AN INVESTIGATION OF THE SUBJECT PREFERENCES OFINTERMEDIATE STUDENTS
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## Abstract

A questionnaire measuring the subject preferences of 296 grade five to seven students showed physical education to be the most popular subject and language arts the least. A second questionnaire investigated reasons for students' dislike of language arts.

Pearson product moment correlations and an analysis of variance were used to investigate factors which might be associated with subject preferences. General ability, achievement and the teacher did not appear to be major factors. Grade level was significantly related to preference for reading, mathematics and language, with fifth grade students expressing the greatest preference for all of these. Sex was significantly related to preference for reading, language and music, with girls expressing greater preferences than boys for these three subjects.

Results from this study agreed with previous research in finding little or no relationship between preference and achievement, a decline with increasing grade in attitudes to school subjects, and a greater preference among girls than among boys for reading, language and music.

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Chapter I
Introduction

The purpose of this study was to discover the preferences of intermediate students for eight subjects in the school curriculum, and to identify possible factors associated with these preferences. When the subject preferences of students in the sample had been determined, attention was focused on the least popular subject, and an attempt was made to determine possible reasons for the apparent dislike of this subject.

A review of the literature on student attitudes to school indicated that relatively few studies have investigated students' subject preferences. Students' preferences for and attitudes toward the subjects in the curriculum merit research for several reasons. One reason is the possibility that there is a relationship between attitude and achievement.

Research has yielded conflicting results on whether achievement in school and attitudes toward school subjects are related. If a positive attitude toward, or strong preference for a school subject is indeed related to achievement in that subject, then knowledge about students' subject preferences and factors related to them could help lead to improved curricula and instructional methods that
could in turn improve achievement. Those studies that have found a connection between attitude and achievement have not indicated any causal relationship, but it does not seem unreasonable to speculate that working to improve students' attitudes to certain subjects might result in improved achievement as well.

If, on the other hand, there is no relationship between attitude and achievement, there is still good reason to strive toward understanding of students' attitudes and preferences. Most educators would agree that school should be a positive and happy experience for children, and any knowledge that can help educators foster more positive attitudes should be considered a worthwhile contribution toward that goal.

Much of the research on student attitudes to school has focused on general attitudes, examining such variables as intelligence, socioeconomic status, self concept and the influence of the teacher. As will be shown in Chapter II, the major area of research has been the investigation of the relationship between attitude and achievement. The study of students' expressed preferences for specific school subjects constitutes one area of student attitude research that is relatively unexplored. Few attempts have been made to determine variables affecting students' subject preferences and attitudes to specific subjects.

This scarcity of research, and the need for knowledge in this area to permit educators to foster more positive attitudes in students, form the justification for this study.

There have been no reports in the literature in which an examination has been made of preferences toward the full range of subjects in the curriculum in relation to sex, grade level, achievement, ability and the teacher. Researchers have considered some of these variables with many subjects, or all of them but in relation to only a few school subjects. The present study was specifically designed to provide a more comprehensive picture of students' subject preferences and factors related to them.

This study was designed to provide answers to the following questions:

1. What are the preferences of intermediate students for eight subjects in the school curriculum?
2. What relationships exist between subject preference and the variables of sex, grade level, achievement, ability and the teacher?
3. What variables appear to be important correlates of attitudes toward the least preferred subject?

## Chapter II

Review of Related Literature

Consistent with the major emphasis of the study, this review will focus on student's subject preferences. The relationship to preferences of such factors as intelligence (IQ), socioeconomic status, method of instruction, self concept, the teacher, sex, grade level, ability and achievement will also be examined.

Studies which examine general attitudes to school, while appearing only peripherally related, have been included because they may be relevant to the study of subject preferences. Knowledge of the effects of IQ, socioeconomic status or method of instruction on students' attitudes to school in general, may help contribute to understanding of the more specific area of subject preference.

Studies of Subject Preference
Recently Cox and Wilson (1978) reported on an informal survey of student attitudes to school. This survey, though supervised by two teachers, was initiated and designed by intermediate students in a New York school. The children and their teachers polled 350 five to eleven year olds as to how they would rụn the school if they had the power to
do so. One of their findings was related to subject preference. Students felt that reading, writing and arithmetic were the most important subjects. They also expressed a desire for activity oriented lessons such as field trips, and they favored a multidisciplinary approach rather than the compartmentalization of subjects.

Beck (1977) looked at the preferences of 13,500 grade one to eight children for various subjects in the school curriculum. He found that across the grades science was the best liked subject and arithmetic was liked the least. These results conflict with several other studies which have found arithmetic to be favored. Girls in this study were more positive than boys to language arts and reading; boys were more positive than girls to science. These results are consistent with most other studies. No significant sex difference was found for mathematics or social studies.

Haladyna and Thomas (1979) found that 3,000 grade one to eight pupils, both boys and girls, liked art the most and social studies the least. This study showed social studies to be held in very low regard. Arithmetic was liked about the same by girls and boys. Girls liked reading, music and language more than boys, while boys liked science and physical education more than girls. These preferences were fairly stable throughout the grades.

The only subject to show a considerable decline from grade one to eight was music. All grades rated reading and mathematics in the middle of the scale, with art and physical education above them.

Fraser (1980) explored the attitudes toward English, mathematics, social studies and art of 1,800 grade seven to ten students. Fraser looked specifically for grade level and sex differences in relation to these subjects. He found that significant declines in attitude to each subject occurred with grade level. Girls expressed significantly more favorable attitudes than boys to English, social studies and art, and boys expressed significantly more favorable attitudes than girls to mathematics. These differences were for the total group, not for each grade level. The overall order of preference expressed by the students in this study was English first, then mathematics, social studies and art.

The 2,500 grade four to six students in Faust's study (1963) showed their preference for the four subjects measured in this order: arithmetic was first, followed by spelling, reading and language.

Inskeep and Monroe (1965) used the full range of school subjects in their study of the subject preferences of intermediate students. They found the order of students' preferences to be arithmetic first, followed by
art, health and physical education, reading, spelling, science, music, social studies, handwriting and language. These findings agree with Faust in that arithmetic was found to be the most popular subject and language the least.

## Attitude and Achievement

The study of a possible relationship between attitude and achievement has been pursued in two different ways. Some studies have looked at students' attitudes toward school in general and compared these with achievement in several different subjects. Other studies have focused on one subject, such as arithmetic, reading or science, and examined attitude and achievement in relation to that one subject. The question important to the present discussion is whether or not there is a relationship between preference for a school subject and achievement in that subject.

While Abram's study (1982) of fourth graders did not directly address the topic of subject preference, she did attempt to find whether high achievers, those with high marks at the end of grade three, liked school better than other students in grade four. She found that high achievers did appear to like school a bit better, but this difference was not significant. The study found no
significant relationship between achievement and three dependent variables: liking for school, popularity and anxiety. Significant association was found between reading and math scores and personal happiness and satisfaction, separate from liking for school.

Beck (1977) reported results from the Survey of School Attitudes of 13,500 grade one to eight students in ten U.S. states. No significant relationship was found between scores on achievement tests and school attitude measures.

- In an extensive study of student attitudes toward school Tenenbaum (1941) found no significant correlation between attitude to school and grade level marks or $I Q$. In another report on the same study Tenenbaum (1944) describes some of the other variables investigated, such as absence and conduct. Absence, like achievement and $I Q$, was not significantly related to attitude, nor was conduct. However conduct correlated most highly with attitude and absence correlated the least. Those children whom teachers considered to be behavior problems expressed more unfavorable attitudes than others to school, teachers and classmates.

