A STUDY OF STUDENTS' SELF SELECTION OF READING MATERIALS IN RELATION TO READABILITY, READING ABILITY, SEX AND CHOICE WITHIN INTEREST AREAS

by

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ABSTRACT

This study examined the ability of grade six students to select appropriate reading materials in terms of readability of the materials and reading abilities of the students. Variables of sex, choice within interest area and reading ability were examined to discover any relationships between them and the ability to choose appropriate materials.

The subjects were seventy-two grade six students equally divided between the sexes and stratified into above, at, and below grade reading abilities. Each subject was tested with the Woodcock Word Identification test to obtain a reading grade score and asked to fill out a reading interest form. One book selected by each subject was given a Raygor Graph readability value. The subject area of the book was recorded to see if students selected books within their stated interest areas.

The results of the study indicated that reading ability was a factor in the selection of appropriate materials but sex and choice within interest areas were not. Further, students did not tend to choose books within their stated interest areas.

In the discussion it was noted that students whose reading ability was above grade level tended to choose books below their ability, those whose reading ability was at reading grade level showed no tendency for their book choices to be above, at or below ability, and those students below ability tended to choose books above their ability. The conclusion made was that interests, developmental stages and availability of books, rather than reading ability, were likely the cause of the subjects' book choices. It was also noted that whatever book a student choose to read is likely to be one of interest to him. Finally, the suggestion was made that further research using different testing instruments was needed, but even so teachers should give guidance to their students in making book selections.

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CHAPTER I

INTRODUCTION TO THE PROBLEM

I INTRODUCTION

Reading programs involving students' free choice of materials are becoming increasingly popular. Teachers are often made to feel that a free reading period is essential if their students are to progress on the reading skill continuum. This method is being used, but perhaps without giving full thought to some of the implications of the approach.

Aristotle's concept of having to be actively involved in the learning process to acquire an ease in application of a skill is easily applied to the process of reading (Howie 1968). This view is used to justify sustained silent reading activities which include free choice of reading materials as one of their attributes. Silent reading programs based on the principles of free choice and learning by doing have become daily occurrences in many schools and classrooms. "After all," teachers say, "the students probably never do get a chance to read at home." Without such justification teachers would be hard pressed to explain the lack of direct interaction and "teaching" activity on their part, during a free reading period, to administrators and the public. The teachers' point is well made as free reading periods probably do offer many students their only used opportunity to engage in recreational reading. Few, if any, would deny that practice brings proficiency but what if the wrong things are being

practised? As Burnett points out bad readers tend to practise bad habits when they read. Thus the assumption cannot be made, for them, that everyone learns to read by reading (Burnett 1975). By the same token if material is too difficult for even the best of readers, progress could also be impeded. Without the necessary skills to read more difficult material students may adopt inappropriate methods of dealing with the content and practise them. The reverse situation may also be a factor in allowing students' free selection of materials for sustained silent reading programs. If material is chosen that is below a student's reading ability, how will daily reading of that material aid the student in improving his skills? The question is not whether or not there should be daily reading periods, but rather how should materials be selected for those periods.

This study was concerned with a number of factors involved with the interpretation of Burnett's statement that students who read material that is too difficult may be practising bad habits. Conversely, the study is also applicable to the viewpoint that students who read material that is too easy for them will progress very little. The principal issue was to determine whether or not students given free choice of reading material chose books of a readability level appropriate to their reading ability. Olson says that they do, but does not present any research proof (Olson 1959). Descriptions of individualized reading programs often contain a section on materials selection,

but little appears to have been done in the way of solid research to support free choice. On the other hand, many writers encourage teachers to take an active role in the students' choice of material for free or individualized reading activities. If students generally choose appropriate materials, that step may not be necessary.

This present study attempted to determine what difficulty of material is chosen by students in a free choice situation. The study also addressed itself to investigating the relationship between a student's reading ability and the readability of the book a student chose in the free choice situation. As no other study was uncovered that deals with this topic, the study was seen as an initial investigation of the problem.

II STATEMENT OF THE PROBLEM

Reading ability, sex and choice within interest area were considered as they related to a student's tendency to choose appropriate reading materials. Appropriate reading materials were defined as those having a readability level (as determined by the Raygor Readability Estimate) within $\pm$ one grade level from the student's reading ability (as determined by the Woodcock Word Identification Test).

Previously it was mentioned that free reading for poor readers may be a counter productive activity because it could reinforce poor reading habits. The problem of any reader developing poor reading habits if material beyond his reading ability is

selected was also raised. Furthermore, the amount of skill enhancement caused by a student reading material below his ability was questioned. Extensions of these thoughts in relation to free choice raised the first major question considered by this study. Do readers of good, average or poor ability demonstrate any difference in tendency to choose appropriate materials? Material selection, if done incorrectly, may serve as a source of frustration or as a confirmation of an inability to read. Little research has been done that deals with this area of free choice of reading materials.

Considering material selection primarily in terms of readability of the material and reading ability of the student, concerns only two of what could be considered the three main aspects of this topic--the third being interest areas of the student. For that reason an interest survey was taken to determine whether or not materials chosen within a student's stated interest areas are at a higher readability level than those materials chosen outside of a student's stated interest areas. The idea of interest is used by Fader (1976) and others to explain a student's ability to read materials seemingly above the student's reading ability.

The items previously mentioned, reading ability, and choice within interest area, along with sex, were considered as factors in a student's ability to select appropriate reading materials as defined by this study.

III PURPOSE OF THE STUDY

The study attempted to determine whether or not a grade six student chooses books within his range of reading ability. Teachers should be aware of the findings of this study so as to be clear as to what results free choice in selection of reading materials for free reading periods may have for grade six students in terms of matching the student's reading ability to the readability of material chosen. If teachers are not, they may be, at the very least, ascribing false attributes to their free reading programs, or at the worst, turning what was meant to be a learning experience into a daily exercise in frustration for many students. The affective implications of that concept should be of concern to all educators.

IV DEFINITION OF TERMS

Readability refers to the level assigned to the book through use of the Raygor graph.

Reading ability refers to the Reading Grade Score of each student on the Woodcock Word Identification Test.

Selection of materials at levels appropriate to students' reading abilities was defined as readability minus reading ability falling within $\pm$ one inclusive. For the purpose of this study, free choice was seen as students being allowed to make an unguided choice of books from school, home or wherever they may obtain them. Choice within stated interest areas was said to occur when

the book the student was reading was of the same type as one of his top three choices made on the interest survey form. (See Appendix A).

V HYPOTHESES AND POSTULATES

HYPOTHESES:

The hypotheses of the study were written in null form:

1) There is no significant relationship between the reading ability of grade six students and their choice of free reading materials at levels appropriate to their reading ability.
2) There is no significant difference between the abilities of boys and girls in choosing free reading materials at levels appropriate to their reading ability.
3) There is no significant difference between students who choose books within their stated interest areas and those who do not in their abilities to choose materials at levels appropriate to their reading ability.
4) There is no significant tendency for students to choose books within their stated interest areas in a free choice situation.

POSTULATES:

1) The students answered honestly regarding their intentions of reading the books chosen.
2) The students actually felt free to choose books from wherever they wanted.

