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THE UNIVERSITY OF ALBERTA



AN EXAMINATION OF PUPIL PROMOTION
IN A LARGE URBAN SCHOOL SYSTEM

by



ERROL A. WHELAN

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
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Abstract

The purpose of this study was to examine and report on promotion policies and practices in Grades Kindergarten to 9 in the Edmonton Public School System.

The data for the school populations for 1974, 1975, and 1976 were obtained from the school system. The population was examined from two points of view. The first analysis concerned itself with the agedness of the school population. Agedness was a broad term that included three age categories:

1. Normal age was used to describe a student who was within the age limits set for the grade. The age limits for Kindergarten were considered to be four years six months to five years six months. The limits accounted for 95 percent of the Kindergarten enrolment.
2. Overage was used to describe a student over the age limits for the grade.
3. Underage was used to describe a student who was under the age limits for the grade.

The second analysis concerned itself with the promoted and non-promoted in the school population. Promoted referred to a student in one grade in June of one year and in the subsequent grade in June of the next year. Non-promoted referred to a student in one grade in June of one year and in the same grade in June of the next year.

The findings revealed that overage started in Kindergarten and climbed to a high of 30 percent by Grade 7. Normal age was highest

in Kindergarten at 95 percent and lowest in Grade 7 at less than 70 percent. Underage was slightly different for the three years. In 1974 underage started at less than 1 percent and peaked in Grade 9 with 5 percent. In 1975 underage started at less than 1 percent and slowly climbed to 4.2 percent by Grade 9. In 1976 underage started at .6 of 1 percent in Kindergarten and peaked at 2.6 percent in Grade 9.

The findings on non-promotion revealed that non-promotion started in Kindergarten, peaked in Grade 1 at 6 percent and slowly but not systematically fell off to less than one-half of 1 percent by Grade 9.

The majority of the non-promoted and the overage were male.

The analysis of the data led to the conclusion that the Continuous Progress Plan that was the approved promotional policy of the Board of Trustees of the Edmonton Public System was not the promotional practice in the schools. Instead the examination of the data pointed to a "graded structure" in place in the school system.

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CHAPTER I

INTRODUCTION

Over the past 75 years numerous studies have been carried out on promotion and non-promotion in schools. In most of the research the practice of non-promotion has been found to be relatively ineffective with respect to gains in student achievement. (Worth, 1959; Allison, 1959; Goodlad, 1954)

The concept that grade repetition will improve student achievement has remained in practice with some teachers even in the face of overwhelming evidence to the contrary. The findings of studies on the effects of failure have caused some school systems to introduce continuous progress plans in order to alleviate some of the difficulties of the graded system. In the Edmonton Public School District a Continuous Progress Plan was introduced as a pilot program in the Parkallen school in 1957. The pilot program was expanded and by 1960 twenty elementary schools were following a continuous progress model.

Senior administrators of the Edmonton Public System presented a Continuous Progress Plan for the school system to the Board of Trustees on December 13, 1960. The plan received the unanimous approval of the trustees.

The principles underlying the theory of continuous progress were outlined by Le Baron in 1945:

1. "Grade standards" in terms of achievement in skill subjects will be abandoned.
2. The curriculum will be developed continuously, and each child will progress through it at his optimum rate.

3. Adjustment from group to group will be a continuous process and not solely a year-end consideration.
4. Acceleration, or double promotion, will seldom be used.
5. Generally speaking, adolescents will not be kept in the elementary grades but will be placed in junior high school.
6. Special classes will be provided for mentally sub-normal (those with intelligence quotients of 50 to 70- or 75). Special classes will be provided for the physically handicapped whenever possible.
7. Promotion to junior high school will be made not in terms of readiness for a set curriculum but rather in terms of the developmental needs of the child.
8. The length of time each child spends in the elementary school will be determined by a careful estimate of his needs in the light of his chronological age, mental age, achievement, physical development, and social and emotional maturity.
9. Methods of reporting to parents and techniques for enlisting parental understanding and cooperation with the program will be carefully revised and developed in the light of these newer emphasis in pupil progress. (Le Baron, 1945:89-96)

The Continuous Progress Plan embraced by the Edmonton Public system had as its goal 10 percent of the students completing elementary school (Grades 1-6) in five years, 10 percent of the students completing elementary school in seven years and 80 percent completing school in the normal six years.

The Problem

The purpose of this study was to ascertain the promotional practice in the Edmonton Public School System fifteen years after the Continuous Progress Plan became the promotional policy of the School Trustees. The Continuous Progress Plan is still the promotional policy of the School Trustees of the Edmonton Public System. The purpose of the study can be delineated by the following questions:

1. Is the promotional practice of the Edmonton Public School System in line with the promotional policy of the Edmonton Public School Trustees?
2. What percentage of the student population can be classified as overage, underage, and normal age for each grade for the years 1974, 1975 and 1976?
3. What percentage of the overage, underage, and normal age population is male and what percentage is female?
4. What percentage of students failed in each of the grades (1-9) during the school years 1974 and 1975?
5. What percentage of the failures for 1974 and 1975 is male and what percentage is female?
6. Is there a relationship between month of birth and failure?
7. What is the cumulative effect by the end of grade nine of applying the failure rate in each grade?

The Need for the Study

The Continuous Progress Plan was last reviewed by W.R. Prunkl in 1970. In his study Prunkl found that the Continuous Progress Plan was operational in the School System. The distribution of pupils in the three phases of the plan is indicated in Table 1 taken from Prunkl's study.

This study provides information on the status of the Continuous Progress Plan during the school years 1974 and 1975. The data also provided information on the distribution of students by age, grade, and sex.

Table 1
School Year 1969-70

Total Distribution of 20,067 Pupils (Second to Fifth Year)					
Five Year		Six Year		Seven Year	
Girls	Boys	Girls	Boys	Girls	Boys
567	420	8,194	8,733	796	1,357
987		16,927		2,153	
57.45%	42.55%			36.97%	63.03%
4.92%		84.35%		10.73%	

Definition of Terms

Pass and promotion are used synonymously in this study. They refer to a student recorded in one grade in June of one year and in the next grade in June of the next year. Non-promotion and failure are used synonymously in this study. They refer to a student who is in one grade in June of one year and in the same grade in June of the next year. Normal age is used to describe a student who is within the age limits set for the grade. The normal age for grade 1 is considered to be five years six months to six years six months. The rationale for the selection of the age limits is directly related to the age a student may start school as outlined in the Operational Handbook of the Edmonton Public School System. (It was found that the age limits selected accounted for 95 percent of the students entering school for

the first year.) Overage is used to describe a student who is over the age limits for the grade. Underage is used to describe a student who is under the age limits for the grade.

Delimitations of the Study

The study investigated the records for three years: 1974, 1975 and 1976. The two years 1974 and 1975 could be investigated for failures because data for the following years were available. If a student failed in 1974 he was recorded in the same grade in 1974 and in 1975. If a student failed in 1975 he was recorded in the same grade in 1976. Since the data for 1977 were not used it was impossible to tell which student failed in 1976. Consequently, the year 1976 data were investigated only with respect to the age of the population.

The study did not attempt to analyze the classroom program a student was following the second year in a grade. Some of the students may not have been repeating the work of the previous year. The students who were in the grade for the second year may have been working on their programs where they left off the previous year.

CHAPTER II

Review of the Literature

This review is presented in four sections. The first section describes some of the research carried out in the early part of the century. The research was concerned with overage students and later with academic achievement. In the second section the research addressed itself to the problem of pupil progress and pupil adjustment when students were failed. The third section deals with studies carried out in Alberta on the subject of non-promotion. The final section deals with the studies carried out in the past decade.

Early History (Academic Achievement)

In his annual report of 1904 William H. Maxwell, Superintendent of Schools for New York City called the attention of the public to the great number of overage children in the elementary schools of the city (Maxwell, 1912:293). Dr. Maxwell showed that some 39 percent of the public school pupils were overage for their grades. At that time Maxwell's work stood alone, there was nothing to compare it with.