Malpass (1953) tested grade eight students to determine their attitudes to several aspects of school: school in general, classmates, teachers, schoolwork and discipline. They were also tested for intelligence
and given standarized achievement tests for reading, social studies, science and arithmetic. Malpass found a relationship between attitude to school and achievement, not as measured by standard achievement tests--these scores did not relate to attitude scores--but in terms of actual marks received for classroom work. These marks were found to relate to attitude scores. Negative feelings about school and poor classroom grades were related. Malpass makes the point that while it cannot be said which came first, a vicious circle of negative attitudes and poor grades, seemingly stimulating each other, could be seen. In the book Life in Classrooms (Jackson, 1968), all studies done on attitude and achievement to that date were reviewed. Jackson noted that no significant relationships had been reported. Neal, Gill and Tismer (1970) felt this was because Jackson cited only studies which measured overall attitude to school, not to specific subjects. Their study looked at attitude and achievement in arithmetic, reading, social studies and science separately, and also looked at girls and boys separately. They also attempted to determine whether attitude could be used to predict achievement. Their findings were as follows: for boys, a significant correlation between attitude and achievement was found for social studies, arithmetic and
reading, and for girls only for reading. In terms of prediction, attitude at the beginning of the year and achievement at the end of the year were significantly related only for arithmetic for boys.

Roettger's (1975) study focused only on reading, and showed a low correlation between attitude to reading and achievement for 697 grade three to six students. Roettger concluded that while there does seem to be some relationship, it is a weak one, and cannot be used to make predictions.

In another study Roettger (1980) measured attitude and achievement in reading and selected for further study 75 students whose attitude scores conflicted with their achievement scores. Thirty-six had low attitude and high performance; 39 had high attitude and low performance. Discussions with these students led the author to conclude that the first group saw reading as a tool for survival and future success, and it made them feel smarter. The second group saw reading as a means of gaining specific information for good school performance.

In Knaupp's (1973) review of studies on attitude and achievement in arithmetic, almost all of the studies found no significant relationship between attitude and achievement in mathematics. Most studies seemed to indicate that students value mathematics, that is, they
feel it is an important subject, but they do not necessarily like it. Earlier Neale (1969) stated similarly that we can produce students who achieve well in mathematics, and think highly of its value, yet dislike it and prefer not to do it. Knaupp's review also indicated that achievement cannot be used as a predictor of attitudes in mathematics, and vice versa. Knaupp himself felt that the instruments used to measure attitudes to mathematics have not been sensitive enough and are of questionable validity. He suggested that there is a major need for better instruments that might help uncover factors which influence students' attitudes and opinions.

Michaels and Forsyth (1978) offered some advice on exactly what should be measured in a study of attitudes to mathematics. They stated that instruments should measure a student's enjoyment of mathematics, security and confidence with it, and appreciation of its value and usefulness. They cautioned that researchers should be sure they are measuring attitudes to mathematics, and not other variables such as achievement or attitude to teacher.

Shaughnessy, Haladyna and Shaughnessy (1983) used a regression analysis to illustrate which of several variables contributed to the attitudes toward mathematics of grade four, seven and nine students. The strongest relationship in all three grades was with the quality the
authors called "fatalism". They describe this as the belief that "math is something that happens to you, and is not a result of your work and effort." It could also be described as students' perception of their ability in mathematics. While achievement was not a variable in this study, the study does have implications for the attitude-achievement question. Malpass (1953) described the possible effect of this fatalistic attitude as "a vicious circle of negative attitudes and poor grades". In another review of attitudes toward mathematics

Aiken (1976) reported that l) when attitude scores are used as predictors of achievement, a low but significant positive correlation is usually found; 2) attitude is second to ability as a predictor of achievement; 3) in late elementary and junior high school the marks a student gets help to form his attitudes, rather than vice versa; 4) the attitude-achievement predictor is stronger for girls than for boys; and 5) boys show somewhat better achievement, and less anxiety to mathematics, than girls. Schofield (1982) measured attitudes toward and achievement in mathematics for nearly 2,000 grade three to six students at the beginning and end of the school year. Schofield administered two kinds of achievement tests, one testing mathematics concepts and one testing computation. Results from this study indicated that the attitude-
achievement relationship was significantly stronger l) in boys than in girls; 2) in computation compared with concepts; and 3) late in the school year rather than early. The relationship between attitude and achievement also appeared to increase with successive grades.

Some of the difficulties of accurately analyzing and classifying the very diverse responses of students is evident in Kiryluk's (1980) sample of students' responses to questions about their feelings on mathematics. Some students said they liked mathematics because it was always different; some hated it because it was always the same. Some desired easy exercises so that they did not have to struggle; some wanted challenging, difficult exercises. Brodie (1964) tested high school students to see if any relationship existed between attitude and achievement. He administered tests measuring nine aspects of academic knowledge and skill. Attitudes were measured using the Student Opinion Poll developed by Jackson and Getzels (1959). The results of Brodie's study indicated that tests which measured skills closely associated with classroom objectives and drill routine were more closely related to attitude than were general knowledge areas acquired through independent reading and observation. In other words, a negative attitude to school was related to poor performance in school subjects, but not to general knowledge gained
outside the classroom. These results are similar to those of Malpass (1953), who found that classroom grades, as opposed to standard achievement test marks, were related to attitude.

Dean (1950) examined the attitude-achievement question by asking students their subject preferences and relating these to scores on achievement tests. He found a tendency, but no significant relationship, between subject preference and achievement among the elementary school students involved in the study.

## Influence of the Teacher

Tenenbaum (1940) suggested that while many factors may influence a child's attitude to school, the teacher is the single most important factor. He also expressed the view that of the many influencing factors the teacher is the most flexible and easily changed. If, as research seems to indicate, the teacher is an important influence on students' attitudes, then the discussion of the teacherpupil relationship is relevant to the study of subject preference.

Lounsbury (1981) reported on a study of the middle school experience in which researchers closely observed 100 grade seven students in 100 different schools. Each student was followed through a day of school, observed, and
later interviewed as to how he felt about school. These conclusions were drawn: the grade seven day is often not interesting or varied enough; more emphasis shold be placed on individual needs; the relations between teachers and pupils are generally good, but the relationship is not being translated into educational independence of thought or the sharing of learning experience.

Brooks (1978) had 94 grade four to six students draw pictures of their classrooms. Each picture portrayed the teacher answering a question the pupil had just asked. Students also answered a written questionnaire that measured attitude to school. Results were that students with negative attitudes to school usually drew the teacher far away from the student in the picture, while those with positive attitudes drew the teacher standing closer to the student. There was also less discrepancy in height between the student and the teacher in the drawings of those with positive attitudes. The authors felt that such classroom contextual drawings formed a good, unobtrusive measure of pupil attitudes to school.

The influence of the teacher on younger children was demonstrated in Sechrest's study (1962) of children in kindergarten, grades one, two and three. From the interviews with the children, it appeared that their teachers used many motivational devices such as stars, praise and
criticism. The most powerful device from the children's point of view was the teacher's own attention, which she could give or withhold. Most of the children in this study were generally positive about their experiences in school, and most seemed to regard the teacher as the main source of the good things that happened to them in school. Jersild's (1943) study of characteristics of teachers who are liked best and disliked most showed the most valued traits to be kindness, sense of humour, liveliness and a liking for others. As well, children liked teachers who were fair.disciplinarians and were interesting and helpful in actual teaching. Skill as a teacher was mentioned more by older children. Characteristics disliked were sarcasm, unkindness, the showing of favoritism and the meting out of unfair punishments.