3) A random selection of subjects from the three schools represents the bulk of the socioeconomic spectrum in Victoria.
4) The Raygor readability graph and the Woodcock Word Identification Test are accurate enough to accurately indicate readability of materials and pupils' reading ability.
5) The sample was large enough to account for book to book fluctuations in the readability levels of books chosen by individual students.

VI LIMITATIONS OF THE STUDY

1) The study does not attempt to account for variations in a student's reading ability due to the type of material being read.
2) The study does not take account of interest as a specific factor causing variations in a student's reading ability.
3) The study cannot be used to unequivocally generalize to all grade six classrooms. The students included in the study represent only the urban population of British Columbia, not the entire school population.
4) The accuracy of readability formulas is extremely questionable.
5) Only students taking instruction at the grade six level were used in this study.
6) The accuracy of the Woodcock Word Identification Test is not without question.

VII ORGANIZATION OF THE STUDY

This study is organized into five chapters. The first chapter introduces the problem, states the hypotheses and outlines some of the considerations involved in the study. The second chapter is a review of the literature on the subject as well as a brief look at interest as a related topic. The third chapter gives the methodology used in choosing the sample and collecting the data. Chapter four reports the data and the results of the statistical calculations used to analyze it. Results are interpreted in terms of the stated hypotheses. Chapter five consists of a summary and discussion of the results of the study. It relates the results to the introduction and the review of literature.

CHAPTER II

REVIEW OF THE LITERATURE

Very little research was found dealing with the hypotheses in this study, although there are many studies which examine interest areas in relation to sex, age, recreational reading, developmental stages and comprehension. Numberous studies also exist using quantity read as a measure of interest. There appear to be no studies combining the concepts of free choice, reading level and reading ability.

Sauls' study, for example, (Sauls 1974) concluded that subjects with better comprehension read more than those in the lower comprehension ranges, girls read more than boys, and those with a positive attitude toward reading read more than those without. The study depended on survey diaries kept by each subject. No mention of the reading levels of materials purportedly being read is made and no check of whether they were actually read is included.

While Burnett (1975) contends that self selection may be counter-productive for poorer readers, others such as Duker (1968) and Fader (1976) are of the opinion it is not. Duker remarks that as long as the freedom to return the book selected is present self selection is fine for those choosing more difficult books. He is joined in that philosophy by Trusty (1971) who feels that children will say a book is too hard if their

status and ego are not threatened by a group situation. Fader espouses the view that high interest will enable the reader to manage the material.

King has come close to the area that was studied in this research (King 1967). She contends that poor readers tend to have interests that are less mature than their classmates but above their reading abilities. Thus, they tend to choose books that are too difficult. She also implies that students of higher intelligence read more difficult material than their classmates because they have more mature interests. She does not tie that concept in with reading ability or the reading level of the material. Geislin (1972) found otherwise. She used pairs of books, one preferred by eight year olds and one preferred by ten year olds. Geislin used eight year olds two years ahead of their classmates and twelve year olds two years behind their classmates. For the twelve year olds she again used pairs of books, one preferred by grade fives and one preferred by grade sevens. She found that interest was the key factor in book selection and concluded that male students of eight years and twelve years were not influenced significantly by reading age or chronological age; however, girls in the twelve year old age group tended to choose books based on chronological age. Students in Geislins study did not have to read the books they choose.

Lamme's study of the relationships between reading habits and abilities examines recreational reading in the same vein as many of the others. She is more concerned with the quality, quantities and types of books being read than their actual reading levels (Lamme 1976). Lamme has relied on questionnaire surveys to obtain her data. This type of data seems to offer no proof that the material reported read, was read. Her method was to compare comprehension results on the Iowa Reading Comprehension Test to factors such as quantity of books read, quality of books read, percent of books chosen from the library and so on, to a total of eighteen factors.

Mary Austin states that observations of self selecting of books showed it often led to poor choices (Austin, 1963).

SELF-SELECTION

> A majority of the teachers interviewed stated that they allowed a child to choose his own reading materials. Some, however, admitted "guiding" children in their choices by "suggesting" certain materials; and other teachers controlled the reading selection of children by preparing lists from which certain books could be chosen.
>
> In the opinion of those teachers who allowed complete self-selection, the children chose wisely anywhere from 80 to 90 per cent of the time. However, on the basis of observations and informal talks with children relative to the books they were reading, it appeared that children had often selected reading material which was more appropriate for their recreational reading level than for their instructional level. In fewer instances children were believed to be reading books too difficult for them.

> Inspection of available records of children's reading indicated a somewhat narrow range of interests. For example, the record of a fourth-grade child revealed that of the ten books he had completed, nine were about sports activities. In other instances teachers who were aware of a child's predilection for certain books made efforts to help him broaden his literary horizons. (p. 90)

Although Austin deals with some areas of this study, her opinions are very subjective. No research design is reported to inform the reader about such basic factors as sample size, sample selection, instrumentation and methodology. Her comments would appear to require testing in a more structured format.

Fleming's study of the ability of children to perceive the difficulty of reading materials is the one study most closely connected with this current research (Fleming 1967). In his study Fleming points out that the ability of students to select reading materials within their range of reading comprehension has rarely if ever been questioned. His study attempted to answer the following questions:

1) Are children able to choose consistently the easiest and the hardest reading materials?

2) Is there a systematic relationship between children's levels of reading comprehension and their perception of easy reading material?

3) Is there a systematic relationship between children's levels of reading comprehension and their perception of difficult reading material?

4) Is there a systematic relationship between children's levels of reading comprehension and the level of reading materials they select as best for themselves to read?

5) Is the variance found in scores obtained from comprehension tests significantly affected by children's sex, level of intelligence, the level of graded materials which they choose as the best for themselves to read, or by any interacting combination of these effects? (p. 1-2)

Fleming used stratified random sampling to obtain a sample of thirty-four grade five boys and twenty-six grade five girls. Subjects' scores achieved on the comprehension part of the experiment were significantly positively correlated with their scores on the reading subtest of the Metropolitan Achievement Test. This allowed him to use the score on the comprehension test as the indicator of ability. He then selected eight categories of interest within which he had four articles, one at grade three, one at grade five, one at grade seven and one at grade nine. The readability levels of the articles were confirmed through the use of two readability formulae. The comprehension exam was made from two of the eight categories consisting of six multiple choice questions for each article. This gave a forty-eight question exam. Students had to select the best story in each category, the easiest and the hardest. Fleming's analysis of the comprehension scores, readability of the selections, self estimation of reading ability, sex and intelligence concluded that: children do not consistently choose the easiest or hardest material; there is a systematic relationship between students' reading ability and their perception of easy reading material; there is no systematic relationship between a

student's level of reading comprehension and his perception of difficult reading material; there is a relationship between students' level of reading comprehension and the level of reading materials they select as best for themselves to read; and that students' sex, level of intelligence, and level of graded materials chosen had no significant effect on the relative comprehension scores. In the results concerning ability to select the easiest material Fleming explains his result by suggesting that the experimental materials may have been biased in favour of the lower ability students who were better able to select the easier materials than the others, since they would automatically rule out the seventh and ninth grade materials, and also that more familiarity existed with easier materials so they were more easily picked out. Fleming's study appears to confirm the need to question students' ability to self select appropriate reading materials as in general his subjects were not able to differentiate reading difficulty clearly. In another respect his answer to the fourth question showed that in terms of what students felt to be the best article they did choose materials comparable to their reading ability.

