEY WERE BORN IN CANADA

Student Background	N	Vocabulary		Comprehension	
		Average	s.d.	Average	s.d.
Born in Canada					
English	2230	9.78	2.56	9.66	2.67
Non-English	864	9.80	2.34	9.78	2.45
Not Born in Canada					
English	180	9.77	2.66	9.33	2.82
Non-English	890	8.10	2.51	8.16	2.78

\* Tested early in February 1972.



Parents' Occupations and Reading Scores

Tables 5 to 8 present the reading scores grade by grade with the students subdivided according to the occupations of the head of household. For the occupational categories 2 to 9, the average reading scores are remarkably regular, with scores increasing as the occupational categories rise. The occupational category "unemployed" (category 13) has scores that are constantly lower than the lowest occupational category. The scores for the category "housewife" (category 4) are generally close to the occupational category which includes labourers sometimes being higher, sometimes lower. The other groups (i.e. categories 10, 11 and 12) have very small numbers of students, and no conclusions should be drawn about them. Although there is a considerable change in average scores as one moves from the lowest occupational category to the highest occupational category, the large variability of scores within each group makes it impossible to generalize to individuals. As in the previous set of tables, the standard deviation is large, and about 1/6 of the students will be found more than one standard deviation above the average and about 1/6 will be found more than one standard deviation below the average.

City-Wide Weighted Average

To get an indication of the average scores for the City, the scores already presented for grades were weighted in terms of language and occupational background. For example, if 15 per cent of the students learned English as a second language and were not born in Canada, the average reading score of this group contributed 15 per cent to the City-wide average. The proportions used for weighting were obtained from the Every Student Survey (Wright, 1976).

TABLE 5

GATES-MACGINITIE READING SCORES, EXPRESSED  
AS GRADE LEVELS, FOR GRADE 4\*, CATEGORIZED  
BY OCCUPATION OF HEAD OF HOUSEHOLD

Occupation	N	Vocabulary		Comprehension	
		Average	s.d.	Average	s.d.
1 - no information	42	3.74	1.33	3.69	1.46
2 - labourers, taxi drivers, etc.	1428	3.41	1.25	3.29	1.32
3 - sheetmetal workers, mechanics, etc.	223	3.65	1.27	3.46	1.35
4 - sales clerks, machinists, etc.	143	3.83	1.32	3.73	1.32
5 - printing workers, electricians, etc.	303	3.92	1.42	3.79	1.39
6 - dental technicians, embalmers, etc.	154	4.10	1.27	3.89	1.46
7 - musicians, athletes, etc.	133	4.34	1.36	4.28	1.69
8 - clergymen, librarians, etc.	144	4.50	1.27	4.66	1.46
9 - accountants, engineers, lawyers, etc.	308	5.13	1.37	5.13	1.53
10 - retired, Workman's Compensation	(3)**	5.20	1.51	4.80	1.84
11 - Welfare, Mother's Allowance	(10)**	3.13	.98	3.10	1.54
12 - university student, adult retraining	(19)**	4.30	1.58	4.38	1.47
13 - unemployed	81	3.23	1.29	3.00	1.10
14 - housewife	110	3.33	1.22	3.31	1.48

\* Tested in Fall 1971.

\*\* Because of the very small N's no generalizations should be made about these groups.

TABLE 6

GATES MACGINITIE READING SCORES, EXPRESSED  
AS GRADE LEVELS, FOR GRADE 6\*, CATEGORIZED  
BY OCCUPATION OF HEAD OF HOUSEHOLD

Occupation	N	Vocabulary		Comprehension	
		Average	s.d.	Average	s.d.
1 - no information	60	5.48	2.32	4.98	2.07
2 - labourers, taxi drivers, etc.	1411	5.31	1.76	5.12	1.93
3 - sheetmetal workers, mechanics, etc.	211	5.59	1.72	5.42	2.10
4 - sales clerks, machinists, etc.	154	6.38	2.01	6.09	2.16
5 - printing workers, electricians, etc.	304	6.22	1.90	6.29	2.32
6 - dental technicians, embalmers, etc.	195	6.30	2.06	6.29	2.43
7 - musicians, athletes, etc.	154	6.59	1.95	6.65	2.33
8 - clergymen, librarians, etc.	161	7.25	2.27	7.28	2.53
9 - accountants, engineers, lawyers, etc.	315	7.62	2.06	7.97	2.59
10 - retired, Workman's, Compensation	⑩**	5.54	1.60	4.63	1.16
11 - Welfare, Mother's Allowance	⑩**	4.63	1.60	4.32	2.05
12 - university student, adult retraining	⑫**	5.66	1.59	5.92	2.24
13 - unemployed	97	4.95	1.58	4.87	1.91
14 - housewife	113	5.35	1.85	5.36	2.25

\* Tested in Fall 1971

\*\* Because of the very small N's no generalizations should be made about these groups.

TABLE 7

GATES-MACGINITTE READING SCORES, EXPRESSED  
AS GRADE LEVELS, FOR GRADE 8\*, CATEGORIZED  
BY OCCUPATION OF HEAD OF HOUSEHOLD

Occupation	N	Vocabulary		Comprehension	
		Average	s.d.	Average	s.d.
1 - no information	62	7.76	2.53	7.13	2.80
2 - labourers, taxi drivers, etc.	1581	7.18	2.22	6.89	2.52
3 - sheetmetal workers, mechanics, etc.	277	7.38	2.22	7.18	2.42
4 - sales clerks, machinists, etc.	169	7.62	2.25	7.26	2.54
5 - printing workers, electricians, etc.	345	8.09	2.59	7.83	2.79
6 - dental technicians, embalmers, etc.	208	8.14	2.30	7.94	2.45
7 - musicians, athletes, etc.	139	8.68	2.44	8.27	2.66
8 - clergymen, librarians, etc.	139	9.30	2.47	9.12	2.64
9 - accountants, engineers, lawyers, etc.	222	9.83	2.47	9.65	2.68
10 - retired, Workman's Compensation	(11)**	8.60	2.18	8.24	2.40
11 - Welfare, Mother's Allowance	(6)**	7.30	1.09	6.57	1.81
12 - university student, adult retraining	(14)**	8.36	2.50	7.78	2.72
13 - unemployed	76	6.51	2.00	6.18	2.37
14 - housewife	127	7.13	2.37	6.61	2.63

\* Tested in Fall 1971

\*\* Because of the very small N's no generalizations should be made  
about these groups.