Leeds' (1954) study of teacher behavior liked and disliked by grade four to six students showed similar results. Students disliked teachers who scolded a lot, were bossy and cross, talked too much, were angry when students didn't understand, and gave a lot of homework. Even superior teachers were seen as having 'pets', and this was universally disliked. Pupils did like teachers who were patient, kind, interested, helpful, understanding, fair, fun and who kept their promises. They expressed a real fear and dislike of teachers who yelled, were unfair
and embarrassed pupils. Sense of humour was much valued. The extent to which teacher behavior affects students' subject preference remains to be demonstrated, but it seems logical that a teacher whom students like and trust could evoke more positive reactions to the various subjects, and a teacher students dislike could have the opposite effect. Together with personality traits must go skill as a teacher of a specific subject, but skill as a teacher was mentioned less often than the 'human' characteristics by the students in these two studies.

Tenenbaum (1944), whose study indicated that students were quite critical of school, found that teachers were more popular than school itself, although those who disliked school mentioned the teacher most frequently as the cause. Girls liked their teachers more often than boys.

Tiedeman (1942) found results similar to the later studies of Jersild and Leeds: seventh, eighth and ninth graders disliked teachers who were autocratic and domineering; who used ridicule and sarcasm; who made threats and gave severe punishments; who did not provide for individual differences and who showed favoritism. Students liked teachers who were kind and cheerful; were helpful and explained things well; who had no 'pets' and were fair to all; who were neat and tidy in their dress and
classroom; who were friendly and polite when encountered out of the clasroom; who had a sense of humour and who understood children.

In Witty's (1947) analysis of the personality traits of the effective teacher, he described the results of reports written by 12,000 grade two to twelve students entitled, "The Teacher Who Has Helped Me Most". The twelve most frequently mentioned traits were a co-operative, democratic attitude, kindliness and consideration for the individual, patience, wide interests, good personal appearance and pleasing manner, fairness and impartiality, sense of humour, good disposition and consistent behavior, interest in pupils' problems, flexibility, use of recognition and praise, and unusual proficiency in teaching a particular subject.

Two studies linked teacher attitude toward school subjects and students' attitudes toward the same subject. Faust (1963) studied the subject preferences of 2,535 grade five pupils. One of the findings of this study was that there was a significant relationship between the attitudes of teachers and the attitudes of their students to school subjects.

Breen (1979) studied grade one to five students and their attitudes to arithmetic, science, social studies nd reading, and found a significant relationship between
teacher interest in subject matter taught and students' attitudes toward subject matter.

Inskeep and Monroe (1965), however, concluded from their study that there was no significant correlation between the preferences of teachers and the preferences of their students, for various elementary school subjects.

Sex Differences
One of the factors that is mentioned most often in student attitude reseach is the different attitudes expressed by girls and boys. Boys and girls tend to react differently in school and have different subject preferences.

Barker Lunn (1972), who studied 2,000 junior school children in England, found that girls had significantly more favorable attitudes to school. They also had more interest in, and placed more importance on schoolwork. They were more involved with the social network of their own classrooms, and were more conforming. On the other hand, girls had a poorer academic self-image and were more anxious in class. Barker Lunn suggested that this was because girls set higher standards for themselves and judged themselves more harshly. In this study girls also obtained higher scores on relationships with teachers. Brodie (1964) found that the attitude-achievement link
was stronger in girls than in boys. In this study, which measured students' satisfaction with school against their achievement, satisfied girls obtained the highest achievement scores, and dissatisfied girls obtained the lowest achievement scores.

Glick (1970) also found more extremes with girls when he studied attitude to school and socioeconomic status. Low socioeconomic status girls had the least favorable attitudes to school, and high socioeconomic status girls had the most favorable attitudes.

Jackson and Getzels (1959) examined the psychological bases for students' dissatisfaction with school. They found that while dissatisfied boys tend to place blame outwardly on school authorities and others, and thus become disruptive, dissatisfied girls tend to feel inadequate and blame themselves. The fact that teachers in this study were able to distinguish dissatisfied from satisfied boys, but were less able to make the distinction with girls, was considered by Jackson and Getzels to be indicative of how feelings of dissatisfaction are manifested differently in girls and in boys. While dissatisfied boys tend to act out, dissatisfied girls tend to retreat into themselves with an inner anxiety that may not be easily discernible.

Neil and Tismer (1970), Tenenbaum (1940) and Wisenthal
(1965) all found that girls' attitudes in general were more
positive than boys'.
There are also differences in the subject preferences and achievement of girls and boys. Most studies show that girls like English better and boys like mathematics and science better.

In terms of achievement, Wisenthal (1965) found that girls did significantly better in school.

Of three studies that did find a link between attitude and achievement, one study found this relationship to be stronger in girls than in boys, while two studies found the link to be stronger in boys than in girls.

The Decline in Attitudes to School
Two studies indicated that students' attitudes to school may decline from fall to spring of the school year. Flanders, Morrison and Brode (1968), who studied 820 sixth graders, found a significant loss in positive attitude of pupils toward their teachers and their schoolwork during the school year. This erosion of positive attitudes did not appear to be related to IQ, socioeconomic status or school achievement. Rather it was related to a student's sense of locus of control. Those with an external locus of control, who tended to believe that outside factors were affecting, their lives, began the year with less positive attitudes and also showed significantly greater loss of
positive attitudes during the year than did students with an internal locus of control, who tended to believe that they basically controlled their own lives. Greater losses of positive attitudes also occurred among students whose teachers exhibited a lower incidence of praise and encouragement.

Neale, Gill and Tismer (1970) found that students' attitudes toward all subjects were less positive at the end of the year than at the beginning. While both girls' and boys' attitudes declined, girls' attitudes in general were found more favorable than boys'.

Several studies have found a general decline in students' attitudes to school as they progress from the primary grades to junior high school.

Wisenthal (1965), in a study of over 2,000 English junior school students, found that attitudes to school declined from the first to the fourth form.

Beck (1977) reported that while pupil attitudes to the school curriculum were generally positive, attitudes were less positive as grade level increased, especially after grade four.

Haladyna and Thomas (1979) studied 3,000 grade six to eight pupils and found that their attitudes to school showed a steady decline as grade level progressed, until by grade eight students were quite negative. Attitude to
school did not seem to be related to attitude to specific subjects. Attitudes to specific subjects were fairly stable throughout the grades.

Snyder and Sibrel (1971) found that of 40 common educational experiences, 24 were perceived significantly more negatively by intermediate children than by primary children.

Other Factors Related to Attitudes to School
Another factor that has been looked at in relation to student attitudes to school is method of instruction. Anttonen and Broome (1978) examined students' attitudes, as well as several other factors, at three schools in the same district. One of the schools had individualized instruction and the other two had regular instruction. The results indicated that students in the school with individualized instruction had more positive attitudes than those in the two schools with regular instruction.

Gilbert (1980) reported on an evaluation of a new alternate program offered at an elementary school in Vancouver. This program had curricular and organizational modifications that offered optional activities, community recreation, semestering of some subjects and structured free time for grades four through seven. Evaluation of the program indicated that there was basically no difference in
attitude between the alternate program students and their regular program counterparts, except that alternate program students were more positive regarding school social structure and climate.

Another study compared the attitudes to science of students in a regular and a revised program. Lowery, Bowyer and Padilla (1980) compared the attitudes of 110 elementary students who had experienced the full six years of a new, experimental science course that was less textbook and more activity oriented, with the attitudes of similar regular program students. Boys in both programs were more favorable to science than girls. New program students, both boys and girls, were significantly more favorable to science, experimenting, and to scientists, than the regular program students. The new program students enjoyed science more. The authors saw this as an encouraging sign that an improved curriculum can have a positive effect on students' attitudes.

Glick (1970) found that the attitudes to school of sixth grade students were affected by socioeconomic status. Low socioeconomic status females had the least positive attitudes to school, and high socioeconomic status females had the most positive attitudes. Low socioeconomic status boys' attitudes improved from fall to spring, and high
socioeconomic boys' attitudes declined from fall to spring.