INTEREST, MOTIVATION AND COMPREHENSION

The effect of interest and motivation on comprehension was not the focus of this study; however, it does serve as the basis of understanding the results that were obtained. To that end a survey of some of the studies relating to interest, motivation and comprehension is included. In general the findings show that high interest or motivation,in this study the terms are considered to be virtually synonomous, allows the reader to comprehend material beyond his normal reading ability. Hunt's (1970) study of the effects of interest, motivation and self selection upon independent, instructional and frustrational reading levels confirmed that high interest enables a reader to handle material which is normally at the frustration level of reading.

One reservation to the philosophy of self selection is expressed by Spache and Spache (1969). Many students have no interest in learning to read so from the point of view of interest, self selection would not be successful since they have no personal or social needs to be met through reading. Heilman (1972) gives two facilitators of the self selection process. The student must have interests in reading he wishes to pursue, and there must be suitable material available. The implication here is that students will have significant trouble with material beyond their independent reading ability. Gambrell (1978) mentions the philosophy of many in that learning to read is best

accomplished when the student is reading a good book. To the student a good book must be one of interest.

Studies by Bernstein (1955) and Estes (1973) both showed interest as a factor in comprehension. Both studies used passages of comparable reading level but of high and low interest based on the student's selection. Comprehension tests were given on each and the means of the results for the high interest passages compared with the means of the results for the low interest passages. In both it was found that high interest did cause superior comprehension. Bernstein's subjects were from grades seven to ten while Estes' were from grade four. A similar study done by Scholtz (1975) demonstrated that interest is not significant in determining comprehension. Her study tested the effect of interest on comprehension using fifth graders in a similar format to Bernstein's and Estes' studies. No explanation for the difference in findings was discernible.

Another item of interest comes from Norma Schlager (1978). She states that children read fiction books that deal with the developmental stage they are in and perception of the world that they have. This refers to the confounding variable of reading level of materials available in the present study. If nothing is available that matches students' needs at their reading level then they will read materials that match their needs and are not at their reading level.

Many reading specialists have observed the phenomenon of students reading above their ability within interest areas. A study by Pauk (1973) rewrote materials within interest areas at appropriate reading levels for below average readers. He found vast improvements in reading ability in students' interest areas with the use of high interest easily readable materials. He also noted that students of high reading ability read and enjoyed the materials as well. The conclusion was that readers become unmindful of readability levels if they are highly interested in the material.

Shnayer's study of the relationship between reading interest and comprehension concluded that interest did allow a student to read above his measured reading ability (Shnayer 1968). Shnayer used five hundred seventy-eight grade six students, from a west coast city, in his study and divided them into seven ability groups. Each student read material with readability levels two years higher than the groups' mean reading level, rated the articles for interest and did comprehension questions. His other conclusions were that high ability students are less affected by interest than low ability students, and low content interest allows for better discrimination between readers. He raised two interesting questions: firstly, do current reading tests report low interest or low ability; and secondly, is the true cause of success in individualized reading simply one of opportunity, not method. Shnayer claims that the Bernstein study

cited earlier is the only other study that attempted to do what he did. It should be noted that Scholtz's study and Estes' study, both cited earlier, took place after Shnayer's. Shnayer's claim demonstrates the lack of research in the area delved into by the present study.

Advocates of self selection of reading materials contend that students do choose materials appropriate to their needs. Two definitions of need come to mind. Need is the requirement to find materials of interest, but it is also the requirement to select materials at a readability level appropriate to a reader's tested reading ability. Fader (1976), Bernstein (1955), Estes (1973) and Hunt (1970) have determined that interest may be the prime component of self selection while others such as Burnett (1975) and Fleming (1967) indicate that more than interest should be involved in analysis of self selection.

Research to date is scarce and inconclusive in terms of the second definition of need which was the prime concern of this study. To date it appears that interest does indeed permit readers to comprehend material beyond their normal reading ability, the only dissenting study reviewed being by Scholtz (1975). More important to this study was Fleming's (1967) research which indicates students do choose "best" materials which are closest to their reading abilities. Fleming states that his study is not conclusive. The present study was largely concerned

with the non interest aspect of need. It sought to expand the scope of Fleming's study into a more applicable replica of the free choice situation in many self selection based individualized reading programs. It was hoped that this study would serve to confirm that students are able to select appropriate reading materials in terms of their reading ability and readability of materials. This study was also expected to show that students who select reading materials within their stated interest areas tend to choose materials more difficult than their tested reading ability.

Many studies are available to show the actual subject categories of interest for pupils of various ages and sex; however, this study was only interested in that aspect so far as availability of material of interest at suitable reading levels. Therefore, those studies are not covered in this review. As far as availability of materials at appropriate reading levels is concerned, the area has been investigated turning up nothing. Availability of materials in this case means the readability levels that are available in the interest areas students may have. For example, if a student is interested in nuclear physics, would he be able to find a suitable book at an appropriate reading level? In any event, that availability was beyond the scope of this study so was listed as a confounding variable.

THEORETICAL CONSTRUCT

The factors of sex, choice within interest area, reading ability and readability of books available have been placed into the schematic diagram shown in Figure 1. The diagram graphically demonstrated the position of each of the factors in the book selection process.

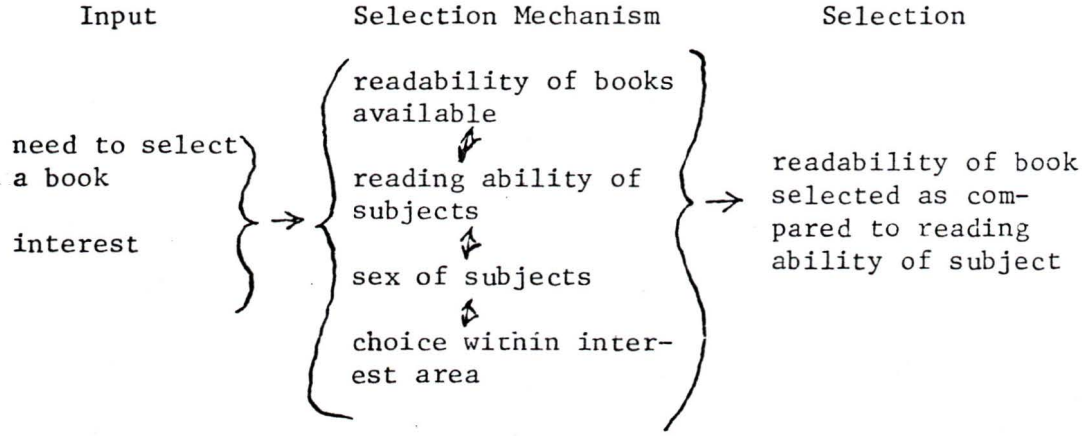

FIGURE 1

BOOK SELECTION PROCESS

The study listed readability of books available as a confounding variable. It examined the remaining selection mechanism components both independently and dependently to determine if they or their interactions served as significant factors in grade six students' ability to select appropriate reading materials.