TABLE 8

GATES-MACGINITIE READING SCORES, EXPRESSED AS GRADE LEVELS, FOR GRADE 9\*, CATEGORIZED BY OCCUPATION OF HEAD OF HOUSEHOLD

Occupation	N	Vocabulary		Comprehension	
		Average	s.d.	Average	s.d.
1 - no information	113	8.56	2.52	8.61	2.77
2 - labourers, taxi drivers, etc.	1698	8.71	2.52	8.70	2.71
3 - sheetmetal workers, mechanics, etc.	326	9.01	2.58	9.09	2.72
4 - sales clerks, machinists, etc.	212	9.63	2.38	9.65	2.43
5 - printing workers, electricians, etc.	423	9.82	2.39	9.67	2.60
6 - dental technicians, embalmers, etc.	292	10.17	2.39	9.94	2.55
7 - musicians, athletes, etc.	203	10.25	2.41	10.01	2.42
8 - clergymen, librarians, etc.	194	11.29	1.87	10.99	2.04
9 - accountants, engineers, lawyers, etc.	339	11.57	1.82	11.32	2.08
10 - retired, Workman's Compensation	(22)**	9.53	2.39	8.77	2.68
11 - Welfare, Mother's Allowance	(11)**	9.82	2.95	9.90	3.04
12 - university student, adult retraining,	(25)**	8.65	3.13	8.49	3.35
13 - unemployed	109	8.49	2.58	8.20	2.44
14 - housewife	198	8.85	2.57	9.08	2.82

\* Tested early in February 1972.

\*\* Because of the very small N's no generalizations should be made about these groups.

The weighting was done twice, once based on language and country of birth, and once based on occupation of the head of household. As will be seen, these two independent weightings gave very similar results (see Table 9).

As has already been noted, the norms are American. In comparison to these norms, one sees that the students in Toronto are, on the average, better in vocabulary than in comprehension. One can also see Grade 9 as the "strongest" year and Grade 8 as the "weakest" year. One can argue that the results are depressed by recent non-English speaking arrivals -- but the use of the Every Student Survey data did limit it to those who were already in the system in May, 1970.

#### Relative Importance of Background Factors

Following completion of the descriptive data dealing with the background factors (see Tables 1 to 8), further statistical analyses were undertaken to see the degree to which these background factors influenced the students' scores. Table 10 reports the results of these analyses. In summary, this table shows that language background "explains" between 3 and 7 1/2 per cent of the reading scores; head of household's occupation "explains" about 10 to 16 1/2 per cent of the reading scores. Taken together, both factors "explain" up to 19 per cent and as little as 12 per cent of the scores. Thus, although the averages for each group may be clearly distinguished, the student's background cannot be viewed as the decisive factor in performance. Considered another way, these two background factors (language and occupation) can be said to be responsible for between one-eighth and one-sixth of the variations in reading scores in the City, occupation being twice as important as language. Caution must be exercised in using these percentages since they refer to the variations of scores among the students and do NOT refer to a percentage of an individual's score.

TABLE 9

GATES-MACGINITIE READING SCORES WEIGHTED  
 BY SUBGROUPS TO PROVIDE ESTIMATE OF  
 CITY-WIDE AVERAGE FOR 1971-1972

Grade (Time of Testing)	Weighted By Language Background		Weighted By Parents' Occupation	
	Vocabulary	Comprehension	Vocabulary	Comprehension
Grade 4 (Fall)	3.79	3.69	3.78	3.68
Grade 6 (Fall)	5.91	5.83	5.85	5.76
Grade 8 (Fall)	7.74	7.45	7.74	7.45
Grade 9 (Mid Year)	9.48	9.40	9.39	9.32

TABLE 10

AMOUNT OF VARIANCE IN READING SCORES ACCOUNTED  
FOR BY BACKGROUND VARIABLES EXPRESSED AS A PERCENTAGE

Group and Test	Background Variables			
	Language* (4 categories)	Occupation** (14 categories)	Language and Occupation Combined	Blishen's Full Occupational Scale (r)
Grade 4				
Vocabulary	2.9%	15.4%	17.2%	11.6% (.341)
Comprehension	2.7%	16.0%	17.8%	14.6% (.382)
Grade 6				
Vocabulary	7.7%	15.3%	19.3%	13.8% (.372)
Comprehension	5.9%	16.6%	19.1%	14.8% (.384)
Grade 8				
Vocabulary	5.3%	10.4%	13.4%	10.4% (.323)
Comprehension	3.7%	9.6%	12.0%	9.8% (.312)
Grade 9				
Vocabulary	7.4%	13.5%	18.1%	15.3% (.391)
Comprehension	5.6%	10.1%	13.7%	9.6% (.310)

NOTE: Columns 1 - 3 based on linear regression, expressing categories as dummy variables. Column 4 is based on a correlation of actual Blishen numbers (limited to students within our categories 2 - 9) and reading scores.

\* See Tables 1 - 4 for categories and averages

\*\* See Tables 5 - 8 for categories and averages



COMPARISON OF RESULTS FROM THE CANADIAN TESTS OF BASIC SKILLS  
AND THE  
GATES-MACGINITIE READING TEST

All schools where the Gates-MacGinitie Test had been administered were asked if they would be willing to volunteer one or more classes for later administration of the Canadian Tests of Basic Skills, Reading and Vocabulary sections only. A large number of schools agreed to participate and their co-operation is gratefully acknowledged. In some cases a single class and in some cases only one grade level from the school participated.

Although this was not a fully representative group, there were a large number of students, over 800 at each grade level, representing a wide range of ability. These are two important factors in a comparison of two tests. The average scores for each grade, however, are not representative.

Three types of information are presented to provide comparisons: firstly, correlation coefficients; secondly, average scores; thirdly, standard deviations. Correlation coefficients essentially provide information about the similarity of ordering of students. The higher the correlation coefficient, the more likely a student who achieved a high score on the one test is likely to have achieved a high score on the other test. When there is a substantial correlation, one assumes that the two tests are measuring essentially the same quality or characteristic.

The data in Tables 11 and 12 present the correlations for Grades 4, 6 and 8. There is some variation from grade level to grade level. One can see that the two subtests of the Gates-MacGinitie correlate very highly with each other in Grades 4 and 6, and are still correlating

substantially with each other in Grade 8. In other words, the Vocabulary and Comprehension subtests are essentially measuring very similar performances. One also sees an equally high correlation between the Vocabulary and Reading subtests of the Canadian Tests of Basic Skills, so that students who score high on one of these subtests can generally be predicted to score high on the other one of the subtests.