In 1904 an experienced educator, Charles H. Keyes began a seven year study of failure. (Bocks, 1977:379) For a school district of about 5,000 pupils Keyes reported that the failures were divided as follows: 21 percent had better grades, 39 percent showed no change and 40 percent had lower grades during the repeat year. (Goodlad, 1954:301)

B.R. Buckingham presented a paper on an experiment in promotion at the meeting of the National Association of Directors of

Educational Research in 1921. Buckingham reported that in the fall of 1918 an influenza epidemic badly disorganized the schools of Springfield and Decatur, Illinois. In order to get the promotion rate back to a normal level 1,276 pupils, who would have failed if normal school promotion policy was followed from second to seventh grade were advanced to the next grade at the close of the first semester of 1918-1919. The same practice was followed in June of 1919, in December of 1919 and in June of 1920. In all a total of 3,141 pupils were advanced on probation. Fifty-six percent of the probationary cases showed improved scholarship, 41 percent showed no change and 3 percent showed a loss. (Buckingham, 1921:333).

In 1928 B.T. McKinney, in his doctoral research at the University of Illinois, studied failures above the first grade and found that 35 percent of the repeaters did better work the second time, 53 percent did not improve, and 12 percent did poorer work. (Bocks, 1977:380)

In a 1929 Long Beach, California, study Vivian Klene and E.P. Bronson equated children, all of whom were to be failed in the grade, on the basis of chronological age, mental age, and sex. Half were then promoted and half were retained. They concluded that in terms of measured achievement potential repeaters profited more from promotion than did the repeaters from non-promotion (Goodlad, 1952:151; Bocks, 1977:380).

Three Newark, New Jersey, researchers found that children with low I.Q.'s who had failed several times were not doing as well in their school work as children of the same ability who had been kept with children of approximately the same age (Farley, Frey, Garland,

1933:186).

Grace Arthur took a sample of 120 grade one students. She matched sixty repeaters with sixty nonrepeaters on the basis of mental age. Arthur concluded that the average repeater did not learn more in two years than the average nonrepeater learned in one year. (Arthur, 1936:203-205)

Henry J. Otto and Ernest O. Melby made an attempt to evaluate the threat of failure as a factor in school achievement. Their study was conducted in four typical school systems of northern Illinois. One hundred and ninety-two pupils in Grade II and 160 in Grade V were used as the sample. The sample was divided into experimental and control groups of approximately equal numbers. Pre-tests were conducted on achievement and controls were established on chronological age, mental age and I.Q. distributions of the control and treatment groups. Otto and Melby concluded that the threat of failure caused no difference in the achievement of the treatment group. (Otto and Melby, 1935:588-596)

Summary

The early studies indicated that the problem of failure in the graded school led to the student population becoming overage. The studies also indicated that repeating a grade apparently did not help a student improve his achievement.

Pupil Progress and Pupil Adjustment

In 1941 Carleton Saunders made an extensive survey of studies into the effects of non-promotion (Goodlad, 1952:151). He summed up the survey as follows:

It may be concluded that non-promotion of pupils in elementary school in order to assure mastery of subject matter does not often accomplish its objective. Children do not appear to learn more by repeating a grade but experience less growth in subject matter achievement than they do when promoted. Therefore, a practice of non-promotion because a pupil does not learn sufficient subject matter in the course of the school year, or for the purpose of learning subject matter, is not justifiable. (Saunders, 1941:29)

Saunders may have ended the purely achievement oriented studies but a new period of study embracing both pupil achievement and pupil adjustment was begun by Rudolph Alfinson in 1938. Alfinson's objective was to test if failure as an administrative device was harmful to the personality development of the child. He studied 116 pairs of junior high school students who were matched on school attendance, chronological age, sex, intelligence and socioeconomic status. (Alfinson, 1941:507) Alfinson found that the regularly promoted students were significantly better in their personal and social adjustment when compared with the non-promoted students. (Bocks, 1977:380)

Adolph Angus Sandin investigated the social and emotional adjustments of the promoted and non-promoted pupils in his doctoral research in Columbia in 1944. Sandin's sample was taken from the Wallingford, Connecticut Public Schools. It consisted of 416 subjects -- 225 boys and 191 girls. Of the subjects 227 had made regular grade progress and 139 were students who had experienced failure at least once. (Sandin, 1944:18-19) Sandin studied the social behavior of the subjects.

the use of tests, ratings, and interviews. He found that the retained child, on the average, was likely to choose companions in the grades ahead and would like to join them there. The children who made slow progress tended to regard their younger classmates as inappropriate companions. The retained children did not often receive the social approval of the regularly promoted, and on most behavior traits teachers rated the slow progress children less favorably than those in the normal progress group. Other children were inclined to describe the children who had "failed" as more likely to be unhappy, grouchy, quarrelsome, rude, and selfish. (Bocks, 1977:381) Sandin also pointed out that children who had failed said their parents had been angry, they had been spanked, and they had been lectured on the need for better study habits. During the interviews the criticism of brothers, sisters, and relatives who pointed out their shortcomings was a continual "sore point" with the students who had failed. (Sandin, 1944:132) Sandin suggested that it was necessary to conduct further study to discover to what extent children who might have been non-prompted according to grade standards, but who were actually promoted, showed a better picture of adjustment than those who were held back. (Sandin, 1944:136)

John I. Goodlad, through a study at the University of Chicago in 1949, attempted to throw some light on the question raised by Sandin. He matched a group of fifty-five promoted second-grade pupils with a group of fifty-five non-promoted first-grade pupils on the basis of chronological age, mental age and achievement. Goodlad conducted considerable preliminary research on his sample in order to secure the same conditions with respect to enrolment, location of schools,

physical normality of subjects and the socio-economic status of subjects' families. Goodlad tested two major null hypotheses:

1. There are no differences in social adjustments between school children who repeat grades and those who do not.
2. There are no differences in personal adjustments between school children who repeat grades and those who do not.

He found twenty-nine instances of significant differences on the instrument used, and thus the two hypotheses were rejected. Eighteen of the significant differences favored the promoted group, and eight favored the non-promoted group. The remaining three instances were not clearly to the advantage of either group. A heavy concentration of those differences favoring the promoted group had to do with peer-group relationships. This led Goodlad to conclude that the evidence supports promotion over non-promotion as the more defensible educational practice. (Goodlad, 1954:301-328)

In 1954 William Coffield and Paul Blommers readdressed the problem of educational achievement. They pointed out that during the fifty year period since W.H. Maxwell's observations, the failure rate had been in constant decline. The failure rate in the thirties had dropped to 25 percent and by the time of their study in 1954 a failure rate in the order of 10 percent had been reached. (Coffield and Blommers, 1956:235) They discovered from their research that slow-learning children who were required to repeat a grade and slow-learning children who were promoted, had the same level of achievement when measured in the same higher grade even though the repeaters spent an extra year getting to the grade. (Coffield and Blommers, 1956:249)

Summary

Over the history of the studies on promotion and non-promotion it appears that:

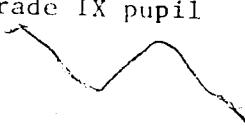
1. Non-promotion did not significantly increase achievement and in a certain percent of cases even retards learning.
2. Non-promotion did not improve student social and personal adjustment sufficiently to render it a worthwhile practice.

Promotion Practices and Policies in Alberta Schools

In 1952 the Department of Education of the Province of Alberta struck a committee to study and report on promotion policies and practices. The Department wanted to find out the type of promotional policies and practices in use in the province.

The committee decided that it was desirable to poll all Alberta teachers (including principals) of grades I-VIII to ascertain what students they intended to promote, and what beliefs and reasons they could give for these intentions as of June, 1954. (Clarke, 1955:

- 24) The conclusions and implications included in the findings were:
1. The most frequent reasons given by teachers for failing students were associated with mastery of school subjects.
 2. There was a relative absence of acceleration. The ratio was one acceleration to seven failures.
 3. There was an approximate 5 percent failure rate in each grade. The cumulative effect of the failure rate was 43.5 percent of all grade one students by Grade VIII. This happens if students fail only once. The finding suggests two sampling studies:

- (a) Are more than 40 percent of Alberta Grade IX pupil repeaters?
- 

- (b) How many have failed more than once?
(Clarke, 1955:29-33)

Two members of the Alberta Department of Education Committee on promotion policies and practices went on to conduct related research in their graduate programs. In 1956 Edwin A. Reid submitted a thesis entitled "Promotion Policies and Practices in the Schools of Alberta," as part of the doctoral requirements at the University of Oregon. In 1959 Walter Worth submitted his doctoral study, entitled "The Effects of Promotion and Non-promotion on Pupil Achievement and Social-Personal Development in the Elementary School."