CHAPTER III

METHODOLOGY

INTRODUCTION

This study was designed to determine the relationship between the appropriateness of book choices made by grade six students and the variables of sex, reading ability and choice within interest areas. The method of data collection was to use stratified random sampling to select an equal number of boys and girls throughout the total sample. The sample was also stratified equally between three schools and three reading ability groupings. The reading ability groupings were based on the results of the Woodcock Word Identification Test. Group one was above grade level readers (7.1+), group two was at grade level readers (6.0 - 7.0), and group three was below grade level readers (5.9-). Random sampling was used within each area. Categories of reading ability, sex and choice within interest area were recorded for each subject. Also, readability levels for the books being read by the subjects were calculated using the Raygor graph. The variables were then statistically analyzed to determine the existance of any relationships.

SAMPLING

The subjects were grade six students from three Victoria schools. Each of the schools had recently completed standardized testing of the reading abilities of their grade six students. Those test results were used to do the initial grouping of students into the three groups desired. Within each group, at each school, four boys and four girls were randomly selected and given the Woodcock Word Identification Test. Where necessary more students were randomly selected until each of the groups were filled at each school. The result was a randomly selected group of subjects numbering twenty-four from each school for a total of seventy-two. To each of the three groups used; above, at and below grade readers; each school contributed four boys and four girls.

The three schools used were selected in an attempt to accurately reflect the bulk of the socioeconomic spectrum in Victoria. School "A", an inner city school, draws from a low socioeconomic area containing a high rental district with a large turnover, many new Canadians and the highest crime rate in the city. School "B" is situated in an older residential area just outside the inner city. It draws from lower middle class to relatively high income families. School "C" draws its population from the middle to upper middle class including numerous semi-professional and white collar families. Table 1 gives a breakdown of information received from the administration and librarian at each school:

TABLE 1

BREAKDOWN OF INFORMATION: SCHOOLS

	School			
	A	B	C	Total
Number of Students	498	451	325	1,274
Number of Grade Six Boys	34	33	33	100
Girls	27	40	29	96
Size of Sample Selected	24	24	24	72
Boys	12	12	12	36
Girls	12	12	12	36
Number of Books in Library	9095	9327	6440	24,862

The total population of grade sixes that the sample was drawn from was one hundred and ninety-six. The schools selected draw from very low socioeconomic to high middle class families and geographically move from the inner city area to the newer residential areas. Each of the libraries claimed to offer a relatively balanced selection of books with regard to interest areas.

PROCEDURES

A letter of explanation guaranteeing anonymity was sent to the parent(s) or guardian(s) of each of the grade six students, see Appendix A. The subjects were not informed as to the basis of selection or whether or not they had been selected. Each subject was given the Woodcock Word Identification Test and asked to fill in an interest survey form, see Appendix B, in order to determine his stated interest areas. Within one week of the testing, in each of the schools, the silent reading books of the subjects were collected. Each subject was questioned to ensure that he did intend to read the book in his possession. The books were borrowed for the evening and Raygor readability scores were determined for each one, as well as a categorization of the book to see if it matched the subject's previously stated interest areas. The subjects did not know that any information about their silent reading book would be collected. In that way any influence of knowing that their book selection would be checked was eliminated.

The Woodcock Word Identification Test has a standard error of $\pm$ .0 - .2 months (Woodcock 1973) and the Raygor readability graph has a probable accuracy of $\pm$ 3.3 months to 1 year (Fry 1968, 1969 and 1977; Baldwin 1979). Therefore, a combination of the two gave a probable accuracy of selection of $\pm$ one year. One year was used as a convenience for statistical purposes, the actual accuracy range according to the data cited would

be from $\pm$ .35 to $\pm$ 1.2. In other words, when the difference between a student's reading ability and the readability of the book he chose was within $\pm$ one year, the student was said to have chosen reading material at his reading ability. If the difference was greater than one year in a positive direction from the student's reading grade score, he chose above his reading ability, and if it was greater than minus one year in a negative direction he chose below his reading ability. The formula was Readability - Reading ability = Difference.

The absolute values of the difference values were used as the interval data for a multivariate analysis of variance to determine the influence of the variables of reading ability, sex and choice within interest area on the subjects' ability to choose materials within their reading abilities. A Chi square analysis was also used to indicate directional tendencies for each group.

TESTING INSTRUMENTS

The Woodcock Reading Mastery Tests: Word Identification Test has a test-retest alternate form reliability of .93. It has an intercorrelation with the Passage Comprehension Test of .79 and with the Total Reading Score of .94 at the grade 4.9 level. At the grade 10.9 level the test correlates with the Passage Comprehension Test at the .67 level and with the Total Reading Score at the .91 level. At the grade 7.9 level the Word Identification Test has a predictive validity of .96 for comprehension. The standard error of measure is from .0 - .2 months. The test has the advantage of being quick and easy to administer and of giving results in terms of Easy Reading Level, Reading Grade Score and Failure Reading Level. For the purpose of this Study the Reading Grade Score was used (Woodcock 1973).

In administering the Word Identification Test the testor selects an appropriate point to start below which no errors would be anticipated. The subject is then asked to read the list of words orally. Each miscue in pronunciation or delay of more than four seconds is recorded as an error. When the level of five errors in a row is reached, the test is stopped. If the testor began at too difficult a level the test is administered backwards until five correct pronunciations in a row are reached. The raw score is the number of words correctly pronounced, including those below the starting point or below the point at which five correct pronunciations are made, up to the point where five

errors in a row are made. The raw score is then entered into the interpretation table provided in the guidebook to determine the appropriate Reading Grade Score.

The Raygor readability graph is a newly designed method for establishing readability levels. It is relatively quick and easy to use as it relies on the number of sentences and 6+ letter words in each of three random samples per book. The Raygor graph receives its reliability from the high correlation of .875 $\pm$ .001 with the Fry readability formula, which uses number of sentences and number of syllables per two hundred words (Baldwin 1979). Baldwin's study of the Raygor Graph's compatability with the Fry Readability Estimate used one hundred books ranging in difficulty from upper elementary to professional. Novels, collections of short stories and textbooks were analyzed. Readability estimates were computed using Fry and Raygor methods and then correlated with a Kendall rank order correlation which resulted in the reported value of .875 $\pm$ .001 (Baldwin 1979). The authors of the study of the Raygor Readability Estimate state that, "the high correlation and the virtually equivalent means between Raygor and Fry estimates ... suggest that, for all practical purposes, the two graphs yield the same results," (Baldwin 1979, p. 153).

This present study accepted the equivalence of the Raygor and Fry readability estimates. Therefore the Raygor values used for the study have been justified by analyzing the Fry formula.