In comparing the two tests, the Vocabulary subtests of the Gates-MacGinitie and the Canadian Tests of Basic Skills correlate highly with the Grade 4 level being the one level at which they correlate least. So too the Comprehension and Reading subtests also have high correlations. On these grounds, one could say that one test would be very similar to the other test in terms of arranging the students; that is to say, students who did well on the Canadian Tests of Basic Skills for the most part will do well on the Gates-MacGinitie Test, and those who did well on the Vocabulary subtest will do well on the other subtest, and vice versa.

In examining the means and standard deviations (see Table 13), one can note, however, that there is a difference between the two tests in the students' levels of performance. The Gates-MacGinitie was administered either very late in the month of September or during the month of October, and the Canadian Tests of Basic Skills was administered in March, 1972, at least five months later. One will note, however, that the Canadian Tests of Basic Skills scores are little, if any, higher, and usually lower, than the Gates-MacGinitie Test scores. Because of the content of the test, and because of the fact that it was standardized with a different population, students achieve lower scores on the Canadian Tests of Basic Skills than they do on the Gates-MacGinitie Test. Furthermore, in Grade 8 and in Grade 6, the standard deviation is much smaller for the Canadian Tests of Basic Skills, indicating that it is not spread-

ing the students out over as wide a range as the Gates-MacGinitie Test is. In Grade 4, the variation is somewhat more similar, although once again the Canadian Tests of Basic Skills shows less variability among the students.

Putting these pieces of evidence together we can say that the Canadian Tests of Basic Skills is a more difficult test for the students. If it were to be used, especially in the fall, it is suggested that the level for the preceding grade be used in order to provide students with a less frustrating experience. People who are accustomed to using American norms will probably be somewhat distressed to see the apparent decrease in the performance of their students if they changed to the Canadian Tests of Basic Skills which is standardized on the Canadian population. It is anticipated that students will score on the average anywhere from four to six months lower on the Canadian Tests of Basic Skills than on the Gates-MacGinitie. The data in Table 13 demonstrate this. One must remember once again that actually these two tests were administered five months apart so that one should really subtract that many months from the Canadian Tests of Basic Skills' results to get a fair comparison.

The Canadian Tests of Basic Skills, being a multi-level test, is easily adaptable in terms of the test booklet for use at one grade higher or lower, depending on the capabilities of the student.

The reader should not consider the average scores reported for the substudy to be representative of the particular grade levels. Not all schools volunteered to participate in this study, and in some schools which did participate only one or two classes were selected for retesting. These were classes about which teachers wished additional information; they were not representative of the school and certainly cannot be considered representative of the City.

TABLE 11

CORRELATIONS BETWEEN GATES-MACGINITIE READING TESTS AND CANADIAN TESTS OF BASIC SKILLS

Gates-MacGinitie Reading Subtests	C. T. B. S.	
	Vocabulary	Reading
Grade 8 (N = 821)		
Vocabulary	.76	.68
Comprehension	.72	.72
Grade 6 (N = 988)		
Vocabulary	.81	.75
Comprehension	.78	.76
Grade 4 (N = 926)		
Vocabulary	.67	.63
Comprehension	.74	.75

TABLE 12

INTERCORRELATIONS BETWEEN TWO GATES-MACGINITIE SUBTESTS AND TWO CANADIAN TESTS OF BASIC SKILLS SUBTESTS

Grade (N)	Gates-MacGinitie	C. T. B. S.
	Vocabulary and Comprehension	Vocabulary and Reading
8 (821)	.69	.80
6 (988)	.81	.82
4 (926)	.81	.80

TABLE 13  
COMPARISON OF GATES-MACGINITIE READING TESTS  
AND CANADIAN TESTS OF BASIC SKILLS

	Vocabulary		Comprehension and Reading	
	Gates-MacGinitie	C. T. B. S.	Gates-MacGinitie	C. T. B. S.
Grade 8 Average	7.20	7.16	6.95	7.30
s.d.	2.36	1.47	2.57	1.51
(N = 921)				
Grade 6 Average	6.44	6.03	6.48	5.88
s.d.	2.14	1.52	2.58	1.23
(N = 988)				
Grade 4 Average	3.84	3.82	3.80	3.97
s.d.	1.46	1.36	1.56	1.19
(N = 926)				

NOTE: Gates-MacGinitie Reading Tests administered in Fall 1971  
Canadian Tests of Basic Skills administered in March 1972

## THE FUNCTION OF READING

### Reading Habits

In order to know how well students in Toronto schools read more than reading test scores are required. It is also necessary to know how much students read, what types of reading they do, and whether or not reading is used as a tool to get other things done.

Accordingly, a questionnaire was designed to provide this information and supplement the data from the reading tests. The questionnaire was also used as an opportunity to find out about the reading environment of the home.

This questionnaire is not a test in the usual sense of the word. There are no norms or standards to which the data can be compared. The data are only descriptive; they will tell, for example, how many students engage in a variety of reading activities, but they will not tell whether these students are more or less active readers than students from other school systems. The other information will also be descriptive.

This part of the study was carried out at only one grade level. Grade 6 was chosen because the students have achieved a level of reading skill at which they could reasonably be expected to use reading in their everyday lives. Of the sixth grade classes from whom reading scores had been collected, 20 per cent were randomly selected for inclusion in the sample. A total of 27 classes were selected, and 760 questionnaires were completed. This represents about 11 per cent of the sixth graders in Toronto schools.

Eight "yes" and "no" questions were asked about the student's own reading habits. Table 14 lists the questions and indicates the per-

centage of students who answered "yes", indicating that they did engage in the mentioned activity.

TABLE 14  
PERCENTAGE OF SIXTH GRADE STUDENTS  
ENGAGING IN VARIOUS READING ACTIVITIES

Question	"Yes"
1. Did you read any comic books in the past week?	45%
2. Did you read any stories or books on your own in the past week?	84%
3. Did you read any magazines on your own in the past week?	57%
4. Did you read the newspaper anytime in the past week?	79%
5. Do you ever read books for fun?	87%
6. Do you ever read instructions to find out how to make something?	94%
7. Do you ever read a set of rules to find out how to play a game?	92%
8. Do you ever read books to a younger child?	72%

The results indicate that sixth graders read quite a bit, enjoy reading, and can read to get things done. 87 per cent of the students said that they read books for fun, and 84 per cent said they had done some reading in books on their own in the past week. 79 per cent had read the newspaper during the past week, 57 per cent had read magazines, and 45 per cent had read comic books. 94 per cent of the students read and follow instructions, and 72 per cent report that they sometimes read to younger children.