Reid presented the procedures, techniques and classification of data carried out by the Alberta Committee on Promotion Policies and Practices. (Reid, 1956:91) The data, which were gathered by means of a questionnaire, were classified by type of school system, type of school district, grade level, size of school, teaching experience of the respondents, and professional training of the respondents. (Reid, 1956:119) Reid's conclusions on the 1954 Alberta sample included the following:

1. The rate of non-promotion among Grade 1-VIII pupils in Alberta schools in June, 1954, was 5.4 percent. . . . The rate of non-promotion among pupils in the 1,749 classrooms where pupils were failed was 8.4 percent. (Failure did not take place in all classrooms in the study.)
2. The greatest incidence of non-promotion was found in Grade 1 where 6.5 percent were failed. . . .
3. The second greatest incidence of non-promotion occurred in Grade VII where 5.9 percent were failed. . . .
4. The lowest rate of non-promotion was found in Grade VI . . . (4.4 percent).

5. The rate of non-promotion in the seven independent city school systems was 5.0 percent. It ranged from 6.9 percent in Lethbridge to 3.7 percent in Wetaskiwin. . . . (Edmonton was in the middle with 5.1 percent.)

(Reid, 1956:262)

After an exhaustive review of the literature on non-promotion, and with the chief reason for all of the 4,389 non-promotions in his study being weakness in certain school subjects, Reid concluded that:

The values of non-promotion, if indeed there are any, have not been discovered in fifty odd years of educational research. There is evidence, though as yet it may be incomplete, which indicates that non-promotion is needless and wasteful at best, detrimental to human development at worst. (Reid, 1956:333)

Worth's sample consisted of two groups of 66 children each matched with respect to sex, I.Q., chronological age, achievement test data, and type of school. One group consisted of low achievers promoted to the fourth grade, the other group of low-achievers who repeated grade three. Worth also controlled for teacher experience, training and continuity, pupil attendance, health, home and family conditions, and instructional materials and methods. The students were pretested with four standardized tests and post-tested by a trained research team. A sociometric test was administered to all pupils in the subjects' classes. On the basis of these data Worth concluded that:

1. Non-promotion in itself does not improve school achievement.
2. Non-promotion may not have as adverse an effect on social-personal development as previous research has indicated.

Charles Allison (1959) studied students who had failed grade seven in the Edmonton Public system. Among his recommendations was the extension of the experimental continuous progress plan to Divisions II and III.

As a result of his study Allison found that:

1. At the time of grade seven failure 63.2 percent of the pupils in the study sample were overage for their grade. Since they all started school within normal age limits this retardation was due to failure in elementary grades.
2. The fact that 70 percent of the pupils who repeated grade seven did better work the second year would seem to indicate that repeating the grade was of value to the majority. It must be borne in mind, however, that the majority of those doing better work the repeated year received only minimum passing grades. However, there was the suggestion that those who did much better work the repeated year in the grade progressed farther in school.
3. The study sample rated significantly lower on all six areas of the personality development scale on ratings given by the teachers than did a reference sample with which it was compared. The greater number of 3 and 4 ratings in the study sample was an indication that these pupils had much more difficulty in adjusting to the school situation than did the normal students.

(Allison, 1959:82)

Summary

The results of the Alberta studies were very consistent with the results of the research studies carried out in the United States. The studies lead to the conclusion that repeating a student in order to improve the gain in academic achievement is at best risky.

Modern Studies

In 1967 Virginia Dobbs and Donald Neville matched 36 pairs of first- and second-grade children in Nashville Public Schools on: (a) race, (b) sex, (c) socio-economic level, (d) type of classroom assignment, (e) age, (f) mental ability, and (g) reading achievement. Each pair consisted of a once-retained grade one student and a never-

retained grade two student. Over a two year period they collected data on their sample. It was concluded from these data that non-promotion was not an aid to achievement. (Dobbs and Neville, 1967:472) In their discussion Dobbs and Neville pointed out that a fruitful approach to the problem might be a system of continuous progress. (Dobbs and Neville, 1967:474)

In 1969 Dr. William Glasser wrote a best selling book, Schools Without Failure. Glasser had acted as a consultant in the Los Angeles city schools. He offered as his basic premise "that we must promote success and not failure in school. . . ." (Glasser, 1969)

In 1969 Betty A. Scott and Louise Bates Ames did a study of "Improved Academic, Personal, and Social Adjustments in Selected Primary School Repeaters." Scott and Ames pointed out that

To date, except for the Chase study (9) there is little research on repeating that might be described as rigorous research. Most previous studies lumped together all children in a school or class who repeated for any reason, and their behavior was evaluated after a year of repeating. (Scott and Ames, 1969:434)

Scott and Ames studies a sample of twenty-seven elementary school children from Cheshire, Connecticut. Five were retained in Kindergarten, fourteen in grade one, three in grade two, three in grade three, one in grade five and one in grade six. Only children whose repeating a grade had been determined solely on the basis of immaturity were included. In some cases a school readiness test was used to decide immaturity. In other cases teachers' and principals' judgments were used. Children's final marks in June 1966 were compared with their mid-year grades in February, 1967 (the repeat year).

Teachers were also asked to rate each child's behavior. Parents, too,

were asked to rate their children's social, emotional, physical, and academic adjustment for 1965-66 and again for 1966-67. The very favorable responses to all these rating scales led Scott and Ames to conclude that:

* for this group of selected subjects, repeating did appear to have a beneficial effect, not only on grades but also on the children's school behavior as reported by their teachers and on school and home behavior as reported by parents. (Scott and Ames, 1969:438)

Wad-Ja-Get? The Grading Game in American Education was published in 1971. This book addressed the grading system in America. The authors questioned the system in use and offered eight alternative grading systems. Among the suggested systems of grading were:

1. Evaluation of students in a written essay form: The essay evaluation points out students' strengths and weaknesses.
2. Contract System: The contract system can be group or individual. A contract for the class or student is arrived at by discussion with the teacher.
3. Pass/Fail Grading: The student either passes or fails the course.
4. Credit/No Credit Grading: The student either gains credit for the course or no credit.

Rosenthal and Jacobson's Pygmalion in the Classroom: Teacher Expectations and Pupil Intellectual Development was published in 1968 and came to the fore in the early seventies. They showed that teachers' expectations for their students was related to I.Q. tests. Teachers, told that certain students had high I.Q.'s (they did not), gave higher ratings to these students in all areas of performance including creativity and initiative. (Bellanca, 1975:11-12)

William M. Bocks did a review of the research on non-promotion in early 1977. Bocks addressed himself to the question, "Do grade repeaters achieve greater mastery, stronger social maturity, respond positively to the threat of non-promotion?" (Bocks, 1977:379)

Bocks concluded that:

. . . common sense and the desire for humane treatment of youngsters suggests that our classrooms must adjust to the needs of the child. It does not appear possible to equally prepare all children for a given grade. One way of dealing with the problems created by this fact is to have each teacher prepare for the children who will be in the class. Children do have to be given "time to grow." Research on non-promotion suggests that they can grow even better in classes with their own age-mates.

Many teachers do not individualize their program because they do not know how. Others have some ideas about how to do it but do not try for fear of failure. It is necessary that school administrators provide opportunities for teachers to learn how to individualize, and provide a safe environment for them to try it. Individualized programs can remove the need for "a year to grow", and all of the harm that comes from it. (Bocks, 1977:383)

Summary

The research studies reviewed in this chapter deal with non-promotion from various points of view. The studies indicate that:

1. Non-promotion does not appear to be a very effective way to gain greater mastery of subject matter for the students.
2. There appear to be some harmful side effects of failure. The social adjustment of the failed child is still open to question.
3. The threat of failure does not appear to be a motivating force with children.
4. The research evidence tends to indicate that even if all children are promoted student achievement is not lowered.

CHAPTER III

Nature and Source of the Data

The data used in this study were made available by the Edmonton Public School System. The school system had computer records on each student. The records contained the information that was formerly placed on cumulative record cards. The Supervisor of Student Accounting and School Information was assigned to help the author collect the data. A computer program was written to obtain the data to study the age, grade and sex of the school population. It was decided that in order to study the students who failed it was also necessary to have the student identification code, the school program being followed (i.e. Academic, Special) and the school identification.