The Fry readability formula has been intercorrelated with other readability formulae and student comprehension for grade eight as follows:

TABLE 2

Intercorrelations of five readability methods' ratings and student comprehension on ten books*

Readability Method	Fry	SRA	Botel	Dale-Chall	Flesch	Student Comp.
Fry	-	.98	.78	.94	.96	.93
SRA	.98	-	.81	.95	.98	.90
Botel	.78	.81	-	.82	.73	.64
DaleChall	.94	.95	.82	-	.95	.90
Flesch	.96	.98	.73	.95	-	.94
Student Comp.	.93	.90	.64	.90	.94	-

*A rank order correlation of .56 is significant at the .05 level and .75 is significant at the .01 level.

(Fry 1968, p. 575)

The books used ranged from 2.5 - 9.5 in readability. The table shows a high correlation between scores obtained using the Fry formula and all the other formulae except for Botel. The Botel formula correlates the poorest both with the other formulas and with student comprehension.

Fry reports that Spache is one of the few people who has given a probable error for his readability formula. That probable error is 3.3 months (Fry 1977). The Spache and Fry formulae are

correlated above .9 (Fry 1969). Fry estimates that his formula is accurate within one grade level because of its high correlation with student comprehension, publishers estimates and other readability formulae including Spache's (Fry 1968, 1969, and 1977). A quick and simple method of evaluating the readability of the seventy-two books in the study was desireable. Since research showed that the Raygor and Fry formulae were equivalent it was decided to use the Raygor graph despite the obvious limitations of accuracy and reliability inherent with any readability formula.

The assumption that Raygor's graph is accurate within $\pm$ one grade level and the reported standard error on the Woodcock Word Identification Test of $\pm$ .0 - .2 grade levels were combined to give limits in the readability-reading ability, difference of $\pm$ one in determining whether or not a subject had chosen material at his reading level.

VARIABLES

OPERATIONAL DEFINITIONS:

A. Dependent Variable

Book Choice - A decision made by the subject to have a book to read in class. Book Choice was recorded in terms of readability of book (Raygor) - reading ability of the student (Woodcock) = difference. The resulting figure was recorded as choice above ability 1.1+, at ability -1.0 - +1.0, below ability -(-1.1). At ability was said to be the appropriate reading level of materials.

B. Independent Variables

1. Reading Ability of Students - manifested by the Reading Grade score on the Woodcock Word Identification test. Scores were categorized as: above grade 7.1+, at grade 6.0 - 7.0, and below grade 5.9-.
2. Sex - male or female.
3. Interest Choice - manifested by whether or not the student was reading a book within his stated interest area. Categorized as yes or no.

C. Confounding Variables

Readability of Material - manifested by the level obtained using a Raygor readability graph. The assumption was made that the reading levels of the materials available had some influence on choices made with respect to the independent variables of sex, reading ability of the student, and choice

within interest areas. The testing of the confounding variable, however, was beyond the limits of this study. An extreme example of this phenomenon could occur if a grade six student happened to be interested in nuclear physics. There may be little reading material available at his reading level.

D. Controlled Variables

Age - by randomly selecting grade six students whose age differences were no more than 1 year, i.e. no failures or early promotions.

Socioeconomic level - by randomly selecting students from three schools representative of the bulk of the entire population spectrum.

Background in English - by selecting only those students for whom English is a first language.

Possible Book Choices - there were no directly limiting factors as subjects had free choice from whatever sources of books were available to them.

Physical Attractiveness of Books - not limited, same as above.

Intention of students to read - books that they were actually reading were checked.

E. Intervening Variables

- interest of student in reading, in terms of honesty of reporting his intention to read or his completion of the book;
- teacher's attitude toward free reading in terms of the atmosphere of the class during sustained silent reading periods;
- student's access to book sources in terms of his freedom to go to places where books are available, or the availability of money to purchase books;
- peer pressure in choice of books--it may exist but may not be admitted.

DATA ANALYSIS

Data analysis varied slightly for each hypothesis. The hypotheses were divided into two groups for testing. Hypotheses one, two and three were tested together using multivariate analysis of variance which was adjusted for zero covariates. The interval data used were the absolute values of the difference values obtained from the formula readability of book chosen (Raygor) - reading ability of subject (Woodcock) = difference. The three hypotheses were written in the null form:

Hypothesis #1 - There is no significant relationship between the reading ability of grade six students and their choice of free reading materials at levels appropriate to their reading ability.

Hypothesis #2 - There is no significant difference between the abilities of boys and girls in choosing free reading materials at levels appropriate to their reading ability.

Hypothesis #3 - There is no significant difference between students who choose books within their stated interest areas and those who do not in their abilities to choose materials at levels appropriate to their reading ability.

Each of the hypotheses were tested further with separate Chi square analyses. Chi square analyses were used to eliminate the extreme difference values which could unduly affect the multivariate analysis of variance (Popham and Sirotnik, 1973). They also served to show directional tendencies. In both types of analyses the independent variables were sex, reading ability and choice within interest areas. The multivariate analysis of variance examined their interactions as well. Hypothesis number one was examined further by recording the mean real difference values for each readability group. It was stressed that those mean values were given only for interest. Finally, a series of t tests were done to compare the abilities of boys and girls, within each reading ability group, in choosing appropriate reading materials.

Hypothesis four was also written in the null form:

Hypothesis #4 - There is no significant tendency for students to choose books within their stated interest areas in a free choice situation.

This hypothesis was tested with a two celled Chi square analysis.

CHAPTER FOUR

ANALYSIS OF RESULTS

The results for this study involve a reading ability score (Woodcock) for each subject, the sex of each subject, whether or not the subject chose a book within his stated interest area, the ability group that the subject belongs to, and a readability score (Raygor) for the book the subject was reading. For all of the statistical analysis $P < .05$ was used as the significance level. The data is presented in Appendix C.

A multivariate analysis of variance was used to test the first, second and third hypotheses. The analysis was adjusted for zero covariates so acted as a multiple classification analysis of variance. The results are reported in Table 3.

TABLE 3

Multivariate Analysis of Variance of
Factors in Student's Self Selection of Free Reading Materials

Source of Variation	SS	DF	M.S.	F	P
Within	149.168	60	2.486		
Sex	2.683	1	2.683	1.079	.303
Choice	.703	1	.703	.283	.597
Group	15.807	2	7.903	3.179	.049*
Sex-Choice	.928	1	.928	.373	.544
Sex-Group	12.463	2	6.232	2.507	.090
Choice-Group	1.002	2	.501	.201	.818
Sex-Choice-Group	1.828	2	.914	.368	.694

*Group sig. at $P < .049$

A separate discussion of each hypothesis will be used to explain the results more fully.

Hypothesis #1

There is no significant relationship between the reading ability of grade six students and their choice of free reading materials at levels appropriate to their reading ability.

From Table 3 it can be seen that the difference in the ability of the three groups to choose appropriate reading material is significant at the $P < .05$ level. Therefore, the first hypothesis is rejected. It would appear that there is a significant difference between each ability group's tendency to choose appropriate reading material.

A Chi square analysis was done to determine directional tendencies of the three ability groups. This test is suitable in that it is not affected by extreme difference values. The analysis presented in Table 4 shows that the above grade ability readers tended to choose reading material below their reading ability and the below grade readers tended to choose material above their reading ability. The at grade readers showed no strong tendency in either direction. This test is not specific enough to show significant tendencies for each of the three groups so a post hoc analysis was done of each group and is reported in Chapter Five.