Epstein and McPartland (1976) studied students' satisfaction with school and found that students with high satisfaction with school were generally those who were comfortable with the school rules and regulations, were ambitious and industrious, had good self-evaluation and received good feed-back from teachers and parents.

These studies help to form the overall picture of student attitudes of which subject preference is a part.

## Summary

From this review, several major points have emerged with respect to students' attitudes to school. 1. While most studies found no relationship or a weak relationship between attitude to school and achievement, Malpass (1953) and Brodie (1964) did find a relationship between attitude and actual classroom grades, rather than standardized test results. Neale, Gill and Tismer (1970) found significant relationships between attitude and achievement for boys for social studies, arithmetic and reading, and for girls for reading.
2. The teacher is a major influence on student attitudes. While research has revealed the important influence of the teacher on students' general attitudes to school, little
research has been directed toward the influence of the teacher on attitudes to specific subjects. Faust (1963) and Breen (1979) did find that teacher attitudes toward school subjects were related to students' subject preferences.
3. Boys and girls have different attitudes to school. Girls tend to be more positive to both school and teachers. Boys and girls also tend to have different subject preferences. Girls express stronger preferences for language and reading, while boys express stronger preferences for science and mathematics.
4. Curriculum, method of instruction, socioeconomic status and self-concept appear to be related to attitude to school. Several studies showed that an improved curriculum or a different method of instruction could result in improved attitudes toward a specific subject, or to school in general. Students with a good self-concept appear to have more positive feelings about school. Glick (1970) found that low socioeconomic status girls had the least positive attitudes to school, and that high socioeconomic status girls had the most positive attitudes. Glick's study also indicated that low socioeconomic status boys' attitudes improved from fall to spring of the school year, and high socioeconomic status boys' attitudes declined from fall to spring.
5. In terms of subject preference, students appear to like physical education, arithmetic and art best, rate social studies, science, music and reading in the middle, and rate language the lowest.

The present study attempts to add to the body of knowledge on student attitudes to school by examining students' subject preferences in relation to sex, grade level, achievement, ability and the teacher. By examining all of these variables in relation to the full range of elementary school subjects, this study should provide a more comprehensive picture of subject preference than has yet been reported in the literature.

## Chapter III

Method

Subjects
This study involved 296 students from a school district in the metropolitan area of Vancouver, British Columbia. This number comprised all the grade five, six and seven students in three different schools. Table 1 shows the number of boys and girls overall and in each grade.

## Instruments

Subject Area Preference Test. Students' subject preferences were determined by using a test developed by the Instructional Objectives Exchange in California. The test measures preferences for eight subjects in the elementary school curriculum. It is scored as follows: for each subject, four questions are asked. Students can assign zero, one or two points for each question. Thus a total score of eight can be assigned to a subject. Eight indicates the most positive attitude toward a subject, and zero indicates the most negative attitude. Students can assign any number from zero to eight for each subject. A copy of this test can be found in Appendix 1.

No reliability or validity data were available from the publishers for the test, and an ERIC search gave no indication that it had been used by other researchers.

Logical validity was established by submitting the test to a panel of teachers, who found it to appear satisfactory for its stated purpose.

Two methods were used to establish reliability. First, the test-retest method was used. One class was given the test twice with an intervening period of three weeks. Test-retest reliability coefficients were computed for each of the eight school subjects. These are presented in Table 2.

Second, the split half method was used to test internal consistency. This test was performed on one class's Subject Area Preference Tests. These results also appear in Table 2. The low test-retest result for reading may be accounted for by the fact that only one class was used for the test-retest, and any change in that class's reading instruction or curriculum could have affected the students' attitudes to reading, causing them to rate reading differently the second time. This class did experience a change of teacher after the first administration of the Subject Area Preference Test. While a larger test-retest sample would have corrected for this type of effect, only one class was available for two administrations of the

Table 1 Grade Placement of Boys and Girls in the Sample $N=296$

|  | 5 | grade <br> 6 | 7 | total |
| :--- | :---: | :---: | :---: | :---: |
| boys | 52 | 54 | 58 | 164 |
| girls | 47 | 46 | 39 | 132 |
| total | 99 | 100 | 97 | 296 |

Table 2 Test-Retest and Split Half Reliabilities of the Subject Area Preference Test $\mathrm{N}=28$

| Subject area | Test-Retest <br> Results | Internal <br> Consistency <br> (split half) <br> Results |
| :--- | :---: | :---: |
| Physical education | 0.84 | 0.85 |
| Art | 0.70 | 0.70 |
| Mathematics | 0.54 | 0.55 |
| Music | 0.84 | 0.65 |
| Social Studies | 0.67 | 0.70 |
| Science | 0.74 | 0.69 |
| Reading | 0.37 | 0.83 |
| Language arts | 0.82 | 0.58 |

test. Since the internal consistency coefficient for reading is high, and since all other reliability coefficients are satisfactory, this is not seen as a serious weakness.

How I Feel About Language Arts. The purpose of this questionnaire, designed by the author, was to determine possible reasons for students' feelings about language arts, which was the least popular subject according to the results of the Subject Area Preference Test.

Logical validity was established through a procedure in which the test was shown to a panel of teachers, who agreed that it appeared to be an appropriate instrument for its stated purpose.

It was not possible to administer this questionnaire twice to any class because of the amount of class time that was available, and as most responses were descriptive, the split half technique for computing reliability was not appropriate. Thus no reliability coefficients could be computed. This questionnaire can be found in Appendix 2.

## Design and Procedure

In January of 1983 a letter was sent to the school board asking permission to conduct this study in its school district. The request was approved but several constraints resulted:

1. The original request was for 600 students and permission was granted to use 300 students.
2. Random sampling was not possible due to the disruption of classes that would occur if only a few students from each class were to complete the test and questionnaire; thus intact classes were used.
3. Data on the socioeconomic status of the students were not available.

Thirteen of the fourteen grade five to seven teachers in the three schools agreed to participate in the study, and these teachers supplied letter grades for their students in reading, language arts, mathematics, social studies, science, art, music and physical education. Teachers also supplied reading scores from the Canada Test of Basic Skills for each of their students. Throughout the study students were not identified by name, but by school, class and number on the class list.

In February, 1983, the Subject Area Preference Test was submitted to a panel of teachers for their examination. After this panel judged the test to be valid, the test was administered to one grade seven class. Three weeks later, at the end of February, the test was administered to this class again as well as to the other twelve participating classes. The test was administered by classroom teachers according to instructions accompanying the questionnaires.

Questionnaires were then collected and scored by the author. Test-retest reliability coefficients were computed from the scores of the class that completed the test twice.

Scores from the Subject Area Preference Test showed language arts to be the least popular subject, and to investigate further this result the How I Feel About Language Arts questionnaire was designed in March, 1983. This questionnaire was submitted to the same panel of teachers to establish logical validity. In April, 1983, the How I Feel About Language Arts questionnaire was administered by classroom teachers.

## Chapter IV

Results

## Data Analysis

The order of subject preferences was determined overall, by sex and by grade, and means and standard deviations for each subject were calculated. These results are presented in Tables 3 through 8.

When subjects were arranged in overall rank order, as shown in Table 3, four groups or clusters of subjects were discovered. While inspection reveals that the differences between rank orders in each group were minimal, the differences between groups were found to be significant. t-tests of the significance of these differences are presented in Table 9.

Each school subject was plotted according to the frequency by which each of the possible preference scores, zero to eight, was chosen. The distribution of preference scores for each school subject is presented in Figure 1.

Pearson product moment correlations were calculated to see which variables might be correlated with subject preference scores. These results are presented in the form of a correlation matrix in Table 10.