The data were taken from the master tapes of the Edmonton Public School System computer and placed on tape for transfer to the computer at the University of Alberta. The data were for June for each of the three years used in the study. June was selected because these data were considered more accurate than the September data.

The school population in grades kindergarten to ten for the years 1974, 1975 and 1976 were used. Table 2 shows the number in the population for the three years. The grade ten population for 1975 and 1976 were included in order to obtain the grade nine students who were promoted the previous year.

The data were on tape in alphabetical order by surname. In order to group the students by grade a Fortran language program was written. The program picked the students enrolled in each grade and

Table 2
Total Populations Used

<u>Year</u>	<u>Grades</u>	<u>Population</u>
1974	K-9	52,847
1975	K-10	59,521
1976	K-10	58,809

placed them in a computer file for study. The placing of students in grades for each year made it possible to find out if the student was still recorded in the same grade the next year. The grade populations generated by the Fortran program are displayed in Table 3 (Page 21).

The population numbers shown in Table 3 represent students who were in academic programs. All students who were in special programs were excluded from the study. This was done in order to ensure that students with special handicaps were excluded from the calculations. Inclusion of students in special programs would have caused the age of the population to increase. In some cases inclusion of children in special programs would have caused an increase in the failure rate.

In order to analyze the age of students in each grade a computer program was written using Statistical Package for the Social Sciences language (hereafter referred to as SPSS). The program selected students in the age categories:

1. Normal age
2. Over age
3. Under age

(Defined in Chapter I)

Table 3
Edmonton Public School System
Grade Populations Used in the Study

Grade	Year 1974	Year 1975	Year 1976
K	2,857	4,362	4,613
1	5,242	5,050	5,233
2	4,859	4,872	4,938
3	5,347	4,727	4,738
4	5,892	5,253	4,708
5	5,867	5,793	5,273
6	5,804	5,709	5,685
7	5,688	5,828	5,820
8	5,728	5,520	5,621
9	5,563	5,419	5,275
10		6,988*	6,905*
Sub-Totals	<u>52,847</u>	<u>59,521</u>	<u>58,809</u>
Grand Total		171,177	

* Included for the purpose of obtaining the 1974 and 1975 grade 9 promoted.

The program selected students in each of the three categories and grouped them by number, percent and sex.

The program made it possible to examine how the three age categories changed from grade to grade and year to year. It was also possible to examine the percentage of males and females in each age category.

In order to analyze failure in each of the grades a Fortran language program was written to select students who were in a grade for two years. This program was also capable of selecting the students who had been promoted, the students who had skipped a grade, and the students in the 1974 population who were still in the same grade in 1976. Computer files were created to store the failures found by the Fortran program.

An SPSS program was written to analyze the failure files. The program allowed for the examination of these data from the point of view of age, grade and sex of the failures.

The failure files were analyzed with an SPSS program which crosstabulated the failures with their month of birth. Students in the study could start school in September if they were five years old by the previous March 1. The students who were born in the months of November, December, January and February were the youngest children in the grades. This analysis was done in order to find out if there was a relationship between failure and month of birth.

An SPSS program was written to establish the relative frequency of males and females in the study population. The population was found to be 0.9 of 1 percent more male than female. This was done in

order to show that any difference between males and females in the age categories or in failure was not due to a difference in the number of males or females in the population.

The mobility of the study population from year to year was analyzed and it was found that the Kindergarten students were the most mobile (mobility defined as moving out of the Edmonton Public School System). An average of 25 percent of the Kindergarten students moved out of the system during the period used in the study. Grade 1 had an 18 percent mobility and Grade 6 had the lowest mobility with less than 13 percent moving out of the system during the three years used in the study.

CHAPTER IV

Analysis of the Data

The data used in the study were analyzed from two points of view. The first analysis was conducted to find out the relative frequency of the three age categories -- normal age, overage and underage. The three categories were lumped together under the broad term agedness. The agedness of the school population was first used by Maxwell in his study of the New York City school system. (Maxwell, 1912)

The second analysis of the data was conducted to find the students who were promoted and the students who were not promoted.

This analysis established the failure rate for each grade.

Agedness

The analysis of the data on Agedness was directed at answering three of the questions put forth in Chapter 1. The three questions were:

1. Is the promotional practice of the Edmonton Public School System in line with the promotional policy of the Edmonton Public School Trustees?
2. What percentage of the student population can be classified as overage, underage, and normal age for each grade for the years 1974, 1975 and 1976?
3. What percentage of the overage, underage, and normal age population is male and what percentage is female?

In order to answer the first question it was necessary to go back to the Continuous Progress Plan approved by the Edmonton Public School

Trustees in 1960. The goal of the approved plan was 10 percent of the students completing elementary school (Grades 1-6) in five years; 10 percent of the students completing elementary school in seven years and 80 percent completing elementary school in the normal six years.

The results of the analysis of agedness are displayed in Table 4 (page 26).

Ninety-five percent of the students in Kindergarten were within the normal range for the grade, i.e. five years, six months, to six years, six months. During the course of going from Kindergarten to Grade 9 the number of students in the normal age range fell off to 70 percent. Twenty-five percent less of the Grade 9 population was of normal age when compared with the Kindergarten population.

Overage started in Kindergarten at approximately four percent and climbed to a high of twenty-five percent by Grade 9. The highest percent of increase in overage children occurred between Kindergarten and Grade 1. The mean increase over the three years was 6.9 percent at the K-1 level. Three other incidents of high increase in overage occurred over the three years. In 1974 a 7.7 percent increase was recorded at the Grade 3-4 level; in 1975 a 6.9 percent increase was recorded at the 4-5 level and in 1976 a 6.0 percent increase was recorded in the grade 5-6 level.

Underage started in Kindergarten at less than one percent of the population and reached a peak in the 1974 population of 5.1 percent in Grade 9. Underage fell off to 4.2 percent in Grade 9 in 1975 and 2.6 percent in Grade 9 in 1976. The growth in underage was

Table 4

Percent of Population of the
Edmonton Public School System Over,
Normal, and Under Age by Grade and Year

Grade	Year 1974			Year 1975			Year 1976		
	% Over	% Normal	% Under	% Over	% Normal	% Under	% Over	% Normal	% Under
K	2.7	96.4	0.9	4.6	94.5	.8	4.2	95.2	0.6
1	9.9	88.7	1.4	10.6	89.0	.4	11.7	87.9	0.4
2	12.4	87.1	.5	13.1	86.1	.8	14.9	84.3	0.8
3	16.1	83.0	.9	15.1	83.9	.9	15.9	83.2	0.9
4	23.8	75.1	1.1	18.1	80.9	1.0	16.8	82.1	1.1
5	26.0	72.8	1.2	25.0	73.9	1.1	20.3	78.7	1.0
6	27.0	71.5	1.4	26.7	72.2	1.0	26.3	72.5	1.2
7	29.0	68.7	2.3	28.0	70.6	1.4	28.2	70.6	1.1
8	26.7	69.1	4.2	28.6	69.2	2.2	27.0	71.5	1.5
9	24.8	70.1	5.1	24.1	71.6	4.2	26.5	70.9	2.6

symmetrical and there were no large increases in any one grade.

The population was also analyzed to see if there were any sex differences in the percentage of normal, underage and overage children. The results are displayed in Table 5 (page 28). Normal age was distributed fairly equally between males and females with a mean difference of less than 1.3 percent over the three years. Overage was more a male than female phenomenon with a mean difference of 14 percent. Underage was more a female than male characteristic by 9 percent for the years 1974 and 1975; it drops to less than 3 percent in 1976.

The plan to have 10 percent of the school population finish elementary school in five years was not supported by these data.

Less than 2 percent seemed to fall in the five year category. The plan to have 10 percent finish school in seven years was not supported by these data. Over 2 percent seemed to fall in the seven year category. The plan to have 80 percent of the school population finish school in six years was not supported by these data. Seventy percent seemed to fall in the six year category.

2. Promotion-Non-promotion

The agedness data alone were found to be insufficient to determine the extent of promotion and non-promotion in the system.

It was apparent from the data that a small percentage (5) started school over the age limits established for the study. If overage alone was used as the one criterion for promotion and non-promotion the student who started school overage would have fallen into the

Table 5

Percentages of the Population,
Normal, Under and Overage by Sex and Year

Year	Sex	Normal	Over	Under
1974	M	49.5	56.6	45.3
	F	50.5	43.4	54.7
1975	M	49.3	56.9	45.7
	F	50.7	43.0	54.3
1976	M	49.3	57.5	48.6
	F	50.7	42.5	51.4

non-promoted category.