The parents' level of reading activity, at least as reported by the students, is lower than the level of activity reported for the students themselves; however, it seems that parents too are active readers (see Table 15). 69 per cent of the parents read books for fun as opposed to 87 per cent of the children. There is somewhat more magazine and newspaper reading than book reading among parents, 71 per cent and 96 per cent, while the reverse is true for the children, who reported more reading of books than magazines or newspapers.

TABLE 15  
PERCENTAGE OF SIXTH GRADE STUDENTS REPORTING  
THAT THEIR PARENTS ENGAGE IN VARIOUS READING ACTIVITIES

Question	"Yes"
9. Does your mother or father ever read books for fun?	69%
10. Does your mother or father ever read magazines for fun?	71%
11. Does your mother or father like to read the newspaper?	96%
12. Does your mother or father ever read with you?	49%
13. Did your parents every give you a book for a present?	72%
14. Does your mother or father ever use a shopping list when they go to the store?	58%
15. Does your father have to read for his work?	58%
16. Does your father ever read instructions to find out how to make something or put something together?	80%
17. Does your mother ever use a recipe book when she cooks?	66%



The functional use of reading is also lower for the parents than for the children. Only 58 per cent of the parents use shopping lists; only 58 per cent of the fathers read in relation to their job, and only 66 per cent of the mothers cook from written recipes. However, fathers often do read instructions in order to make something or put something together, 80 per cent.

These figures on the functional use of reading are meaningful regardless of whether or not they are accurate. They indicate that children view reading as more of a child activity than an adult activity. Each child has to read in school, but not every adult uses reading in important ways. It would seem important, if children are to become able and active readers, that they view reading as having functional value beyond the classroom. That this is true, will be seen later.

Many parents further encourage the reading of their children by giving books as presents, 72 per cent; about half of the parents sometimes read with their children.

The absolute value of these figures is not too meaningful. Students were not asked how often they or their parents engaged in various reading activities, but simply whether or not they ever did. Also, there is a strong bias in the questionnaire to answer "Yes." "Yes" is obviously an answer that is socially desirable. There was great variety in the percentage of "Yes" answers, ranging from 49 per cent to 96 per cent, indicating that the children did not automatically answer "Yes" to every question. Nonetheless, there was probably some unconscious bias in the questionnaire due to the phrasing of the questions.

Because of these problems, the greatest value in the data lies in comparing answers to various questions rather than in looking at the level of "Yes" responses to individual questions.

It is interesting to note that children read more for profit than for fun, while the reverse is true for parents. Children read more books than magazines and newspapers, while again the reverse is true for parents.

#### Reading Ability and Reading Activity

Most of the sixth graders who answered the questionnaire had also taken the Gates-MacGinitie Reading Test. Information on the occupation of their parents was also available from data collected in previous years. Together with data from the questionnaire, it was possible to explore the relationships among reading ability, reading activity, and home background.

Each child received a score which was the number of reading activities in which he said he participated. The maximum possible score was 8; the average score was 6. Each child also received a score which was the number of reading activities in which he said his parents engaged. The maximum possible score here was 9, and the average score was 6.

It was discovered that children who read more were more able readers (see Figure 1). However, the relationships were small.

It was also discovered that parents who read more had children who read more; parents who read more also had children who were more able readers. Considering occupational status as a measure of achievement in our society, it was discovered that the achievement of the parents influenced the children. Parents with higher status occupations had children with greater reading ability, although their children did not necessarily read more.

There are thus two groups of children who read well: those whose parents have higher status jobs, and those whose parents read a lot. But it is only children whose parents are active readers who read a lot themselves.

Children who read a lot are likely to be better readers ( $r = .18$  for Vocabulary). However, using the technique of partial correlations, it appears that this relationship only holds if the parents are active readers. If the influence of parental activity is statistically removed, there is no remaining relationship between a child's reading activity and his reading ability (partial  $r = .04$ ).

The same is not true for the achievement of the parents. If the effect of occupational status is statistically removed, a significant relationship between a child's reading ability and his reading activity still remains ( $r = .16$ ).

Thus, we are faced with the importance of the parents' behaviour in molding the child, both in determining how well he will do things and how much he will do them. One is a question of skill and the other a question of values.

What is missing from the picture is data on how much the school can do apart from the parents. To what extent can the school make good readers out of all children whose parents are not high achievers? To what extent can the school make active readers out of all children whose parents are not active readers?

Data from other studies indicate that the home is more important than the school (Coleman, 1966; Reich, 1972). The educational system is becoming increasingly aware of the need to engage parental support for the school programme. The use of school/community interaction, as provided for by the Donner Foundation at Park Street School, is a step in this direction.

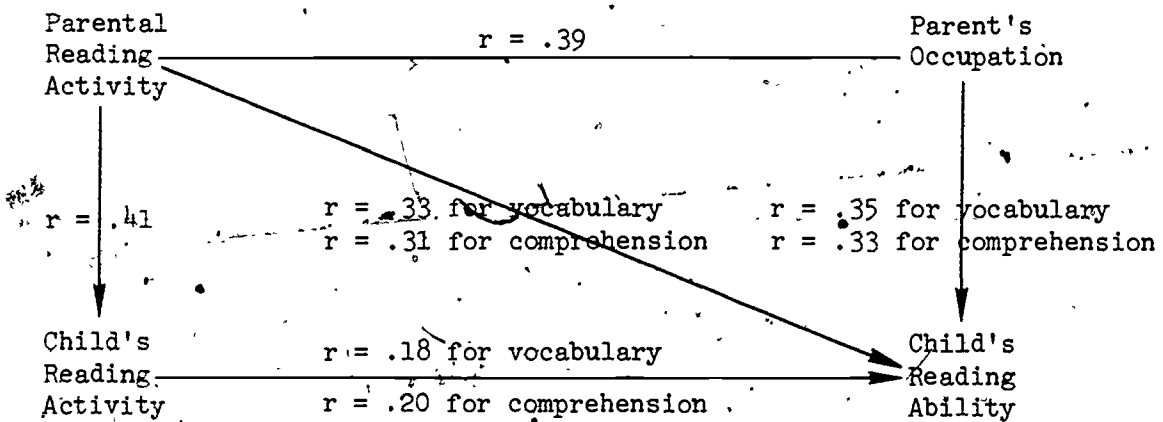


Fig. 1. The relationship between children's reading and their home environment (N = 588). A line between two variables indicates that there is a relationship between those variables significant at the .05 level or beyond. An arrowhead on a line indicates the presumed direction of causation.