Table 3 Order of Subject Preferences Overall N=296

| Rank | Subject name | Mean* | Standard <br> deviation |
| :---: | :--- | :---: | :---: |
| 1 | Physical Education | 6.67 | 1.79 |
| 2. | Art | 5.73 | 2.06 |
| 3. | Mathematics | 5.69 | 2.02 |
| 4. | Music | 5.20 | 2.32 |
| 5. | Social Studies | 5.11 | 2.19 |
| 6. | Science | 5.08 | 2.37 |
| 7. | Reading | 5.08 | 2.20 |
| 8. | Language Arts | 4.17 | 2.48 |

*Eight was the highest score that could be assigned to a subject.

Table 4 Order of Subject Preference: boys N=164

| Rank | Subject name | Mean | Standard <br> Deviation |
| :---: | :--- | :---: | :---: |
| 1. | Physical Education | 6.78 | 1.67 |
| 2. | Mathematics | 5.46 | 2.08 |
| 3. | Art | 5.44 | 2.22 |
| 4. | Social Studies | 5.29 | 2.27 |
| 5. | Science | 5.18 | 2.49 |
| 6. | Music | 4.79 | 2.56 |
| 7. | Reading | 4.72 | 2.24 |
| 8. | Language Arts | 3.73 | 2.24 |

Table 5 Order of Subject Preferences: girls N=132

| Rank | Subject name | Mean | Standard <br> deviation |
| :---: | :--- | :---: | :---: |
| 1. | Physical Education | 6.54 | 1.94 |
| 2. | Art | 6.10 | 1.78 |
| 3. | Mathematics | 5.98 | 1.91 |
| 4. | Music | 5.71 | 1.88 |
| 5. | Reading | 5.53 | 2.08 |
| 6. | Science | 4.95 | 2.22 |
| 7. | Social Studies | 4.88 | 2.07 |
| 8. | Language Arts | 4.71 | 2.43 |


| Table 6 | Order of Subject Preferences: grade five $\mathrm{N}=99$ |  |  |
| :---: | :--- | :---: | :---: |
| Rank | Subject name | Mean | Standard <br> Deviation |
| 1. | Physical Education | 6.76 | 1.73 |
| 2. | Art | 6.48 | 1.47 |
| 3. | Mathematics | 6.29 | 1.78 |
| 4. | Reading | 5.68 | 2.12 |
| 5. | Music | 5.45 | 2.50 |
| 6. | Science | 5.28 | 2.41 |
| 7. | Social Studies | 5.26 | 2.22 |
| 8. | Language Arts | 5.07 | 2.49 |


| Table 7 | Order of Subject Preferences: | grade sixN=100 <br> Rank Subject name | Mean |
| :---: | :--- | :---: | :---: |
| 1. | Physical Education | 6.68 | Standard <br> deviation |
| 2. | Art | 5.87 | 1.83 |
| 3. | Mathematics | 5.66 | 1.75 |
| 4. | Music | 5.54 | 2.18 |
| 5. | Science | 5.43 | 2.13 |
| 6. | Social Studies | 5.28 | 1.98 |
| 7. | Reading | 4.68 | 2.06 |
| 8. | Language Arts | 3.96 | 2.26 |

Table 8 . Order of Subject Preferences: grade seven $N=97$

| Rank | Subject name | Mean | Standard <br> Deviation |
| :---: | :--- | :---: | :---: |
| 1. | Physical Education | 6.57 | 1.84 |
| 2. | Mathematics | 5.12 | 2.14 |
| 3. | Reading | 4.90 | 2.32 |
| 4. | Art | 4.84 | 2.50 |
| 5. | Social Studies | 4.78 | 2.36 |
| 6. | Music | 4.59 | 2.18 |
| 7. | Science | 4.50 | 2.50 |
| 8. | Language Arts | 3.48 | 2.44 |

Table 9 Subject Preferences Grouped According to Significant Differences in the Means $N=296$

| Rank | Subject name | Mean | Standard deviation |
| :---: | :---: | :---: | :---: |
| 1. | Physical Education | 6.67 | 1.79 t=6.22 $\mathrm{p}<.01$ |
| 2. | Art | 5.73 | 2.06 |
|  | Mathematics | 5.69 | $2.02 \quad t=2.82 p^{<} .01$ |
| 3. | Music | 5.20 | 2.32 |
|  | Social Studies | 5.11 | 2.19 |
|  | Science | 5.08 | 2.37 |
|  | Reading | 5.08 | $2.20 \quad t=4.65 p^{<} .01$ |
| 4. | Language Arts | 4.17 | 2.48 |


| Subject Preferences | Achievement and other Variables |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\overline{\text { APE }}$ | AA | AM | AMu | AS | ASc | AR | AL | CTBS | Div | Gr | Sex | Sch |
| PPE | . 18 | . 04 | . 16 | . 13 | . 15 | . 13 | . 08 | . 05 | . 24 | . 10 | . 03 | . 12 | . 13 |
| PA | . 18 | . 02 | . 01 | . 02 | . 05 | . 02 | . 03 | . 10 | . 07 | . 01 | .31* | . 11 | . 04 |
| PM | . 06 | . 02 | . 11 | . 02 | . 01 | . 01 | . 10 | . 12 | . 10 | . 20 | . 23 | . 08 | . 16 |
| PMu | . 22 | . 10 | . 15 | . 28 * | . 09 | . 01 | . 06 | . 01 | . 05 | . 19 | . 02 | . 08 | . 21 |
| PS | . 09 | . 01 | . 16 | . 04 | . 25 | . 17 | . 09 | . 02 | . 07 | . 04 | . 12 | . 18 | . 08 |
| PSc | . 01 | . 04 | . 01 | . 10 | . 01 | . 19 | . 03 | . 02 | . 05 | . 06 | . 19 | . 12 | . 05 |
| PR | . 06 | . 02 | . 10 | . 02 | . 08 | . 03 | . 03 | . 02 | . 19 | . 22 | .32* | . 21 | . 15 |
| PL | . 11 | . 07 | . 07 | . 09 | . 09 | . 09 | . 01 | . 04 | . 09 | . 13 | . 26 | . 03 | . 10 |

* $\mathrm{p}<.01$


## Abbreviations:

Preferences: Physical Education-PPE, Art-PA, Mathematics-PM, Music-PMu, Social Studies-PS, Science-PSc, Reading-PR, Language Arts-Pl.
Achievement: Physical Education-APE, Art-AA, Mathematics-AM, Music-AMu, Social Studies-AS, Science-ASc, Reading-AR, Language Arts-AL.
Other
variables: Canada Test of Basic Skills Reading Score-CTBS, Division-div,

Figure 1 Frequency Distribution



Figure 1 - cont'd
Reading
$\begin{array}{ll}\text { Mean } & 5.08 \\ \text { SD } & 2.20\end{array}$


Language Arts
Mean 4.17
SD 2.48


Figure 1 - cont'd



Figure 1 - cont'd
Math
Mean 5.69
SD 2.02


Music
Mean 5.20
SD 2.32


An examination of Table $X$ shows three significant correlations: preference in music is correlated with achievement in music ( $r=.28$ ), preference in art is correlated with grade ( $r=.31$ ) and preference in reading is correlated with grade ( $r=.32$ ).

Analyses of variance were done for the effect of sex and grade on each of the eight subject preferences. The effect due to sex was found to be statistically significant for three school subjects, with girls expressing significantly greater preferences than boys for reading $(F(290)=9.99, \mathrm{p}<.01)$, language $\operatorname{arts}(F(290)=10.77, p<01)$ and music $(F(290)=10.48, ~ p<.01)$.