The second analysis of the data was directed at answering two of the questions put forth in Chapter 1. The two questions were:

What percentage of students failed in each of the grades (1-9) during the school years 1974 and 1975?

What percentage of the failures for 1974 and 1975 is male and what percentage is female?

The results of the analysis together with the related failure rates are displayed in Tables 6 and 7 (pages 30, 31). In addition, the number of students who were in the same grade for the third year were located and they appear in the last column of Table 6.

The two tables (6-7) indicated the extent to which failure was taking place in the system. Failure began in Kindergarten, peaked in Grade 1 and slowly, but not systematically, dropped to a low in Grade 9 of less than one-half of 1 percent. The tables (6-7) indicate that grade skipping also occurred. The grade skipping reported in the Alberta study of the mid-fifties was one skip to seven failures (Clarke, 1955). In this study the figure stood at one skip to ten failures.

The failures were cross-tabulated with sex to determine the number of males and females in the failed population for the years 1974 and 1975. The results are displayed in Tables 8 and 9 (pages 32, 33). The results indicate that males failed in the system at a rate of approximately two males to one female. The greatest differences occurred in Grades 2 and 7).

Failure was also examined from the point of view of the month of birth. Students born in the four month period November, December,

Table 6
Promotion and Non-Promotion
1974

Grade	Pass	Fail	Grade Skip	Total	Failure Rate	Double Failure
K	2,070	53	4	2,127	2.49	0
1	3,976	298	22	4,296	6.93	4
2	3,929	132	15	4,076	3.24	0
3	4,476	108	10	4,594	2.35	1
4	5,014	99	12	5,125	1.93	2
5	4,948	63	4	5,015	1.26	3
6	5,033	39	3	5,075	.77	1
7	4,781	62	6	4,849	1.27	1
8	4,767	77	6	4,850	1.59	0
9	4,538	15	Not Known	4,553	.33	1

Table 7
Promotion and Non-Promotion
1975

Grade	Pass	Fail	Grade Skip	Total	Failure Rate
K	3,309	59	9	3,370	1.75
1	3,937	214	13	4,164	5.14
2	3,924	168	16	4,108	4.09
3	3,939	89	8	4,036	2.21
4	4,477	75	13	4,565	1.64
5	4,965	81	12	5,058	1.60
6	4,991	51	2	5,044	1.01
7	4,949	68	9	5,026	1.35
8	4,641	55	3	4,699	1.17
9	4,459	10	Not Known	4,449	.21

Table 8
1974 Failures
Number and Percent Male
and Female by Grade

Grade	No. of Males	% M	No. of Female	% F
K	38	71.7	15	28.3
1	178	59.7	120	40.3
2	83	62.9	49	37.1
3	68	63.0	40	37.0
4	60	60.6	39	39.4
5	38	60.3	25	39.7
6	21	53.8	18	46.2
7	38	61.3	24	38.7
8	48	62.3	29	37.7
9	7	46.7	8	53.3

Table 9
1975 Failures
Number and Percent Male
and Female by Grade

Grade	No. of Males	% M	No. of Female	% F
K	35	59.3	24	40.7
1	126	58.9	88	41.1
2	114	67.9	54	32.1
3	49	55.1	40	44.9
4	45	60	30	40.0
5	45	55.6	36	44.4
6	32	62.7	19	37.3
7	50	73.5	18	26.5
8	36	65.5	19	24.5
9	6	60.0	4	40.0

January and February were the youngest children in any grade. These were the children who turned five during the four month period prior to March of their first year in school. The results of the analysis for the total failed population are displayed in Table 10 (page 35). Closer inspection of the data used to generate Table 10 revealed some interesting results with respect to the same four month period when applied to the failures in Kindergarten and Grade 1. The results are displayed in Table 11 (page 36). Inspection of the table indicates that 73.5 percent of the 1974 Kindergarten failures were born in the months of December, January, and February. Seventy-eight percent of the 1975 Kindergarten failures were born in the four months of November, December, January and February. Of the 298 students who failed Grade 1 in 1974, 42.6 percent were born in those four months, and 45.7 percent of Grade 1 failures in 1975 were born in the same four months. Students born in the four month period prior to March 1 were the youngest children in these grades. This indicates that age was a factor in non-promotion at these grade levels.

Cumulative Effect of the Failure Rates

One of the questions put forth in Chapter 1 was - "What is the cumulative effect by the end of grade nine of applying the failure rates in each grade?" In order to answer the question a projection was done on a hypothetical sample of 100 students starting school in Kindergarten in each of the two years. The results are displayed in Tables 12 and 13 (pages 37, 38). The tables indicate that even with a low failure rate the cumulative effect can be as high

Table 10

35

Month of Birth of the Total
Failed Population

<u>Month</u>	<u>Year 1974</u>	<u>Year 1975</u>
	%	%
January	9.8	10.8
February	13.7	11.0
March	5.8	6.4
April	5.6	6.4
May	5.7	6.8
June	6.97	5.9
July	8.66	7.5
August	6.96	8.2
September	8.35	7.8
October	8.76	10.2
November	8.2	10.1
December	11.5	8.9
Total	100%	100%

Table 11
 Month of Birth of the
 Failed Kindergarten and Grade 1

Month	Year 1974		Year 1975	
	Kindergarten	Grade 1	Kindergarten	Grade 1
January	26.4	10.4	25.4	12.6
February	37.7	14.8	25.4	12.6
March	3.8	6.0	5.1	2.4
April	1.9	5.7	0.0	5.1
May	5.7	8.1	3.4	5.1
June	0.0	9.1	3.4	7.0
July	5.7	8.7	5.1	7.9
August	0.0	4.7	1.6	9.4
September	2.5	8.1	3.4	7.9
October	1.9	7.0	0.0	9.4
November	0.0	6.7	15.3	10.7
December	9.4	10.7	8.5	9.4
Totals	100.0	100.0	100.0	100.0

Table 12

Projected Cumulative Failures
in EPSS in a Sample of 100

1974

Grade Level	No. Surviving	Failure Rate	No. Failing	Cumulative Failure Rate
K	100	2.49	2.49	2.49
1	97.51	6.93	6.76	9.25
2	90.75	3.24	2.94	12.19
3	87.81	2.35	2.06	14.25
4	85.75	1.93	1.66	15.91
5	84.09	1.26	1.06	16.97
6	83.03	.77	.64	17.61
7	82.39	1.27	1.05	18.66
8	81.34	1.59	1.29	19.95
9	80.04	.33	.26	20.21

Table 13

Projected Cumulative Failures
in EPSS in a Sample of 100

1975

Grade Level	No. Surviving	Failure Rate	No. Failing	Cumulative Failure Rate
K	100	1.75	1.75	1.75
1	98.25	5.14	5.05	6.80
2	93.20	4.09	3.81	10.61
3	89.39	2.21	1.98	12.59
4	87.41	1.64	1.43	14.02
5	85.98	1.60	1.38	15.40
6	84.60	1.01	.85	16.25
7	83.74	1.35	1.13	17.38
8	82.61	1.17	.97	18.35
9	81.65	.21	.17	18.52

as 20 percent by the end of Grade 9. In the hypothetical sample shown in Tables 12 and 13 if no student failed twice, twenty of the students in the sample of 100 would probably fail once by Grade 9.

The data on overage seems to support the notion that at least 20 percent of the Grade 9 population have failed at least once.

Summary

The data were analyzed from two approaches. The first was an analysis of age and the second was an analysis of failure.

The analysis of age indicates that approximately 5 percent of the students start school over the age limits set by the Edmonton Public System. The number of students overage hits a peak in Grade 7. If one were to use overage as the only criterion for grade failure, then it would appear that nearly 30 percent of the Grade 7 population had failed.

The actual failure rates generated for each grade do not lead one to expect 30 percent of the Grade 7 population to be failures.

The hypothetical sample displayed in Tables 12 and 13 (pages 37 and 38) indicate that the cumulative effect of the failure rates presented in the study was more in the order of 18 percent at the Grade 7 level.