Type of Preferred Reading

We were also interested in the type of reading that students prefer. The students answering the questionnaire were given a list of nineteen themes and asked how well they liked each one. Table 16 lists the themes, and groups them according to how many children said that they liked them.

Mystery, adventure, and horror head the list. Detective stories and science fiction are also popular. The rest of the topics are liked by only about one-half or less than one-half of the children.

The number of themes that each child said he liked was counted. Once again the influence of the home is seen. Children from families with higher occupational status liked fewer of the themes that were named ( $r = -.19$ ). Children of greater reading ability also liked fewer of the themes ( $r = -.12$ ). The significance of this finding is not clear. But it may be that these children have progressed beyond the monothematic books implied by the form of the questionnaire to more mature, complex materials. In another study, it was found that better readers among tenth grade students and students from higher status families preferred more complex fiction (Reich, 1972).

TABLE 16

LIKED AND DISLIKED THEMES OF SIXTH GRADE CHILDREN

Topic Group	Topic	Percentage of Children Liking That Topic
Themes liked by 75% or more of the children	Mystery	89
	Adventure	85
	Horror	83
Themes liked by 50 - 74% of the children	Detective	73
	Science Fiction	67
	Science, Nature, Health	59
	Sports	57
	Famous People	56
	People and Events of the Past	56
	Love	53
	"How To" Books	52
Girls	51	
Themes liked by less than half of the children	Poetry	48
	Far Away Places	45
	Myths and Legends	44
	Boys	43
	Fairy Tales	41
	Cowboys	35
Cars	33	

## WRITING ABILITY

Another area of language use is writing. The proposal included a study of writing ability, although again such a study would be merely descriptive and would provide no basis of comparison with other students or other school systems. However, it was considered useful to have some indication of the students' work since writing is such an important part of the language programme.

Eighth grade was chosen as a level at which students should be able to produce fairly mature written text. A random sample of 10 per cent was drawn from class lists. For each student indicated, teachers were asked to "choose two compositions which you believe accurately represent his writing ability. Do not choose a student's best work, nor his worst, but that which is most representative." It was felt that "representative" was a more objective criterion than "best."

In any study of writing ability, an important issue is whether or not the essays should be produced in a standardized test setting. In such a setting, time, topic, and conditions are controlled. This is perhaps the choice when the intent is to compare one group with another. However, this technique does not indicate how well students can do in more natural relaxed settings, and introduces bias from fatigue, illness, boredom, and test pressure. An even more serious problem is topic restriction. Some people do well on one topic, others on another. Some excel on description, others on narrative. It was decided not to hamper the student's performance by imposing any artificial conditions. Teachers were told that we "do not want compositions that have been produced especially for this study. Compositions should be chosen from among the normal class assignments the student has completed."

The price paid for naturalness is ignorance of the circumstances under which the compositions were produced. Undoubtedly some compositions were written in a few minutes, and some were laboured over for many hours. Some are first drafts while others have gone through many revisions. Some students will have written few compositions during the year, others will have written many.

But, in a sense, we are not concerned in this study with failure to achieve that kind of standardization. What the study is designed to assess is the quality of writing produced in Toronto classrooms under the wide ranging situations and instructional programmes that exist.

There were a total of 752 students in the sample. Two writing samples were returned for 618 or 82 per cent of these. Eleven more were listed as transferees. Of the remainder, 67 students only had one composition sent in and there was no information on 56 others. This is a loss of 16 per cent. To what extent this represents transfer of students, loss of student compositions, or failure of the curriculum to require compositions of students is unknown.

A clue is provided by looking at the date the compositions were written. Most were undated, and no supplementary information had been requested in order to minimize the work load imposed on the teachers. However, it turned out that 176 compositions were dated. Of these, almost half were dated after the request for compositions had been sent out. This may only mean that later compositions were easier to collect, but it may also indicate that compositions were produced specifically for our study.

Of the 618 students for whom two samples were returned, 35 were eliminated because the samples were poetry and it was felt that it would



be difficult to handle such a different form of writing in this study. Provision would have been made for the poetry samples if there had been more of them. An additional 57 students were eliminated because they had not been in the school system in May of 1970 when the Every Student Survey data were collected or had not taken the Gates-MacGinitie Reading Test in the fall of 1971. The Every Student Survey data contain information on the social and ethnic background of students, information which was to be related to writing ability along with reading scores. This left 526 students in the sample.

Since each student was represented by two pieces of writing, there were 1,052 compositions to be marked. There are basically two approaches to composition marking. One, called the Analytic, involves grading a composition on a series of separate criteria, such as grammar, clarity of ideas, organization, originality, etc., and then combining these scores into one final grade. Usually extensive training of markers is required in order to clarify the criteria and insure agreement and uniform judgement.

The second approach is called the method of General Impression. In this method, written instructions to markers are very brief and there is little or no consultation. Markers quickly read a script and assign one mark which represents their impression of its overall worth.

In multiple impression marking, several examiners rate each composition, and its score is the total of the separate marks it received. J. N. Britton and his associates showed that using this method, there is a great deal of agreement in the composite score that two teams of markers will assign to a composition ( $r = .77$ ), greater agreement than can be achieved with Analytic Marking ( $r = .52$ ). Also, the composite



score on two compositions is in close agreement with a more broadly based assessment of writing ability using ten compositions of a student ( $r = .67$ ). Rapid impression marking has the additional advantage of being much faster than Analytic Marking. More information on this technique can be found in Multiple Marking of English Compositions, Examinations Bulletin No. 12, by J. N. Britton, N. C. Martin, and H. Rosen; London: Her Majesty's Stationary Office, 1966.

For this study the marking was done by three secondary school teachers. Secondary school teachers were chosen instead of primary school teachers merely because it was more convenient; specialization at the secondary level made it easy to identify teachers who had a great deal of experience with composition marking. The three women were not currently employed as teachers and were thus available for the study. All three had been recommended for their excellence by former principals.

The two compositions by a student were separated and scrambled by school. All identifying marks were removed except for student identification number and school number. The compositions were separated into twelve piles. Markers worked with one pile at a time, and the piles were rotated so that each marker eventually worked on every pile.

Markers were instructed to rate each composition on a scale of 1 to 10. They were asked to informally weight orthography about 20 per cent; 80 per cent of the mark was to be determined by content. However, it must be emphasized that this weighting was only an informal one for the markers to keep in mind as they worked.