TABLE 4

Chi Square Analysis of
Book Choices of Reading Ability Groups

	Readability Level of Book			
Group	Above	At	Below	Total
1	5	6	13	24
2	8	11	5	24
3	19	5	0	24
Total	32	22	18	72
				$\chi^2 = 27.35$*

*The χ^2 value of 27.35 is sig. at the $P < .001$ level.

The final step was to find the mean of the real difference value for each group. The values are -.87 for group 1, +.68 for group 2, and +2.575 for group 3. These values do not have any significant statistical value for this study but are presented as a matter of interest in respect to general tendencies.

Hypothesis #2

There is no significant difference between the abilities of boys and girls in choosing free reading materials at levels appropriate to their reading ability.

Referring back to Table 3, it can be seen that the P value of $P < .303$ is not significant. Therefore the hypothesis will be accepted. Sex does not appear to be a factor in grade six

students' ability to choose appropriate reading materials.

A Chi square analysis was done for this hypothesis as well. Table 5 presents the analysis and confirms the results of the multivariant analysis of variance.

TABLE 5

Chi Square Analysis of
Book Choices of Boys and Girls

	Readability Level of Book			
	Above	At	Book	Total
Male	18	12	6	36
Female	14	10	12	36
Total	32	22	18	72
				$\chi^2 = 2.68$*

*χ^2 value of 2.68 is not sig. at $P < .05$

The Chi square analysis shows a slight, but not significant, tendency for both sexes to choose above their ability.

Hypothesis #3

There is no significant difference between students who choose books within their stated interest areas and those who do not in their ability to choose materials at levels appropriate to their reading ability.

Referring again to Table 3, the P value of $P < .567$ for choice within interest areas is also not significant. There-

fore, this hypothesis will also be accepted. Choice within interest areas does not appear to be a factor in the students' ability to choose appropriate reading materials.

The Chi square analysis presented in Table 6 shows a tendency for those who choose books within subject areas to select above their ability, however the χ^2 value is not significant and therefore confirms the multivariate analysis of variance. Those subjects who did not choose within stated interest areas tended to be evenly distributed across the three levels.

TABLE 6

Chi Square Analysis of Book Choices
in Relation to Choice Within Interest Areas

Choice within interest areas	Readability Level of Book			
	Above	At	Below	Total
Yes	21	12	10	43
No	11	10	8	29
Total	32	22	18	72
				$\chi^2 = .84$*

*χ^2 value of .84 is not sig. at $P < .05$

The multivariate analysis of variance showed that the intereaction between sex and group was close to significant at $P < .09$. For that reason the data was collapsed and another multivariate analysis done using only sex and group. As reported in Table 7, the increased degrees of freedom for within cells caused the significance level for sex and group interaction to read $P < .085$, however, it remained not significant.

TABLE 7

Multivariate Analysis of Variance of
Factors in Students' Self Selection of Free Reading Materials

Source of Variation	SS	DF	MS	F	P
Within cells	15366.738	66	232.829		
Sex	268.346	1	268.346	1.153	.287
Groups	1628.852	2	814.426	3.498	.036*
Sex x Group	1194.362	2	597.181	2.565	.085

*Group sig. at $P < .036$

Because it was so close a t test was used to analyse the means of the sex group cells. This data is presented in Table 8. The separate t test formula was used for the analysis.

TABLE 8

t test Analysis of
Book Choices by Sex and Group

Group		Sex m	Sex f	t value
1	x	1.68	2.24	2.04*
	s_2	1.18	1.40	
	s^2	1.39	1.96	
2	x	1.65	1.33	.64
	s_2	1.87	.64	
	s^2	3.50	.41	
3	x	3.3	1.94	2.57*
	s_2	2.24	1.28	
	s^2	5.02	1.64	

df for each group = $n_1 - 1 = 11$

* sig. at $P < .05$

The t test results showed tendencies for group 1 females (above grade readers) to be less able to choose appropriate reading materials than group 1 males, and for group 3 males (below grade readers) to be less able to choose appropriate reading materials than group 3 females. These results are influenced by extreme difference values in the data; however, the tendencies would be interesting to test with a large sample. This study allows for only twelve observations per cell which is a somewhat limited sample on which to base a hypothesis.

A final analysis, not related directly to the hypotheses one, two and three was to do a Chi square analysis of the total sample to check for overall tendencies. This analysis,

resulting in a Chi square value of 4.34, showed that the subjects tended to choose books above their reading ability but had no significant tendency in any direction.

The conclusion in general would be that no significant tendency exists for the grade six group as a whole to choose reading materials in any of the categories of above, at or below their reading ability. This particular aspect was not studied directly because the grouping is so heterogeneous as to make the results become nonapplicable to grade six students in classroom instruction.

Hypothesis #4

There is no significant tendency for students to choose books within their stated interest areas in a free choice situation.

A Chi square analysis was used to test this hypothesis as well. The result, as seen in Table 9, was not significant; therefore, the hypothesis was accepted. In the case of this study students did not tend to choose books within their stated interest areas despite a non significant tendency in that direction.

TABLE 9

Chi Square Analysis of Book Choice in Relation to Choice Within Interest Areas

Choice Within Stated Interest Areas		
Yes	No	
43	29	$\chi^2 = 2.34$*

*χ^2 value of 2.34 is not sig. at $P < .05$

SUMMARY

Hypotheses one, two and three were analyzed by both multivariate analysis of variance adjusted for zero covariance and Chi square. The results caused the acceptance of hypotheses two and three, and the rejection of hypothesis one. In addition, t tests were used to further analyze the interaction between sex and reading ability as it affected the ability to choose appropriate reading materials. No conclusions could be made from the t tests; however, it appears that girls of above grade reading ability are less able to choose appropriate reading materials than boys of the same ability and that boys of below grade ability are less able to choose appropriate reading materials than girls of the same ability. Finally, hypothesis four was accepted on the basis of a Chi square analysis.

In essence it would appear that grade six students' reading ability is a significant factor in their ability to select appropriate reading materials. Those subjects who were above grade level in reading ability tended to choose books below their ability, while those who were below grade level chose books above their ability. Neither sex nor choice within interest area appeared to be factors in the students' ability to select appropriate reading materials.

In conclusion, grade six students in this study did not, significantly, choose books within their stated interest areas.

CHAPTER V

SUMMARY AND DISCUSSION

SUMMARY AND POST HOC ANALYSIS

The conclusions of this study relate directly to the four hypotheses tested as well as to some post hoc analyses.

Hypothesis number one stated that there is no significant relationship between the reading ability of grade six students and their choice of free reading materials at levels appropriate to their reading ability. This hypothesis was rejected on the basis of the multivariate analysis of variance reported in Table 3 and the Chi square analysis reported in Table 4. Post hoc analysis included a Chi square analysis done for each of the three reading ability groups. The results reported in Table 10 show the below grade level ability group as the only one where reading ability appears to be a factor in book choice in terms of readability. In this study the below grade reading level subjects tended to significantly choose books of readability levels above their reading ability.