CHAPTER V

Summary and Conclusions

The problems of agedness and non-promotion have been with us since the introduction of the graded system in the late nineteenth century. The establishment of grades led to the practice of non-promotion of students who did not reach the standard set for the grade. The so-called "grade standards theory" led to the overageness in the school population first noted by Maxwell in 1904 (Maxwell, 1912). In order to alleviate the problems connected with the "grade standards theory" several other school promotional practices have emerged over the past three decades. These practices -- "Non-graded school", "Continuous Promotion" and "Continuous Progress" have been rooted in the empirical educational research that suggested non-promotion was dysfunctional with respect to increases in student achievement.

The current study investigated the school population for the Edmonton Public School District for the school years 1974, 1975 and 1976. The student records were analyzed to obtain the information on agedness and grade failure in the system.

Agedness

The data analysis indicated that overage started in Kindergarten and reached a peak in Grade 7 with close to 30 percent overage by that time. The Edmonton Public System's age of entrance regulation states that a student may start school if the child is five years of age by March 1st. If a child turns six by the first day of school, starting

school that year becomes mandatory. (Operational Handbook, 1978-79)

The age of entrance regulation has been in effect prior to the Alberta

studies of the mid-fifties (Reid, 1956). The 30 percent overage at Grade 7 can be interpreted in several ways.

1. It may be that the failure rates arrived at in the study are lower than the failure rates that were applied to the student population in the previous years. This would account for the discrepancy between the percent overage in Grade 7 and the failure rate for the grade.
2. In the current study 5 percent were starting school over the age limits set by the system. This late starting may have been higher prior to the introduction of Early Childhood Services in 1975.
3. A small part of the overage in Grade 7 may be attributed to illness, moving in and out of the system and to other causes that might keep a student out of school.

Normal age was the highest in Kindergarten with over 95 percent and it reached a low in Grade 7 with less than 70 percent the normal age. This indicates that the great majority of children in the population start school at the normal age.

Underage was slightly different for the three years. In 1974 underage started at less than 1 percent and peaked in Grade 9 with 5 percent. In 1975 underage started at less than 1 percent and slowly climbed to 4.2 percent by Grade 9. In 1976 underage started at .6 of 1 percent in Kindergarten and peaked at 2.6 percent in Grade 9.

The distribution of the agedness of the population was analyzed with respect to sex. It was found that the normal age group was just over 1 percent more female than male. The overaged population was 14 percent more male than female. The underage population was 10 percent more female than male.

Conclusions about Agedness

Agedness in itself appears to be insufficient to indicate if a child has progressed "normally" through a school system. A small percentage of students (5) start school over the age limit set by the system. It seems plausible that if 5 percent start school overage then a certain percentage of the additional overage picked up in the various grades would be from grade repetition. Overage cumulates to approximately 30 percent by Grade VII. If overage cumulates in a school system then the question arises "Should underage not also cumulate?" The Continuous Progress Plan approved by the Board of Trustees in 1960 would have had 10 percent of the elementary school population finishing school under age. The current study has less than 2 percent in this category. The plan called for 80 percent to finish at the normal age range. Just over 70 percent finish in the normal age range. The plan called for 10 percent to finish overage. The current study indicates that close to 27 percent fall in the overage category. The agedness data do not support the notion that a Continuous Progress model is in place in the Edmonton Public School system. The agedness data for the three years imply that the graded structure is in place.

Promotion and Non-Promotion

Promotion and non-promotion were arrived at by ascertaining the actual grade placement of the student over a two year period. Students registered in the next grade the following year were considered promoted and students registered in the same grade the

following year were considered failed.

Failure takes place in Division I (Grades 1, 2 and 3) four times more often than in Division II (Grades 4, 5 and 6) or Division III (Grades 7, 8 and 9). The highest rate of failure in the system was in Grade 1 where a failure rate of 6 percent was reached. Seventy-five percent of the Grade 1 failures were born in the four-month period November, December, January and February. The birth month indicates that these students would be among the younger children in the grade.

The review of the research literature on promotion and non-promotion indicated very little support for the practice of failing 6 percent of the Grade 1 population. The extent of Grade 1 failure has not changed over the twenty year period since the Alberta study on promotion in the the mid-fifties. There has been a noticeable decline in grade failure in all other grades. Especially noticeable is the decline in Grade 7 failure during the period 1955 to 1975. The Grade 7 failure rate reported by Reid in his study was 5.9. (Reid, 1956:119) The 1975 failure rate reported in this study was less than one and one-half percent.

In most grades in the Edmonton Public School System over 98 percent of the students are promoted each year. This represents an increase in the percentage promoted since the 1955 studies.

Conclusions about Promotion and Non-Promotion

One of the conclusions that the promotion and non-promotion data point out is that the Board's plan to have 10 percent of the students finish elementary school in seven years, 80 percent finish

in six years and 10 percent in five years, is not being met. The promotion and non-promotion failure rates established in the study indicate that in grade 6 the percentage of students who have taken seven years to complete elementary school is in the order of 17 percent. The percentage of students who have taken five years to complete elementary school could not be ascertained on the promotion and non-promotion data alone. Coupled with the underage data, the promotion and non-promotion data on grade skipping indicated that the number completing elementary school in five years would be less than 2 percent. The number of students completing grade 6 in the expected six-year period was 80 percent.

A second conclusion that may be drawn from the promotion and non-promotion data is that most of the failures take place in the first four years of school. After the first four years over 98 percent of the students are promoted.

A third conclusion that may be drawn is that the sex ratio of failure is two males to one female.

Other Studies

One of the studies that could be undertaken is the effect of non-promotion on young grade Kindergarten and 1 students in both achievement and social adjustment.

The chief reason for non-promotion given in the 1955 Alberta study was "unprepared for the work of the next grade" (Reid, 1956). The chief reason for failure at the Grades Kindergarten and 1 in the current study appears to be "young for the grade". It may be that

the effects of non-promotion may be less dysfunctional for the young student.

A second study that these data point to concerns the rejection of the Continuous Progress Plan by the classroom teacher. A study might address itself to the question: "What were the problems with the continuous progress model that caused it to be rejected by classroom teachers?"

BIBLIOGRAPHY

- Akridge, G.H. Pupil progress policies and practice. New York: Bureau of Publications, Columbia University, 1937.
- Allison, C. Characteristics of students who failed grade seven in Edmonton junior high schools, 1951-1952. Unpublished Master's thesis, University of Alberta, 1959.
- Anfinson, R.D. School progress and pupil adjustments. The Elementary School Journal, March, 1941, 507-514.
- Ayres, L.P. Laggards in our schools. Encyclopedia of Educational Research, New York: The Macmillan Company, 1941, 442.
- Barkley, M.V. To grade or not to grade. Illinois Teacher of Home Economics, March-April 1975, 201-203.
- Beaton, M.A. The effects of acceleration on the academic progress and on the personal and social development of Calgary and Edmonton grade X students. Unpublished Master's thesis, University of Alberta, 1956.
- Bellanca, J.A. Grading, Washington: National Education Association, 1977.
- Black, D.B., MacArthur, R.S. and Peterson, J.G. Pupil personnel in Alberta secondary schools. Monographs in Education No. 6, University of Alberta, 1961.
- Bocks, W.M. A year to grow? Educational Leadership, February 1977, 379-382.
- Boyer, W. and Walsh, P. Are children born unequal? The B.C. Teacher, January 1969, 132-136.
- Buckingham, B.R. An experiment in promotion. Journal of Educational Research, May 1921, 326-335.
- Buckingham, B.R. Research for Teachers. New York: Silver, Burdett and Company, 1926.
- Clarke, S.C.T. Promotion practices and policies in Alberta schools. Alberta Journal of Educational Research, December 1955, 24-34.
- Coffield, W.H. and Bloomers, P. Effects of non-promotion on educational achievement in the elementary school. The Journal of Educational Psychology, April 1955, 233-25