The markers took the first pile home and marked it. Several days later they returned and discussed their work. The scores they had assigned were checked to insure that they were properly distributed over the scale, with all scores from 1 to 10 being used and the average score falling between 5 and 6.

The markers were remarkably able in maintaining a good distribution without explicitly attending to it. The average of all the scores that were assigned was 5.6.

It was important to know how well the three markers agreed among themselves on each composition. A measure of this agreement, based on all compositions, was .85; this is quite high<sup>2</sup>.

A procedure was also included to calculate how consistent each individual marker was. At the end of the study, each marker re-did the first pile she had marked and a measure of agreement was calculated. This is a very stringent test of consistency since it compares the first set of marks when the markers were new to the task, with the last set of marks when they were most experienced. The three markers produced correlation coefficients of .74, .77, and .76. This is quite high.

This procedure produced six marks for each student in the sample. Each student's overall score is the average of these six marks. The overall average for all students was 5.6. This means that a composition scored as "5" or "6" represents the average level of writing ability.

How well does the average eighth grade student in Toronto write? Although the markers responded in terms of general impression, by the end of the study they had developed a rather clear idea of what compositions marked at different levels looked like. The average eighth grade composition is a narrative which succeeds in telling a coherent story in a straightforward, matter-of-fact manner. The writers show that they have generally mastered the English language and can communicate simple ideas.

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2 The method used to compute inter-rater reliability is based on the analysis of variance, and is described in Statistical Principles in Experimental Design by B. J. Winer; Toronto: McGraw-Hill, 1962. Nevertheless, the first marking was discarded in favour of the final marking:

Vocabulary is adequate, although limited. Simple declarative sentences predominate, and the story line marches on, one event following the other in straightforward succession. There may be a few noteworthy features, such as an attempt at dialogue, a few especially well chosen words, some uniqueness of content or organization.

Many stories impressed our markers as being heavily influenced by T.V. fare. Physical danger and adventure was a common theme, and the writer was always the hero. Stories were usually short and the writers were able to maintain a theme for one paragraph; however, in longer stories they often had difficulty maintaining a theme.

In terms of mechanics, the most frequent errors were the comma splice and the run-on sentence. However, in general, orthography was good. Paragraphing was good, although there was some tendency to over-paragraph.

The typical eighth grader, then, is a rather ordinary writer of English prose. This is not to demean his accomplishment. He has mastered the language and can communicate simple ideas. It is questionable whether much more is generally required of adults in our society. The teacher who expects expository pieces, abstract discussions, or complex plots is likely to be making an unreasonable demand, taxing the students beyond their ability.

Sixty-nine per cent of the students in the sample wrote at this level or above. Examples of compositions scored as "5" or "6", as well as examples of compositions scored at the other levels, appear in the Appendix. In assessing the writing ability of the students, it is more important for the reader to study the compositions for himself than to read our comments about them.

Proceeding to the lower marks, the compositions generally degenerate in their presentation of a coherent story line. Compositions scored

as "4" manage to tell a story, but the organization is poor with many run-on sentences. Compositions scored as "3" begin to be difficult to follow. The organization is haphazard, with ideas presented, then dropped, only to appear again later. Ideas are not presented in any connected fashion, although the writer does stay on one topic. 30 per cent of the students had scores in this category. Only 1 per cent scored below this point at level "1" and "2". Such compositions are marked by a great deal in incoherence, almost to the point of being completely incomprehensible.

Proceeding upwards from the average student, compositions are marked by gradually increasing individuality, uniqueness, and personal involvement, in addition to the general mastery of English shown in the average composition. Compositions marked "7" and "8" have a unique or interesting story to tell which is told using a variety of syntactic structures and vocabulary. Only 12 per cent of the students fell into this group. Only 1 per cent fell into the highest group of compositions scored at "9" or "10". Compositions at this level were markedly more original, mature, and personal.

Table 17 gives a brief description of the categories and the percentage of students falling in each. Notice that more students fall below average than above average. Very few eighth graders were able to proceed beyond the straightforward telling of a commonplace story.

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#### Relationship of Writing Ability to Reading and Home Background

There was a definite relationship between reading ability and composition scores. The correlations between a student's overall composition score and the vocabulary section of the Gates-MacGinitie and the comprehension section of that same test were both .46. This is a modest relationship. Reading and writing are to some extent separate abilities, and one should not hastily generalize from one to the other.

TABLE 17  
COMPOSITION CATEGORIES

Categories	Description	Per Cent of Students
1 to 2	an incoherent or barely coherent narrative	.95
3 to 4	a complete story but poorly organized with faulty orthography	29.84
5 to 6	a coherent story, clearly organized but with limited vocabulary and unvaried syntax	56.08
7 to 8	a coherent story with some originality of expression or idea	12.16
9 to 10	a coherent story, highly original and mature, demonstrating personal involvement of the writer in the topic	.95

The relationship to socio-economic background is less than one might expect; the correlation coefficient of .22 is much lower than the correlation between socio-economic background and reading scores explored on page 19.

One might speculate why this is so. Socio-economic background has been shown again and again to be related to intelligence and school success, the ability to learn and understand ideas that are part of the culture. Good writing, however, at least as considered in this study, requires the ability to create something new, to be original. Good compositions also were characterized by the expression of personal feeling, and certainly that is not the province of any one group. Although it seems clear that certain groups of people are more adept at dealing

with Canadian culture, it is indefensible to argue that the humanity and depth of feeling of any one group is superior to another's.

Ethnic background of the students made no difference at all to their scores. The distribution of scores, as shown for the entire sample in Table 17, was broken down into four groups -- English speaking Canadian-born students, non-English speaking Canadian-born students, English speaking immigrants, and non-English speaking immigrants. There were no differences among the four groups.

SUMMARY

During the school year 1971-72, an extensive study of language skills was conducted across the City at the request of the Toronto Board's Fundamental Skills Committee. Scores on the Gates-MacGinitie Reading Test were analyzed for Grades 4, 6, 8 and 9. Students essentially scored at grade level with reference to the American norms of this test.

The vocabulary and reading subsections of the Canadian Tests of Basic Skills were also administered to groups of students in Grades 4, 6 and 8 in order to compare the two tests and the American and Canadian norms. The relative performance of students on this test was similar to performance on the Gates-MacGinitie; however, the scores were several months lower, and give evidence that the students found it a more difficult test. If the Canadian Tests of Basic Skills is administered in the first half of the school year, it would be wise to use a lower level of the test. Teachers should be prepared for results several months lower than those they are accustomed to with the Gates-MacGinitie.