TABLE 10

Separate Chi Square Analysis
of Each of the Three Ability Groups

Group	Readability Level of Book			χ^2
	Above	At	Below	
1	5	6	13	4.75
2	8	11	5	2.35
3	19	5	0	24.25*

χ^2 sig. at $P < .05$

The most logical explanation for the tendency of above grade level readers to choose below their ability and below grade level readers to choose above their ability would appear to be the availability of different readability levels of books that match their interest areas at the particular time they are choosing material to read. References to Schlager's (1978) article, wherein she states that students choose books depending upon their developmental stage and also Geislin's (1972) article, which concludes that interest not reading age or chronological age is the key factor in book choice, help to explain both the tendencies of the extreme groups and the lack of influence of reading ability on the at grade level group.

It may be assumed that books which would appeal to the average grade six student would be written at or near the grade six level. Consequently, below grade level readers are almost compelled to choose material above their ability. Similarly, above grade level readers are forced to choose books below their ability. In other words, it is likely interest and materials available, not reading ability and readability, that caused the rejection of the hypothesis. However, this is not a total explanation, but would help to explain the tendencies observed.

Hypothesis number two stated: there is no significant difference between the abilities of boys and girls in choosing free reading materials at levels appropriate to their reading ability. This hypothesis was also tested by the multivariate analysis of variance reported in Table 3 and a Chi square analysis reported in Table 5. In both cases the hypothesis was accepted. It would appear that there is no difference in the ability of either sex to choose appropriate reading material. Furthermore, neither of the sexes appear to choose materials matching their reading abilities.

Hypothesis number three stated: there is no significant difference between students who choose books within their stated interest areas and those who do not in their abilities to choose materials at levels appropriate to their reading ability. This hypothesis, too, was tested by the multivariate analysis of variance reported in Table 3. It was also tested with the Chi

square analysis recorded in Table 6. In both cases the hypothesis was accepted. Choice within stated interest areas did not appear to be a factor in selection of reading materials at levels appropriate to the subject's reading ability. An explanation for this result may be the rapidly changing interest areas of grade six students combined with judgmental factors involved in the classification of books chosen into interest areas. It might also be assumed that whatever book a student reads is within an interest area.

Hypothesis number four encounters the same problem as hypothesis number three. Hypothesis number four stated that there is no tendency for students to choose books within their stated interest areas in a free choice situation. This hypothesis was tested using the Chi square analysis reported in Table 9 and consequently accepted. In this study, students did not choose within their stated interest areas. As the discussion of hypothesis three stated any book chosen and read by a student in a free reading situation must be of interest to him. Therefore, the testing of this hypothesis is more a matter of interest than something on which to base educational implications.

DISCUSSION OF RESULTS

The discussion of results will deal directly with the studies cited in the first two chapters.

Pauk's conclusion that interest, not readability, is the key factor in book selection would appear to tie in nicely with the results found in this study (Pauk 1973). It tends to substantiate the discussion of hypothesis number one. The differences in the three reading level groups' tendencies to choose appropriate material has already been explained in respect to availability and interest relating to Schlager's and Geislin's findings. Comments from people such as King and Austin can also be assimilated easily into the present results. King's claim that poor readers choose books that are too difficult is corroborated by the results of the present study for the below grade readers (King 1967). The term"too difficult", however, must be qualified by the effect of interest upon comprehension and reading test results. Austin's claim that students tend to choose easier books is also amenable with the present study in terms of above grade level readers (Austin 1963).

The original basis of this study, expanded from Burnett's idea that poor readers practise bad habits, was that if material is chosen that is too difficult, for even the best of readers, progress might be impeded (Burnett 1975). It was further pointed out that if readers choose material that is too easy for them, there will be little opportunity for growth in reading ability.

It would appear, on the surface, that both of these possibilities exist. The bulk of the subjects, fifty of the seventy-two, chose books that were not appropriate to their reading ability. Remembering that the effect of interest on comprehension is not being taken into account it would seem that the potential for the two difficulties cited does exist in the free selection situation.

Reflections on the comment of Trusty (1971) that students will return a book if it is too difficult and Fader's (1976), Duker's (1968), and Hunt's (1970) position that high interest allows students to read materials otherwise too difficult for them, would call for the conclusion that the books chosen by the subjects in this study were chosen largely for interest's sake. The connection between reading grade level groups and choice of appropriate reading materials was quite possibly due to the interests of grade six students and availability of materials, as already mentioned, not to differences in their tendencies to search for materials of certain readabilities. It may be concluded that if a student is interested in a subject and there is a book available to him that covers the subject, he will attempt to read it as best he can regardless of readability. Both Bernstein's (1955) and Estes' (1973) studies substantiate the idea of allowing students to choose books on the basis of interest as they found that student's comprehension of high interest materials was higher than that of low interest materials.

The obvious question about anyone's attempt to match a student to a book based on a combination of interest, reading level and readability is how is the reading level determined. In other words, does the reading test contain articles or items of high interest to the student or does it reflect the reading ability of the student with material that is not interesting to him. Perhaps, as Shnayer pointed out, the success of free choice reading instruction is due to the opportunity of students to read materials they are interested in as opposed to materials matched to them on the basis of suspect readability and reading ability scores (Shnayer, 1968).

The present study disagreed with the results of Flemming's study which claimed that students did choose materials of readability comparable to their reading ability (Flemming, 1967). There are a number of possible explanations for this disagreement, the major explanation being the lack of free choice in the Flemming study as evidenced by the limited choice of both materials and interest areas. Further, the use of the Woodcock Word Identification test, for establishing a reading grade score, and the Raygor graph, for establishing readability, limit the credibility of the present study.

IMPLICATIONS

The results of this study raise a number of concerns of which teachers should be aware. The first concern would be that students do tend to choose books of readability levels that differ from their tested reading abilities. This tendency does not appear to be related to the factors of sex or choice within stated interest areas, but to reading grade level. Further expansion of this observation is that above grade level readers tend, but not significantly, to choose materials below their reading ability and below grade level readers significantly tend to choose materials above their ability. At grade level readers have no significant tendency in any direction. These observations may be explained by a combination of developmental stages and interest. Indeed it may be stated that if those two factors are the key to book selection, as much of the research cited claims they are, the results of the present study would be completely expected. It must be concluded that, although reading ability groups showed different tendencies in choice of appropriate reading material, there is no strong evidence that reading ability is a major factor. In other words, the limitations of the study's design, based on the independent testing instruments used, prohibit labeling reading ability as the primary factor in grade six students' self-selection of free reading materials.

Another concern would be that students did not tend

to choose books within stated interest areas, although, as pointed out, that does not mean that they did not choose books of interest to them.

RECOMMENDATIONS

Any recommendations on the basis of this study must be made with the full knowledge of the need for more research as outlined in suggestions for further research. Teachers may be inclined to view the results of this study in terms of Burnett's and Austin's remarks pertaining to free reading classes. If teachers did so they would provide guidance in book selection for their students. They would attempt to help the student find a book of interest at a readability level compatible with enabling the student to grow in reading ability without the material being either too difficult or easy. The results of the present study would imply that such guidance is necessary. Further to that, however, teachers would realize that tests of reading ability may not accurately reflect a student's ability to read material that is of high interest to him. For that reason teachers may wish to use a conference method of checking how well a student is managing with a particular book. Finally, teachers should be able to assume that if a student has chosen and is reading a book it is of interest to the student and therefore may be quite comprehensible despite a large difference between tested reading ability and readability levels.