- Dey, J.D. Theory and practice governing the time of school entrance. Monographs in Education No. 4, University of Alberta, 1960.
- Dobbs, V. and Neville, D. The effects of non-promotion on the achievement of groups. Matched from retained first grades and promoted second graders. The Journal of Educational Research, July-August 1967, 472-475.
- Does standard grading encourage excessive competitiveness? Change, September 1975, 45-47.
- Elsbree, W.S. Pupil progress in the elementary school. New York: Bureau of Publications, Columbia University, 1958.
- Farley, E.S., Frey, A.J. Garland, G. Factors related to the grade progress of pupils. Elementary School Journal, November 1933, 186-193.
- Finlayson, H.J. Non-promotion and self-concept development. Phi Delta Kappan, November 1977, 205-206.
- Glasser, W. Schools Without Failure. New York: Harper and Row, 1969.
- Goodlad, J.I. Research and theory regarding promotion and non-promotion. The Elementary School Journal, November 1952, 150-155.
- Goodlad, J.I. Some effects of promotion and non-promotion upon the social and personal adjustment of children. Journal of Experimental Education, June 1954, 301-327.
- Illich, T. Schooling: the ritual of progress. The New York Review, December 1970.
- Kelly, F.J. Teacher's marks. New York: Bureau of Publications, Columbia University, 1914.
- Klug, B. The grading game. London: NUS Publications, 1977.
- Leary, J.L. The grading controversy: how do you meet it? Educational Leadership, October 1975, 25-27.
- Lebaron, W.A. Some practical techniques in developing a program of continuous progress in the elementary school. Elementary School Journal, October 1945, 89-96.
- Longstreet, W.S. The grading syndrome. Educational Leadership, January 1975, 243-245.
- MacArthur, R.S. and Hunka, S. School examination practices and standards in Alberta. Monographs in Education No. 2, University of Alberta, 1960.

- MacManus, T.M. A survey of pupil progress in Edmonton city schools. Unpublished Master's thesis, University of Alberta, 1950.
- Marchak, N. Summary data: junior high final marks and student promotion. Memorandum, Department of Research and Evaluation, Edmonton Public School Board, January 25, 1979.
- Maxwell, W.H. School achievement in New York. Education Review, October 1912, 293-297.
- Melnychuk, R. Academic achievement of pupils in the Edmonton continuous progress plan. Unpublished Master's thesis, University of Alberta, 1964.
- Minutes - Edmonton Public School Board, December 13, 1960.
- Morrison, I.E. and Perry, I.F. Acceptance of average children by their classmates. Elementary School Journal, January 1956, 217-220.
- Operational Handbook, Edmonton Public School System, 1978-79.
- Otto, H.J. and Melby, E.O. An attempt to evaluate the threat of failure as a factor in achievement. The Elementary School Journal, April 1935, 588-596.
- Power, M.E. The grading syndrome. Journal of Reading, April 1976, 568-572.
- Prunkl, W.R. A summary of the Edmonton continuous progress plan. Edmonton Public School Board Report, January 1970.
- Reid, E.A. Promotion policies and practices in the schools of Alberta. Unpublished doctoral dissertation, University of Oregon, 1956.
- Rinne, C.H. Grading and growth: answer to an editorial. Educational Leadership, January 1975, 247-249.
- Rosenthal, R. and Jacobson, L. Pygmalion in the classroom. New York: Holt, Rinehart and Winston, Inc., 1968.
- Sandin, A.A. Social and emotional adjustments of regularly promoted and non-promoted pupils. New York: Bureau of Publications. Columbia University, 1944.
- Scott, B.A. and Ames, L.B. Improved academic, personal, and social adjustment in selected primary-school repeaters. Elementary School Journal, May 1969, 431-438.
- Snider, E.W. To pass or not to pass. The Grade Teacher, June 1955, 26-28.

Wall, W.D., Schonell, F.J. and Olson, W.C. Failure in school.
Hamburg, Unesco Institute for Education, 1962.

Woodsworth, J.G.; Clarke, S.C.T.; Safran, C.; Worth, W.H.;
Hamilton, H.; Wooton, F.W.; Larson, O.P.; Evenson, A.B. and Reid,
E.A. Promotion Policies Report, Edmonton: Queen's Printer, 1957.

Worth, W.H. The effects of promotion and non-promotion on pupil
achievement and social-personal development in the elementary
school. Unpublished doctoral dissertation, University of
Illinois, 1959.

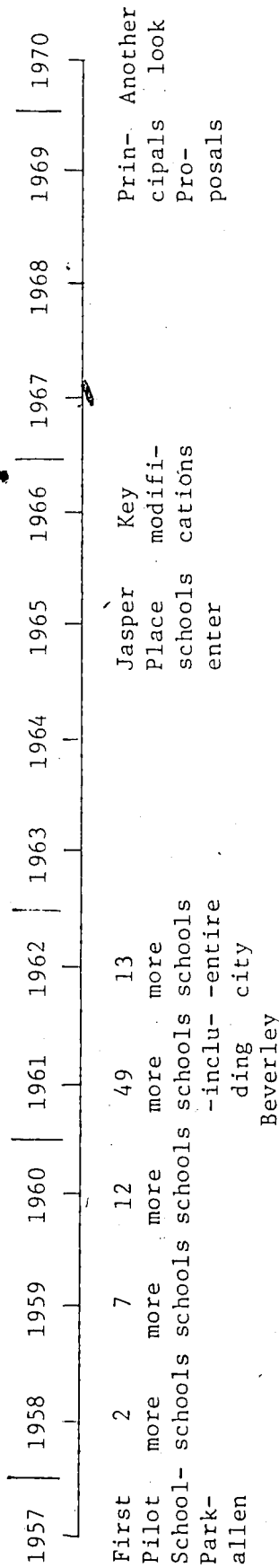
APPENDIX A

E.P.S.S. Continuous Progress Plan

WHY?

The Continuous Progress Plan - a modified system of Elementary school organization - evolved from an expressed dissatisfaction with the conventional grade system that had been so long a part of the North American educational scene. Administrators and teachers attempted to bridge the wide range of abilities in any one class by using a variety of groupings in each classroom, "skipping" those who continued to be inadequately challenged by the attempts to multi-program, failing those youngsters who could still not cope, and conditionally promoting those from whom a decision could not be made. All of these attempts failed to meet individual pupil needs. Something more had to be done.

As the time line below indicates, 1957 was the year for change in Edmonton.



Board
Approval
Dec. 13, 1960

A BRIEF HISTORICAL LOOK

THE INITIAL STRUCTURE

Observation & Screening Year		Modified Grade Plan starts in Second Year and continues until the end of the Fifth Year - except for slower pupils.														Regular Program Again	
Grade I			Grade II		Grade III		Grade IV		Grade V		Grade VI						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
Plus Enrichment			← 4 units		→ 4 units		← 4 units		→ 4 units		← 4 units		→ 4 units		Plus Enrichment.		
First Yr.			Second Yr.		Third Yr.		Fourth Yr.		Fifth Yr.		Sixth Yr.		Seventh Year				
					</												

The features to be noted, include:

- * an initial screening year, with classifications arising from the results of standardized tests in reading, spelling and arithmetic, intelligence test scores, and the classroom teacher's personal judgment.
- * a unit achievement of 4 units per year for the second, third and fourth year of a more-able student's program.
- * a unit achievement of $2\frac{1}{2}$ units per year for the seven years of a slow learner's program.
- * a unit achievement of 3 units per year for the average student.
- * probationary placement in streams at the end of the initial screening year with provisions for an upward or downward movement during the succeeding year.
- * a percentage variance of pupils within each stream from school to school, but a suggested city representation of 10% of pupil population in the seven-year stream and 80% in the six year program.
- * a major emphasis on the time differential factor and a minor emphasis on enrichment and remediation.
- * a basic core program for all students.
- * an administrative arrangement whereby more-able students are placed with low average students, and seven-year students placed with high-average students. This allows for balancing class load, and forces classroom teachers to vary the program for each stream.

* a greater need to maintain excellent individual pupil records in schools, and evaluate program in the light of stream goals.

* closer liaison with the home through written and verbal reporting and discussion.

Modifications Suggestions (1965)

In this year - and in fact in the years preceding and following 1965 - numerous questions were and are being asked and investigated concerning all aspects of the program. These questions include:

A. Initial Classification

1. Are our screening guides adequate?
2. Is the end of the first year of school too soon to make the initial classification? Would we perhaps be wise to wait until the end of the second year, with acceleration being related to third, fourth, fifth and sixth years of the program?
3. Would it be advisable to classify at the end of the first year, making the second year a probationary year? (Parents, of course, would need official notification that the second year was probationary.)

B. Re-Classification

Although every effort is made to classify students correctly, errors may be made.

1. Should a standardized form or procedure be followed notifying parents of change, or should this be handled by each individual principal in the manner he feels best suits the particular case?
2. Is the end of the third year the final point at which we might justifiably change a pupil from the superior stream to the high average stream?