Reading activities were the subject of a separate questionnaire administered to a sample of sixth graders. In general, the sixth graders report that they engage in many reading activities, as do their parents. However, the children and their parents read somewhat different types of things. Students read more books in their leisure time, while their parents more frequently read newspapers and magazines. The favourite themes of the children are mystery, adventure, and horror. The children see themselves as using reading in other activities more often than their parents use it.



Analysis of compositions collected from a sample of eighth graders shows that most of the students have mastered the English language to the point where they can write a coherent narrative of acceptable prose.

Parents' occupation was found to be related to all three measures of language ability, with higher occupational status being associated with higher scores. Language background had a modest relationship to reading scores, but no relationship to composition scores.

REFERENCES

Britton, J. N., Martin, N. C., & Rosen, H. Multiple marking of English compositions. Examinations Bulletin No. 12. London: Her Majesty's Stationery Office, 1966.

Coleman, J. S., et al. Equality of educational opportunity. Washington, D.C.: U.S. Department of Health, Education and Welfare, U.S. Government Printing Office, 1966.

Farr, R., & Tuinman, J. J. The dependent variable: measurement issues in reading research. Reading Research Quarterly, Spring, 1972, pp. 413-423.

Reich, C. A study of the effects of the developmental English programme on reading. Toronto: The Board of Education for the City of Toronto, Research Department, 1972 (#109).

Winer, B. J. Statistical principles in experimental design. Toronto: McGraw-Hill, 1962.

Wright, E. N. Students background and its relationship to class and programme in school (The every student survey). Toronto: The Board of Education for the City of Toronto, Research Department, 1970 (#91).

READING TESTS USED

Grade 4 -- Gates-MacGinitie Reading Tests, Primary C, Form 1  
Vocabulary and Comprehension Subtests \*  
-- Canadian Tests of Basic Skills, Form 1, Level B \*\*  
Vocabulary and Reading Subtests

Grade 6 -- Gates-MacGinitie Reading Tests, Survey D, Form 1  
Vocabulary and Comprehension Subtests  
-- Canadian Tests of Basic Skills, Form 1, Level D  
Vocabulary and Reading Subtests

Grade 8 -- Gates-MacGinitie Reading Tests, Survey E, Form 2  
Vocabulary and Comprehension Subtests  
-- Canadian Tests of Basic Skills, Form 1, Level E  
Vocabulary and Reading Subtests

Grade 9 -- Gates-MacGinitie Reading Tests, Survey E, Form 3M  
Vocabulary and Comprehension Subtests

\* Gates, A. I., & MacGinitie, W. H. Gates-MacGinitie Reading Tests. New York: Columbia University, Teachers College, 1964.

\*\* King, E. M., Lindquist, E. F., & Hieronymus, A. N. Canadian Tests of Basic Skills. Toronto: Thomas Nelson & Sons, 1970.

APPENDIX

Examples of Compositions Graded 1 or 2

Example 1

1 Descriptive Paragraph

A tall stern average sized man with only half a face shown the other with dark heavy hair had a gleam in his eyes. His eyes were very shifty looking at everyone. His mouth moving very fast giving out alot of different commands he is always saying that he is the top of the school. But I don't think he is. His clothes are not very wealthy but are kept very clean.

Example 2

Character Sketch

There is a friend of mine I just can't stand her because every minute she is the problem that I get with her is that she never get fat and she always take phye in the classroom and she never has her lunch the teacher never catch her eating. I sometimes ask her to come at my home and every minute she tells me that she's hungry so I get her and she opens the frigerator and she gets food for herself.

Examples of Compositions Graded 3 or 4

Example 1

Creative Writing

Sitting in the subway -  
listening to the music and  
screaming. Watching an old man  
sitting across from me. He's  
staring at me, I wonder what  
what he's thinking about,  
maybe he's thinking about me,  
wondering what I'm thinking.  
I've seen him before maybe  
on the street or somewhere.  
He probably just came from  
the liquor store because his  
nose is red and there's a  
lump inside his coat. ~~He~~ Like  
it's my stop. As the train went  
by I walked to him and  
he walked back, I ~~was~~ ~~can't~~  
can't see him any more.

c

## The Longest Day

Well it all started one week when I was away, our teacher gave everybody a sheet of paper that had a bunch of activities on it. They had to pick two of them. When I got back to school the next week I got called down to the science room.

When I got down Mr. asked me what activity I wanted. I asked if I could have typing and badminton. And he said they were full.

The only one left was needlework.

I took that one.

But when I got back everyone asked what I got, I told them and they said I had Mrs.

It was Monday and I was hoping Thursday would never come.

The week did go fast and Thursday finally came and I went down to the cafeteria.

And sat down and all Mrs. did was talk all afternoon and

that is what made my day the longest.

And after that was over with I had to go babysit for the rest of the day.

It was boring because there was nothing good on television.

I had to babysit from five thirty until nine thirty, and by the time I got home it was about 10:30 I got something that was on television, I just sat down and ready to watch it and it was over. So I just got ready for bed and went to sleep. And that was the longest day I had.



Examples of Compositions Graded 5 or 6

Example 1

Babysitting  
the  
Twins.

It was the day before my exams that Mrs Jones called my mother and asked her if I could babysit her twins. My mom told me when I arrived home. Barbie a friend from down the street, wanted to study with me that night. My mom didn't know about the tests and hinted to me that I better study so I can pass the test or I wouldn't be going anywhere that summer because I'll be going to summer school. She really meant that I shouldn't go babysitting that night. I told her that the twins would be in bed when I got there and I could study then. She agreed to let me go. I asked my girlfriend Barbie if she wanted to come along. She said no I think I will go home and study. I phoned Mrs Jones and told her that I was coming. She said okay I'll see you at eight. After I hung up I got my books together and headed for the Jones house. When I arrived there the twins were asleep at least that's what they looked like when Mrs. Jones and I looked in on them. After Mr. and Mrs Jones left one of the twins woke up and wanted a glass of water. When I went to give him his drink Bobby wasn't in his bed. When I asked Joey where his brother was he pretended that he didn't know. I went looking in the kitchen for him. He was sitting at the table eating a vanilla cake. The crumbs were



all over the floor. I cleaned up the mess including Bobby. Then I sent him to bed and when I got to the door Joey was missing. I called him but he did bother answering me. I saw the washroom light was on so I went to see who or what was there. It was what I was looking for but not the way I expected him to look. He had his fathers shaving lotion all over his face and hands and on the floor and sink. He looked as if he had tried to dress up as a foamy ghost. I put him to bed and made sure his brother wasn't out of bed. One of my assignments was to write a story about anything I wanted to and it seemed like I had my story so I sat down and started to write...