SUGGESTIONS FOR FURTHER RESEARCH

1) Using a cloze technique and comprehension questions, a test could be designed for each subject based on his book selection. This would eliminate the lack of compatability between reading test scores and ability to read items of high interest.
2) In order to test more fully the relationship of choices within interest areas to readability of books chosen, it may be useful to have students choose a book from a group of books they are not interested in. The readability of that choice could then be compared to the readability of a free choice. Cloze tests combined with comprehension questions would assess the appropriatness of each choice.
3) A larger sample using the cloze and comprehension question technique could be used to further evaluate the relationship between sex and ability in making appropriate free reading selections.

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APPENDIX A

COVERING LETTER SENT TO

PARENTS OF PROSPECTIVE SUBJECTS

..... Elementary

Date _____

Dear Grade Six Parent(s) or Guardian(s):

Mr. D. Bawtinheimer, a graduate student from the University of Victoria, has received permission from the Superintendent of Schools, Mr. Stables, to do a study in our school. This letter is to advise you of the nature of the study and to allow you a chance to exclude your child if you wish.

The study is concerned with the ability of students to choose reading material that matches their reading ability. To this end Mr. Bawtinheimer will be giving a survey form on which students will indicate their three favourite types of books, (i.e. westerns, mysteries). Other than the student's name, no other information will be requested on the form. As well as that, students randomly selected for the study will be asked to take a five minute reading ability test involving word identification. The results of this test will be used for grouping and for comparison to the readability level of one of the books chosen by the student for a silent reading period. Please be assured that students' names will not be used in the study. All data will be rostered and reported by number rather than name.

If you have any concerns regarding this study please contact Mr. Dave Bawtinheimer at the University of Victoria, phone: 477-6911, local 4458.

Sincerely,

D. Bawtinheimer
Staff Associate,
University of Victoria

Principal

APPENDIX B

FORM FOR SURVEYING STUDENTS' READING INTERESTS

Student Interest Survey

Name _____

Please put a number one beside your favourite type of books, a number two beside your second favourite and a number three beside your third favourite. If one of your favourites is not listed, add it in under other types and put the number beside it.

Mystery	_____
Horse	_____
Animal	_____
Love	_____
Science Fiction	_____
Western	_____
Boy growing up	_____
Girl growing up	_____
Suspense	_____
Ghost	_____
Fantasy	_____
Detective	_____
Sports	_____
War	_____
Humour	_____

Other types:

_____	_____
_____	_____
_____	_____

APPENDIX C

DATA TABLES FOR

THE THREE READING ABILITY GROUPS

APPENDIX C

DATA FOR GROUP 1 (7.1+) ABOVE GRADE LEVEL READERS

I.D.	Reading Ability	Readability of Book	Difference[A]	Sex[B]	Choice[C]
1	7.2	7.6	.4	1	2
2	7.7	9.4	1.7	1	1
3	9.9	11.2	1.3	1	2
4	7.4	6.0	-1.4	1	1
5	8.3	6.3	-2.0	2	2
6	9.6	7.2	-2.4	2	2
7	7.4	7.3	- .1	2	2
8	7.2	6.8	- .4	2	2
9	8.8	8.7	- .1	1	1
10	8.1	10.4	2.3	1	1
11	9.9	7.2	-2.7	1	2
12	10.6	7.2	-3.4	1	2
13	9.3	6.8	-2.5	2	2
14	8.3	10.1	1.8	2	1
15	9.1	6.5	-2.6	2	1
16	12.9	7.5	-5.4	2	2
17	8.1	12.0	3.9	1	1
18	7.2	8.0	.8	1	1
19	7.4	6.2	-1.2	1	1
20	8.3	9.2	.9	1	1
21	8.3	7.0	-1.3	2	2
22	11.0	9.1	-1.9	2	2
23	9.9	6.8	-3.1	2	1
24	9.9	6.4	-3.5	2	1

A - Difference = Readability - Reading Ability

B - 1 denotes male, 2 denotes female

C - 1 denotes choice within stated interest areas,

2 denotes choice outside stated interest areas.

APPENDIX C

DATA FOR GROUP 2 (6.0 - 7.0) AT GRADE LEVEL READERS

I.D.	Reading Ability	Readability of Book	Difference[A]	Sex[B]	Choice[C]
25	6.4	8.0	1.6	1	1
26	6.0	5.8	- .2	1	1
27	6.9	12.4	5.5	1	1
28	6.9	7.3	.4	1	1
29	6.1	8.8	2.7	2	2
30	6.2	7.2	1.0	2	1
31	6.2	7.2	1.0	2	2
32	6.4	7.2	.8	2	2
33	6.1	5.0	-1.1	1	1
34	6.9	7.7	.8	1	1
35	6.4	6.8	.4	1	1
36	6.2	6.1	- .1	1	2
37	6.9	5.7	-1.2	2	1
38	6.9	8.8	1.9	2	1
39	6.0	7.2	1.2	2	1
40	6.9	6.2	- .7	2	2
41	6.0	8.7	2.7	1	1
42	6.7	5.0	-1.7	1	1
43	6.4	11.5	5.1	1	2
44	6.9	7.1	.2	1	1
45	6.0	5.5	- .5	2	1
46	6.9	4.8	-2.1	2	1
47	6.0	7.2	1.2	2	2
48	6.7	5.0	-1.7	2	1

A - Difference = Readability - Reading Ability

B - 1 denotes male, 2 denotes female

C - 1 denotes choice within stated interest areas,

2 denotes choice outside stated interest areas.

APPENDIX C

DATA FOR GROUP 3 (5.9-) BELOW GRADE LEVEL READERS

I.D.	Reading Ability	Readability of Book	Difference[A]	Sex[B]	Choice[C]
49	5.5	5.5	0	1	2
50	4.4	7.4	3.0	1	1
51	4.6	9.0	4.4	1	1
52	5.3	6.8	1.5	1	1
53	3.7	6.3	2.6	2	1
54	4.8	7.8	3.0	2	2
55	4.8	4.2	- .6	2	2
56	5.0	6.2	1.2	2	2
57	3.9	10.7	6.8	1	1
58	4.1	8.6	4.5	1	1
59	3.7	8.0	4.3	1	1
60	4.0	7.0	3.0	1	2
61	3.8	5.8	2.0	2	2
62	3.8	8.6	4.8	2	2
63	5.8	8.5	2.7	2	2
64	3.8	5.8	2.0	2	1
65	5.8	13.0	7.2	1	2
66	5.6	8.8	3.2	1	1
67	4.7	6.7	2.0	1	1
68	4.8	5.2	.4	1	1
69	5.7	7.2	1.5	2	1
70	5.8	6.2	.4	2	1
71	5.0	4.7	- .3	2	2
72	5.1	7.3	2.2	2	1

A - Difference = Readability - Reading Ability

B - 1 denotes male, 2 denotes female

C - 1 denotes choice within stated interest areas,

2 denotes choice outside stated interest areas.

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March 5, 1980