3. What type of standard form might be useful for recording all changes? Who should retain copies of such a form?
4. If the end of the third year is the point at which it is unadvisable to alter superior and slow learner groupings, how is it best to handle those Division II students who appear to be misplaced?

C. Failure Within Continuous Progress

There is a small group within the slow learner stream which is not able to cope with the 2+ units of work assigned to that group. Eventually these students get so far behind that in effect, it would take them eight years to complete six years of school.

1. Should there be another placement of these pupils (possibly an adjustment class set up in central schools)? This would not be the same as a Junior Opportunity room.

D. The Differentiated Program

It is to be presupposed that if groups are established, it is being done to provide a special education for each of the established groups.

1. How much provision is made in our program for anything other than a time differential?
2. To what degree should the differentiated program be planned, and to what degree do we rely on the creativity of the classroom teacher to make this differential?

E. Percentages and the Groups

1. Are these figures realistic?
2. In lower socio-economic areas, would it be possible to establish a central school to which neighboring schools would funnel their superior pupils?

F. Superior Pupils

1. How might maturity level be measured most accurately?
2. Some principals suggest that a mathematics deficiency is arising within this group. Is this a universal trend? If so, is the association with low average pupils, and the tendency to teach to the low group in this particular subject area the cause?
3. What are the possibilities of cross-setting within the Continuous Progress Plan?
4. What homework policy should be established for these pupils?
5. What relationships are to be noted between health and the superior category?
6. To what degree are leadership qualities destroyed for those pupils who are the least competitive within the superior group?
7. How might these pupils be encouraged to participate in extra-curricular activities, or is this not a school problem?

G. The Small School

1. Is the small school able to do much more than identify pupils according to streams?
2. When superior students transfer into a small school, how may they be suitably accommodated?

H. Administration and the Teachers

1. What policy is to be followed in placing teachers with groupings?
2. How is the problem of the "new teacher" most successfully bridged?
3. To what degree should the Administration office be involved in in-service projects, or is this the prime responsibility of the principal of each individual school?

4. To what extent should a principal and his staff have assessment meetings throughout the school term?

I. Record Keeping

1. Do the forms C.P.1, C.P.2, C.P.3 and C.P.4 meet all the record keeping needs of the principal and classroom teachers?
2. What statistical recording should be employed for noting stream changes of individuals throughout the system?
3. Is there any necessity of altering our cumulative records which have proved adequate prior to the initiation of Continuous Progress?

J. Public Relations

1. What messages does our report card convey to the parents?
2. Is there a need for an enclosure letter to explain the letter gradings as they apply to each of the streams?
3. What are the effects upon parents whose children proceed to Junior High School, and are not graded according to a stream, but to the group as a whole?
4. Is a yearly meeting necessary to review Continuous Progress with the parents?
5. Does Continuous Progress involve many more direct contacts with individual parents than does the conventional grade system?
6. To what degree are parents allowed to influence placement of children within the streams?

K. Junior and Senior High School

1. What are the responsibilities of Elementary personnel to the pupils who are proceeding to Junior and Senior High School?
2. What are our responsibilities to those girls and boys from the superior stream who do not measure up to full matriculation standing in their Secondary level?

3. How grave is the age and maturity factor for superior students at the Secondary level?
4. To what degree should the receiving Secondary schools keep the Elementary school informed on pupil progress?

Arising out of the investigation related to these questions were eleven modification suggestions. These were explored in a complete review of the Continuous Progress Plan at an Education meeting of the Edmonton Public School Board. The Board at that time reaffirmed their support of the plan and felt that the modification suggestions had merit. The suggestions listed below with the exception of 3, 7 and 10 were implemented:

1. Standardized forms should be developed to inform parents of initial classification, and changes in classification.
2. The idea of Parent-Teacher conferences be explored as a part of the C.P. Plan.
3. One year-end form should be developed for the purpose of making an annual statistical report.
4. Consideration be given for the establishment of a few adjustment classes for those girls and boys who are not able to handle the seven-year program.
5. Thought should be given, to the development of a special curriculum guide for five-year and seven-year pupils, should an Elementary Curriculum Director be appointed at some future date.
6. The possibilities and problems in cross-setting for reading and arithmetic be explored.
7. Studies be conducted to analyse the achievement of High Average pupils.
8. Small schools should be considered for special enrolment and staffing privileges.
9. The University might be approached with a request that a members of our

staff be granted an opportunity to be a guest lecturer, explaining the features of the Continuous Progress plan to Standard E and Standard S students. This would aid greatly in our in-service program.

10. Cumulative record cards need immediate revision to assure constant identification of streamed pupils throughout their school career.
11. Meetings in June should be held between principals of receiving and feeder schools, to clarify the position of all pupils who are being moved from one division to the next. This would assure proper identification.

It should be noted that the last suggestion proved to be one of the most useful in that it focused attention at the Junior High level on the products of this elementary administrative plan. This emphasis on articulation between the elementary and junior high schools proved to be particularly beneficial to the five-year or more-able student.

At the time of the 1965 report, there were 9.17% of the pupils in the more-able program and 9.65% of the pupils in the seven-year program.

Principals' Consideration, 1968 - 69

During the 1968 - 69 school term, meetings were arranged with administrators in the South West administrative zone to further discuss the Continuous Progress Plan. Some of the interesting points arising out of the discussions included:

1. If the Semester System was implemented, what effect would it have upon the streams? Would two points of entry for Grade I be encouraged or resisted?
2. In the initial screening year, one school found it particularly advantageous to have their Grade I teachers do some "teaming" in the spring. This provided an opportunity to verify the tentative selections that each Grade I teacher had made for placement in each of streams. The follow-up meeting was much more meaningful having done this.
3. Grade II teachers be members of the placement team along with the administration and the Grade I teachers. This decreases the amount of resistance to placement that seems to follow in the second year.

Part of the decision has come from the Grade II teachers.

4. Do the new concept schools strengthen Continuous Progress or weaken the structure as it is presently outlined? The opinion seems to be that Continuous Progress loses its identity in these new schools, giving way to a continuum nongrading.
5. It was suggested that a Stanford-Binet be given to possible candidates for the five year program and that hearing tests be given to candidates for the seven-year program.
6. If the Junior High School is moving away from departmental examinations, would the time perhaps be right at the moment to explore the possibility of streaming from Grades IV - IX? This could eliminate some of the errors of placement resulting from the maturity factor at the Division II level.
7. Retain the idea of balancing class load with the average group but remove the High Average and Low Average labels. Teachers receiving pupils in the Low Average category do not seem to have the same goal set for their pupils as do the teachers of the High Average group. Yet, there are a number of students who would be suitable candidates for either group. This division is merely an administrative convenience.
8. Teacher placement is still an important key to the success of the plan. Certainly, the group would not be allocated on a rotation basis. It is necessary for administrators to assess personnel carefully.
9. The Black Study done by the A. T. A. four years ago reflected an acceptance on the part of the teachers to the plan. What would happen if the study was repeated today?
10. Should we not screen in more than three subject areas? Do we have instruments to measure skills and objectives of Social Studies Enterprise; Science; ?
11. The Low Average groups should not exceed ten in any situation.
12. The home environment is an error producing factor in stream placement.
13. Seven year pupils are really not provided for - especially in the area of Mathematics.

14. With our variance of facilities, materials and support staff, two systems are necessary - Continuous Progress and Nongrading.
15. With our K-12 structure, and elimination of grade IX and XII departmentals, could we not have two periods, but, only one acceleration or deceleration?
16. There is need for a tempered teacher specialization in elementary schools.
17. Does the Junior High core program not do more? There is a need for creative teachers to add or subtract from the core - do we have them?
18. Time has been the prime factor but is this enough?
19. More in-service is needed - especially with new appointees.
20. Principals need to relate to staff and parents more often.

It should be noted that on December 13, 1960 the Edmonton Public School Board approved adoption of the plan, with the condition that it was to be in full effect in September, 1962. It follows, then, that this is the system of organization still in effect in our elementary schools in Edmonton. It is understood, of course, that the principal has a responsibility to analyse his particular school situation and offer the type of organization that best meets the needs at that particular time. It would be fair to assume that percentage figures for each of the streams would possibly vary from one year to another in any one school, - or in the system for that matter. What is the distribution at the moment?