Example 2

## What a Game!

It was Sat., Dec. 19, the day of the one-on-one championship competition. It was decided the day before that Alex would play Billy.

Alex got the jump and put in a lay-up to make it 2-0. Billy tried to drive for the basket but it bounced off the rim. Alex put in a long shot as the crowd heard the swish.

Billy ~~got~~ got his first basket to make it 3-2. Alex put in three more baskets as the quarter ended with the score 14-2 for Alex.

The second quarter went fast for both teams as the score at the end of the second quarter was 23-5 for Alex.

---

Things started changing in the third quarter. Billy got hot on his long shots and made the score 31-29 for Alex.

The fourth quarter had 1:27 left to go and the score was 39-37 for Alex. Billy put in a lay-up. The time left was 1:08. Alex's shot bounced off the rim and Billy got the rebound. He tried to waste time but Alex fouled him with :18 to go. Billy made the shot. Alex dribbled in and took a shot and missed.

Billy had won 40-39.

Examples of Compositions Graded 7 or 8

Example 1

The Second Period  
Intermission

Here he sat, the coach of the hockey team, a whistle dangling from his neck and a clipboard in his hand. His bald head leaned forward as he instructed the team about their faults. The forwards were there breathing heavily from exhaustion but listening intently to his words.

In one corner, slumped over a long bench, sat the new goalie. With nervousness he shook like a leaf. He had a look of grim determination written all over his face.

Beside him sat his defence. Silvery beads of <sup>perspiration</sup> sweat danced on their foreheads as they discussed their strategy for the third period. Then the subs came into the avid discussion giving their opinions and solutions from the benchers standpoint. Finishing, they all stood up just as the shrill whistle blew and the third period was under way.

Example 2

# Friendly Family Argument

We now break in on a happy household where father and son are arguing about who to vote for.

"But dad, don't you see that if the Spadina Expressway goes through it will mean more traffic and pollution?"

"Okay, okay I see your point, that it will bring traffic into the city, but it will also take traffic out of the city. If the expressway doesn't go through, people will be involved in bumper to bumper traffic every morning and evening."

"That doesn't matter. People have been going through this for years. The thing that does matter is beautiful old houses and trees will be destroyed."

"That's progress."

"Huh?"

"Progress. Haven't you ever heard of progress? If we hadn't started the Spadina Expressway, people who work but don't live in the city, would have to travel many more miles to get to work."

"I know but if the Expressway hadn't been started this issue would never have come up."

In any event, they can both vote for whoever they think is right.

Examples of Compositions Graded 9 or 10

Example 1

A Short Career

A few years ago my mother took me to see a ballet at the O'Keefe Centre. I promptly fell in love with the fluttering creatures who seemed to glide across the stage on their delicate toes so, my first exposure to ballet inevitably ended with me asking my mother for dancing lessons she agreed, rather reluctantly I'll admit, but soon afterwards I found myself eagerly climbing the steps which led to ... Madame Yeginsky's School of Dance.

I was dressed in a light fitting black leotard with pink stockings and matching leather slippers. Surprisingly enough, I was forced to take my first lessons with a class of fourteen five-year-olds. Naturally I found this very depressing. Mrs. Yeginsky must have noticed, for she rather hurriedly "advanced" me to a class of older, more experienced girls. From then on, I was the midget of the class. The exercises were so much more difficult. Some of the leaps I had to execute took my joints right out of their sockets. And my posture was something Mrs. Yeginsky continually wailed over. Somehow my back was firmly moulded into the curve of a letter S and none of Madame's protests would straighten it. But I worked hard, for more than anything else I wanted a pair of real ballet slippers, so that I could pirouette on my toes just as the ballerinas did at O'Keefe Centre. For many months I begged and pleaded with Mrs. Yeginsky until she finally gave in. Joyfully, I bought my first and last pair of ballet slippers. Now quickly I learned how cruel those innocent looking slippers could be. No matter how much I'd stuff them with lamb's wool, cotton and

Then, my feet would always end up pinched, red, and sore. During every lesson I hobbled and wobbled and lurched and tottered to such an extent, I resembled a new born colt taking its first walk.

Then, quite suddenly, Mrs. Yeginsky announced her intention of closing the school and retiring. Perhaps it was the strain of having too many pupils like me. Anyway, I thought it was for the best because I had learned, the hard way, that a good dancer's performance on stage was the result of many, many years of strenuous work.

And so, to my great relief, my career as a ballerina ~~came~~ came abruptly to an end.



## The Solace

The alarm clock rings shrilly and suddenly, dragging you unmercifully from the depths of sleep and driving fear like a shaft into the back of your mind. You shut it off and sink back into sleep once more, but the shaft is there, burning and nagging. Finally, after grappling for some time, your conscience wins, and you rise. Splashing frigid water over your face, you noiselessly pitter down the stairs and pull the heavy wood door with the brass knocker until it gives way with a sudden wheezing sound, leaving you angry, breathless, and a little dazed on the floor. You pick yourself up and slip out into the night with all the grace and agility of an elephant.

The darkness folds over you and cloaks you, and the cool silence mollifies your temper. The street lamps spill pools of light on the rough sidewalk. Mist lays a soft screen over the world, melting and rounding hard, sharp outlines, collecting and clinging in wisps around the lights. You are strangely detached from the silent, moving shadows. In the world of dreams, you are alone, a solitary figure with the earth and your thoughts. Moths flutter around the lamps. Leaves rustle softly, flickering shadows over the light. Way back in the darkness, a cat in flight, swift

and agile, meets your gaze. The moon, radiating that silver, limpid light that is only associated with the moon, seems to assure you.

You become dimly aware of familiar faces through the mist, all part of a routine, that if disturbed, would leave you feeling lost and disorientated. First comes the mongrel with tinkling chain, then the milk truck. And the rogger, muscles rippling, shoulders slumped, smiles as he sails by. For he knows the routine too. You feel warm inside and at peace.

Then, unnoticed, a few more people begin stirring. The sky is slowly washed with pale light. The black silhouettes of houses, stark against the slightly lighter sky, have receded. The houses are in the forelight now. Misty dreams have withdrawn with the night. The bustle and noise has returned, but your peace, a gift from the night, will remain with you until the morrow, when again you will meet, and find solace.