The effect due to grade was found to be statistically significant for four school subject, reading ( $F(290)=5.56$, $\mathrm{p}<.01)$, mathematics $(\mathrm{F}(290)=7.84, \mathrm{p}<.001)$, language arts $(F(290)=9.62, \mathrm{p}<.01)$ and $\operatorname{art}(F(290)=15.61, \mathrm{p}<.001)$.

The interaction between sex and grade level was not found to be significant for any of the eight school subjects.

While the analyses of variance showed a significant grade effect for four subjects, they did not reveal which grade level differences were significant. To determine which grade level differences were significant, a number of t-tests were done. To reduce the number of t-tests, and thus reduce the chance of making a type one error, the
smallest difference was measured for each subject. In the case of mathematics, the difference between the means of grade six and seven was smaller than the difference between grade five and six. The smaller, grade six-seven difference was measured and found to be significant (t $(195)=0.54, \mathrm{p}<.01)$, so the larger, grade five-six difference was also assumed to be significant. In the case of reading the smallest difference, which was between grades six and seven, was not found to be significant, so the larger difference between grade five and six was measured and found to be significant (t(197)=5.79, p<.01). For language arts the smallest difference was between grades six and seven as well. This difference was found to be significant $(\underline{t}(195)=2.58, \mathrm{p}<.01)$, so the larger, grade five-six difference was also assumed to be significant. For art, the smallest difference was between grade five and six. This difference was measured and found to be significant (t(197) $=4.55, \mathrm{p}<.01$ ), so the larger, grade six-seven difference was also assumed to be significant.

In summary, for each of the four subjects in which a significant grade effect was found (reading, mathematics, language arts and art), the differences between grade five and six and between grade six and seven were significant, except in the case of reading, where only the grade five-six difference was significant.

The differences in subject preference means for all eight school subjects, according to sex and grade, are displayed in Figure 2.

Further Findings
Results from the How I Feel About Language Arts questionnaire are presented in Table ll. Responses to each question are given in the form of percentages. Only those responses that were given by $10 \%$ or more of the students in the group are presented.

Only the responses from students who expressed a definite like or dislike of language arts were analyzed. Those who assigned six, seven or eight out of a possible eight to language arts on the Subject Area Preference Test were included in the 'like' group, and those who assigned zero, one or two to language arts were included in the 'dislike' group.

Figure 2 Subject Preference Means
(a) Subject
Preference Means Overall MEAN SD

| PPE | 6.7 | 1.8 |
| :--- | :--- | :--- |


| PA | 5.7 | 2.1 |
| :--- | :--- | :--- |
| PM | 5.7 | 2.0 |


| PMu | 5.2 | 2.3 |
| :--- | :--- | :--- |
| PS | 5.1 | 2.2 |
| PSC | 5.1 | 2.4 |
| PR | 5.1 | 2.2 |
| PL | 4.2 | 2.5 |

(b) Subject
Preference
Boys
Means by Sex
Girls ... PPE 6.86 .51 .61 .9
PA $5.46 .1 \quad 2.21 .8$
PM $5.5 \quad 5.9 \quad 2.1 \quad 1.9$
PMu $4.8 \quad 5.7 \quad 2.51 .8$
PS $5.3 \quad 4.8 \quad 2.3 \quad 2.1$
$\begin{array}{llll}\text { PSC } & 5.2 & 4.9 & 2.5 \\ 2.2\end{array}$
$\begin{array}{lllll}\text { PR } & 4.7 & 5.5 & 2.3 & 2.1\end{array}$
$\begin{array}{lllll}\text { PL } & 3.7 & 4.7 & 2.4 & 2.4\end{array}$
PPE PA PM PMU PS PSC PR PL


Figure 2 continued


Responses to the How I Feel About Language Arts Questionnaire

| like - $\mathrm{N}=86$ |  | dislike - N=73 |  |
| :---: | :---: | :---: | :---: |
|  | statement |  | response |
|  |  | like | dislike |
| 1. | If I had to describe | 25\% | boring 26\% |
|  | language arts in one | 18 | interesting |
|  | word, I would say | 13 | okay 22 |
|  | it is | 11 | good/excellent |
|  |  | -- | bad 17 |
| 2. | If I were a language arts teacher $I$ would | 25 | make it more fun/ |
|  |  |  | give more work/ |
|  |  | 15 | make it harder qive less work/ |
|  |  | -- | give less work/ make it easier 15 |
|  |  |  | emphasize creative |
|  |  | 14 | writing |
|  |  | -- | quit 15 |
|  |  |  | be a good teacher/ |
|  |  | 14\% | explain well l2\% |
|  |  |  | emphasize |
|  |  | -- | spelling 10\% |
| 3. | The thing I like best about language arts is | 45 | creative writing 41 |
|  |  | 27 | spelling 22 |
|  |  | -- | nothing 22 |
| 4. | The hardest thing about language arts is |  | creative writing/ deciding what to |
|  |  | 32 | to write 26 |
|  |  | 22 | language 27 |
|  |  | 11 | nothing-it's easy -- |
|  |  | -- | spelling ll |
| 5. | If I could change language arts somehow I would |  |  |
|  |  | 23 | interesting 32 |
|  |  |  | ```give less work/ make it easier change it to art, PE or mathNone``` |
|  |  | 16 |  |
|  |  |  |  |
|  |  | -- |  |


| statement |  | response |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | like |  | like |
|  | The most important | 37 | spelling | 39 |
|  | thing I have learned | 21 | how to write well | 27 |
|  | from language arts is | 15 | punctuation | 13 |
|  |  | 11 | how to speak well | - |
|  | The most boring part of language arts is | 28 | creative writing | 10 |
|  |  | 22 | language | 31 |
|  |  | 15 | spelling |  |
|  |  | -- | everything | 19 |
| 8. | When I was younger I thought language arts was | 30 | fun | 18 |
|  |  | 26 | boring | 17 |
|  |  | -- | bad | 22 |
| 9. | The most interesting part of language arts is | 44 | creative writing | 42 |
|  |  | 23 | spelling | 19 |
|  |  | 10 | language | -- |
|  |  | -- | nothing | 22 |
| 10. | The thing a language arts teacher should never do is | 22 | give too much work | -- |
|  |  | 13 | yell/be mean | 17 |
|  |  | 11 | give homework | 22 |
|  |  | -- | give work that is too difficult | 13 |
|  |  | -- | be boring | 13 |
| 11. | The part of language arts I like best is | 48 | creative writing | 57 |
|  |  | 42 | spelling | 41 |
|  |  | 10 | language | -- |
| 12. | The part of language arts I am best at is | 50 | spelling | 43 |
|  |  | 38 | creative writing | 57 |
|  |  | 12 | language | -- |
| 13. | Language arts is interesting | 38 | agree | 10 |
|  |  | 19 | disagree | 53 |
|  |  | 43 | no strong | 37 |


| statement |  | response |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | like |  | dislike |
| 14. | Language arts is | 62 | agree | 38 |
|  | useful to me now | 10 | disagree | 19 |
|  |  | 28 | no strong feelings | 43 |
| 15. | Language arts will be | 78 | agree | 52 |
|  | useful to me when I am older | 7 | disagree no strong | 20 |
|  |  | 15 | feelings | 28 |
| 16. | Language arts is | 18 | agree | 20 |
|  | difficult | 35 | disagree | 31 |
|  |  | 47 | no strong feelings | 49 |
| 17. | Language arts is fun | 28 | agree | 7 |
|  |  | 32 | disagree no strong | 64 |
|  |  | 40 | feelings | 29 |
| 18. | I get lots of language | 8 | agree | 12 |
|  | arts homework | 72 | disagree no strong | 58 |
|  |  | 20 | feelings | 30 |
| 19. | I used to like | 32 | agree | 41 |
|  | language arts better when I was younger | 35 | disagree no strong | 34 |
|  |  | 33 | feelings | 25 |
| 20. | I wish I didn't have | 20 | agree | 57 |
|  | to take language arts | 44 | disagree no strong | 16 |
|  |  | 36 | feelings | 27 |

Subject Area Preference Test
In terms of the overall order of subject preference there were four groups, and not eight distinct categories. These four groups are similar to other subject preference study results. Inskeep and Monroe (1965), Faust (1963) and Fraser (1980) all found physical education and arithmetic to be among the most popular subjects, and Inskeep and Monroe, and Faust found language to be the least popular subject. This study confirms those results.

The frequency graphs (Figure l) show considerable similarity between all of the subjects except language arts and physical education. The graph for physical education shows just how popular this subject was among the students in the study. 130 pupils, or almost half the sample, assigned physical education the maximum preference score of eight. Physical education also had the smallest standard deviation. The graph for language arts, on the other hand, shows that preference scores for language arts were more widely distributed, as attested to by the fact that language arts had the largest standard deviation.

The Pearson product moment correlations showed three significant correlations. Achievement and preference in
music appeared to be related. This was the only apparent relationship between achievement and preference, though the correlation coefficient for achievement and preference in social studies approached the level of significance. The other two significant correlations were grade level correlations with preference in art and reading. For art, the preference means for each grade were grade five: mean 6.5, SD 1.5; grade six: mean 5.8, SD 1.7; grade seven: mean 4.8, SD 2.5. These figures show a decreasing preference and an increasing standard deviation with increasing grade level.

Reading did not follow this pattern. While grade fives again expressed the greatest preference, grade six preference scores were the lowest. Means and standard deviations were grade five: mean 5.7, SD 2.; grade six: mean 4.7, SD 2.0; grade seven: mean 4.9, SD 2.3. Standard deviations in this case were all very similar.

The analyses of variance showed sex to be related to subject preference for three subjects, with girls expressing significantly greater preferences than boys for reading, language and music. These results are similar to those of Beck (1977) and Haladyna and Thomas (1979).

The analyses of variance also showed a significant grade level difference for four subject. For each of these four subjects, reading, language, mathematics and art,
grade five students expressed the greatest preferences. For language, mathematics and art, differences between the grade five and six scores, and between the grade six and seven scores, were all significant, indicating a steady decline over the three grades in these subjects. This confirms the findings of Beck (1977) that students' attitudes to school subjects become less positive as grade level progresses. These findings do not concur with those of Haladyna and Thomas (1979), however, who found that while general attitudes to school declined with increasing grade, attitudes to specific subjects were fairly stable throughout the grades. The only subject in this study that did not show some decline from grade five to seven was physical education, which seemed to enjoy universal and continued popularity.

Neither general ability, as measured by the Canada Test of Basic Skills, nor the teacher, as represented in Table 10 by the variable called division, appeared to be related to subject preference.

The How I Feel About Language Arts Questionnaire Responses to many of the questions were remarkably similar for students who liked language arts and those who disliked it. As can be seen in Table 11 (page 31), responses to questions one, two and five all indicated that
students in both groups found language arts boring, and felt it should be made more interesting and more fun. Percentages were very close for both groups making these responses.

Questions three, nine and eleven all indicated that within language arts, students from both groups preferred creative writing overwhelmingly, with spelling second and language a distant third. Again, percentages were very close for both groups.

Question six also showed similar results for both groups. Spelling was felt to be the most important thing learned from language arts, how to write well was second, and punctuation was third.

Responses to several questions did show differences between the two groups, however, questions two, four and ten gave some indication that perhaps students who dislike language arts find it more difficult. In question two, l5\% of the students who liked language arts said that a language arts teacher should give more work and make the work harder, while the same percentage of students who disliked language arts felt a teacher should give less homework and make the work easier. This difference could also indicate less willingness to apply and extend themselves on the part of students who disliked language arts, and not be an indication that they found the work
more difficult.
While students from both groups liked creative writing better than spelling and language, question twelve shows that $57 \%$ of the students who disliked language arts felt that creative writing was the part of language arts at which they did best. More students who liked language arts felt they were better at spelling. Language was again a distant third, with no students in the dislike group claiming language was their best area.

Question sixteen does not support the idea that students who disliked language arts found it more difficult, and results from the Subject Area Preference Test did not show any relationship between either achievement or ability, and preference for language arts. Thus despite the possible interpretation of some parts of the How I Feel About Language Arts Questionnaire that students who disliked language arts found it more difficult, this is not a conclusion that can be realistically drawn. Additional research in this area is needed to clarify this ambiguity.

One of the things that is evident from the results of this questionnaire is that students viewed creative writing, spelling and language very differently. It appears that creative writing, spelling and language should probably have been treated as separate subjects on the

Subject Area Preference Test. This might have resulted in a clearer picture of students' subject preferences.

Students generally appeared to like creative writing, with those who disliked language arts expressing even greater favour for creative writing than those who liked language arts. The students in the dislike group, who did appear to be more apprehensive about difficult work or too much work, may have liked creative writing partly because it allows room for expression with fewer judgements of correct or incorrect. Unlike spelling or language, in which an answer is either correct or incorrect, creative writing is an area in which students can express ideas, even show a sense of humour, and be praised for these things by the teacher without constant corrections. Sometimes minor errors are ignored by the teacher in favour of encouraging students' free expression. Thus there may be less tension and worry involved in creative writing. Also, by its very nature, creative writing might seem less boring than repetitive language worksheets or spelling exercises.

Although students from both the like and dislike group expressed a preference for creative writing, both groups chose spelling as the most important thing they had learned from language arts. This is probably because they must use correct spelling for writing in all subject areas and in
daily life. The practical applications of spelling might be most evident to them. By the same token, language might be the hardest area from which to perceive a practical application.

Undoubtedly language topics such as punctuation and sentence structure must be taught, but perhaps changes are needed in the worksheet and drill method by which language is often approached. If language skills could be taught more as they occur in daily use they might seem less boring and students might find it easier to see their practical application. Perhaps teachers could incorporate more language instruction into creative writing lessons, where students could see how strengthening their language skills can improve their writing.

At any rate, the results of this study hold a consistent and strong message to teachers: language aspects of the curriculum need examination with respect to both content and methodology.

## Chapter VI

## Summary

Physical Education was found to be the most popular subject; art and mathematics were second; music, social studies and reading were third; and language arts was the least popular subject.

The breakdown of language arts into language, creative writing and spelling showed that students liked creative writing best, spelling second and language third. Spelling was seen by students to be the most useful part of language arts. Most students said they found language arts boring. The very low preference expressed by the students for language arts seemed to be related to their negative feelings about language, not creative writing or spelling. Of the variables investigated in relation to subject preference, sex and grade level appear to be the most important. Pearson product moment correlations showed grade level to be significantly correlated with preference for art and reading, and an analysis of variance showed the grade level effect to be statistically significant for reading, mathematics, language and art. In each of these subjects, grade fives expressed the highest preference. All of the eight school subjects studied showed some decline in popularity from grade five to grade seven, with
the continued exception of physical education, which enjoyed universal popularity.

The analysis of variance also showed the sex effect to be significant for three subjects, reading, language and music, with girls expressing greater preferences than boys for each of these.

Achievement, ability and the teacher did not appear to be related to subject preference.

The results of this study are generally in agreement with previous research in the order of subject preferences, in finding a general decline in attitude to school subjects, and in finding that girls are more favorable than boys to reading, language and music. Most studies investigating a possible link between achievement and subject preference or attitude have found a weak relationship or no relationship, and the results of this study also confirm that finding.

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Appendix 1
Subject Area Preferences

## Intermediate Level

Description and Rationale
The Subject Area Preference inventory is composed of two parts: the first presents a list of seven subject areas commonly taught in the upper elementarty grades and asks students to indicate those which they like and dislike very much; the second presents the same seven subjects and asks students to respond "yes" or "no" to indicate if each (1) is interesting; (2) is useful, and (3) has interesting textbooks and other materials. The measure provides a straightforward descriptive index of students' preferences regarding the various subject areas and a modicum of information regarding student perceptions of the strengths and weaknesses of each subject as it is taught in school. Directions for Administration

Directions are provided with the measure and should be read orally to the students, with ample tme allotted for student questions. Remind the students that on both parts of the instrument, items about which they have no strong opinion should be left blank.

## Scoring

To obtain, for each student, a profile of his relative preferences for the seven school subjects, assign points to
each response as follows:
2 points for each "L" or "yes" response
1 point for each space left blank
0 points for each "D" or "no" response
To obtain an average score for a group of students for a particular subject area, sum the individual students' scores and divide by the number of students in the group. If more detailed information is desired regarding which subjects are perceived as being interesting, useful, and having good textboks and other paterials, these responses for each subject area may be treated separately. Directions: Show how you feel about the following subject by marking:

L by those you like very much
D by those you dislike very much
Where you have no strong opinion, leave the space blank

You may mark $L$ or $D$ by as many subject as you wish. Do not write your name on this paper.
$\qquad$ Reading
$\qquad$ Arithmetic
___Social Studies (i.e. history and geography)
$\qquad$
$\qquad$
___ Physical Education (P.E.)
$\qquad$
___Language Arts

Instructional Objectives Exchange Copyright 1970<br>Box 24095<br>Los Angeles, California 90024

Directions: Below you will find seven school subjects, each followed by three descriptive phrases. If you think a description is definitely true about a subject, mark yes next to the descriptive phrase. If you think a description is definitely not true, mark no on the line. If you have no strong opinion, leave the space blank. For example:

Subject X
yes is interesting
___ is useful
no has good textbooks and other materials

1. Reading
$\qquad$ is interesting
$\qquad$ is useful
$\qquad$ has good textbooks and other materials

## 2. Arithmetic


3. Social Studies
____is interesting
___ is useful
_has good textbooks and other materials
4. Art
_____ is interesting
is useful
has good textbooks and other materials
5. Music

$\qquad$ is useful
$\qquad$ has good textbooks and other materials
6. Physical Education

___is useful
$\qquad$ has good equipment and other materials

## 7. Science

> ____ is interesting
> is useful
___ has good textbooks and other materials
8. Language Arts
____is interesting
___ is useful
___ has good textbooks and other materials

Appendix 2

## How I feel about language arts

Language Arts includes language, creative writing and spelling. Some of these questions will ask you to think about these three things separately. When a question just says Language Arts it means the general school area caled Language Arts. In these questions think of language, creative writing and spelling together. Please answer each question as carefully and truthfully as you can.

1. If I had to describe Language Arts in one work $I$ would say it is $\qquad$ -
2. The thing I like best about Language Arts is $\qquad$
$\qquad$ -
3. If I were a Language Arts teacher I would $\qquad$
$\qquad$ -
4. The hardest thing about Language Arts is
$\qquad$ -
5. If I could change Language Arts somehow I would $\qquad$
$\qquad$ -
6. The most important thing I have learned from Language Arts is
7. The most boring part of Language Arts is $\qquad$
$\qquad$ -
8. When I was younger I thought Language Arts was $\qquad$
$\qquad$ -
9. The most interesting part of Language Arts is $\qquad$
$\qquad$ -
10. The thing a Language Arts teacher should never do is

Please check one:
11. The part of Language Arts I like best is Language $\qquad$ Creative Writing $\qquad$ Spelling $\qquad$
12. The part of Language Arts $I$ am best at is Language $\qquad$ Creative Writing $\qquad$ Spelling $\qquad$

Please put a checkmark that shows whether you agree, disagree, or have no strong feelings about each of the following sentences.

$\underline{\text { agree }}$| no strong |
| :--- |
| feelings | disagree

13. Language Arts is interesting
14. Language Arts is useful to me now
15. Language Arts will be useful to me when I am older ( ) ( ) ( )
16. Language Arts is difficult ( ) ( )
17. Language Arts is fun
18. I get a lot of Language Arts homework
19. I used to like Language Arts better when I was younger
20. I wish I didn't have to take Language Arts

Appendix 3

Dear Principal:
I am about to embark on my Master's thesis study and I would very much like to have students in your school participate.

The purpose of the study is to determine the preferences of intermediate students for the subjects in the school curriculum. This will be done by means of a questionnaire. Once the subject preferences have been determined a second questionnaire will attempt to discover reasons for the dislike of the subject that appears to be most unpopular. Each questionnaire will take about fifteen minutes and will be administered by classroom teachers.

Teachers will be asked to give letter grades for each student for each of the subjects in question, and it is hoped that CTBS reading scores can be obtained from school records. This information, as well as other variables such as sex, age and grade will be correlated with the subject preference results to form a profile of how various groups of students feel about the various subjects.

A total of thirty minutes of class time is required from each student. I would like to use all the grade five to seven classes in your school.

I feel the results of this study could be useful for curriculum planning and revision, and would be most grateful for your participation. Please contact me at any time and I will be happy to discuss the study in greater detail. Thank you very much.

Sincerely,

Deborah Court
telephone:

## Appendix 4

## Dear Teacher:

Thank you so much for taking your class time to participate in this study. The total time required is about 30 minutes from your students and another fifteen minutes or so of your time.

The purpose of the study is to discover which subjects in the curriculum intermediate students like and dislike the most. The Subject Area Preference Test will be used for this purpose. When these results have been tabulated a second short questionnaire will follow. Its purpose will be to discover reasons why the subject that is most disliked is held in such low regard.

The first questionnaire will take only ten minutes for the students to complete. Please go over the instructions yourself first, and then discuss them with your students to be sure they understand what to do. The second questionnaire, which will come in two or three weeks, will take fifteen or twenty minutes for you to administer.

If you will take the additional time to fill in approximate letter grades for your students, as well as their most recent CTBS Reading scores, it will be much appreciated.

Strict confidentiality will be observed. No students' or teachers' names will ever be used. It is necessary to identify students by number, though, for purposes of data analysis. Thus each student questionnaire is marked at the lower right hand corner with a number. This number corresponds to a student's number on your alphabetical class list. Sheet number one, in a hypothetical class, would go to student Anderson, and sheet number 28 would go to student Zaborsky.

Put your completed answer sheets in the envelope and return them to the office, where they will be picked up.

Results of the study will be available when the final report is completed. I hope that knowledge gained through this study might prove useful in curriculum planning and revision.

Again, thank you.

> Sincerely,

Deborah Court
UBC Master's candidate and teacher at Diefenbaker School

## Appendix 5

Please give a grade of $A, B, C, D$ or $F$ for each Subject (except CTBS).

| Pupil Reading Math Soc. Sci. Art Music PE Reading |
| :--- |
| No. Re. |
| 1 |
| 2 |

Pupil CTBS No. Reading Math Soc. Sci. Art Music PE Reading

19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35

Appendix 6

Dear Teacher:
The questionnaire filled out by students recently showed Language Arts to be the least popular subject. The enclosed questionnaire will try to uncover some reasons for this dislike. Thank you for your participation in the last part of this study.

I would like very much to tabulate these results over spring break, so I hope you will be able to find the time to administer this questionnaire by Thursday, March 24th. Envelopes will be picked up at the office.

Enclosed is a list of your class results for the Subject Area Preference Test. Subjects are listed from most to least popular.

Thanks again for all your help.

Sincerely

Deborah Court

