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EARLY INDICATIONS OF DROPOUT POTENTIAL:
A STUDY OF GRADUATES AND NON-GRADUATES
IN A MID-WESTERN HIGH SCHOOL

presented by

Lawrence V. Wells

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Education

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EARLY INDICATORS OF DROP OUT POTENTIAL:
A STUDY OF GRADUATES AND NON-GRADUATES
IN A MID-WESTERN HIGH SCHOOL

By

Lawrence V. Wells

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ABSTRACT

EARLY INDICATORS OF DROPOUT POTENTIAL: A STUDY OF GRADUATES AND NON-GRADUATES IN A MID-WESTERN HIGH SCHOOL

By

Lawrence V. Wells

The purpose of the study was to determine if there was a difference in potential dropout indicators, at the elementary level, between selected graduates and non-graduates. The population was grouped as follows:

1. Graduates without dropout indicators.
2. Graduates with dropout indicators.
3. Non-graduates without dropout indicators.
4. Non-graduates with dropout indicators.

Data were obtained from cumulative records and interviews. Cumulative records contained potential dropout indicator data (i.e. attendance, grade point average, retention, citizenship, standardized test scores, mobility). Data analyses were conducted at alpha .05 through analysis of variance, Scheffe group difference comparison, multivariate analysis of variance, and univariate F test. The students' elementary school experience was examined through interviews.

Cumulative record data analysis and interview findings were generally in agreement. There was a difference in the characteristic indicators of dropout potential for students with indicators who drop out and students without indicators who graduate. Statistics were insufficient to determine a difference between groups on reasons for staying in school

when dropout indicators indicated increased dropout potential. Interviews revealed there was some difference. The difference was the extent of family support. Data were insufficient to determine the impact of mobility on dropout potential. Null hypotheses were stated for dropout indicators. All hypotheses, with the exception of retention, were rejected. Interview responses suggested there was a difference among groups on dropout potential.

Conclusions of the study indicated groups without dropout indicators and groups with dropout indicators had characteristics consistent with their group status. Interview responses suggested that group perception of themselves was also consistent with their cohort status. The development of a broad profile indicative of characteristic potential dropout indicators is considered a factor in early identification of those at greater risk of dropping out.

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CHAPTER I

INTRODUCTION

Educational attainment has always had implications for individuals and society. In order for an individual to be a contributing societal member some level of education is helpful. Society depends upon skilled, educated citizens for societal maintenance, growth, and renewal. Schools have provided the means through which this function could be carried out.

As we have moved from an agrarian society, to an industrial society, to the current service and information, data-based management society the need for skilled, educated citizens has become greater than ever before. In an agrarian society one could be a productive, contributing citizen with minimal formal education. In an industrial society, formal education becomes increasingly important. Individuals need to be educated as a means to become independent, self sufficient, productive contributing societal members. In a service and information, data-based management society, the need for skilled, educated citizens becomes imperative for the individual and for society. In such a situation the uneducated person with minimal skills becomes dependent upon society. Those with limited prospects face a future of limitations and frustrations.

They become assimilated into a cycle of failure which, without prevention or intervention, becomes self-perpetuating. These persons may become a burden to themselves and to society as well.

There is no shortage of data generated by the schools regarding students. A problem may be how these data resources are used. These data resources are the cumulative record data and the feelings, perceptions, and responses of students to their school experiences. Herein lies the focus of this study.

In this chapter is presented information regarding the scope of this study. Included also is an historical explanation of a dropout, along with social and employment expectations. The reasons for dropping out, related to the student and school, are discussed. The purpose of the study is presented. The significance of the study is viewed relative to societal and individual implications. Research questions, definitions of terms, methodology, delimitations, limitations and an overview are all included in the pages which follow.

Historical Perspective

Dropouts have always been an aspect of the history of American education. The percentage of persons dropping out has generally declined over the years. This has resulted in an increase in the percentage of persons graduating from high school. In 1899 - 1900 only 6.4% of high school age students became graduates (Kaufman and Lewis, 1968). Societal expectations relative to graduating from or dropping out of school have changed. Initially, the expectation was that everyone would not graduate from high school. That has changed, however, to the expectation that everyone should have the opportunity to graduate from high school. The expectations changed as societal needs, which demand higher levels of education in the workplace, changed. The minimal social and job expectations of a century ago, however, permitted dropouts to be assimilated into society and the workplace. The needs of the rural south and the industrial north were for strong backs, not thinking workers. There was little need for critical or creative thinking individuals. Workers were not expected to solve problems.

By the school year 1949-1950 the percentage of high school graduates had increased to 59.0% of the total population of high school age students. By the 1964-1965 school year, the last year of the Kaufman and Lewis (1968) data, the percentage of graduates had been increased to

72.0%. The reduction in the dropout rate has also been recognized by Wehlage and Rutter (1986).

Although the school dropout rate has been on the rise in recent years, viewed historically it is relatively low even today. In 1900, for example, about 90 percent of the male youth in this country did not receive a high school diploma. By 1920 the noncompletion rate for males was still 80 percent, and it was not until the 1950s that the dropout rate fell below 50 percent. (p. 70).

Viewed from the aspect of graduation, historically there has been a significant increase in the number of graduates. Tanner (1972) has shown that for a period of 100 years, school years from 1869-70 to 1979-80 [projection], graduates ranged from 2.0 to 87.90 per 100 persons seventeen years of age.

The general trend then, as presented by the Center for Education Statistics (1986), has been an increase in the percentage of students completing high school. A United States General Accounting Office (i.e. GAO) report states "...the proportion of youth completing high school has risen dramatically in the last half century (p. 6). However, although the percentage of high school graduates has more than doubled in the past 40 years (and the percentage of college graduates more than tripled), it cannot be inferred that the graduates' educational achievement has remained the same..." (p. 8). The GAO report further points out "...there is evidence that in the late 1960's, and 1970's, there was a considerable decline in high school students' achievement levels..." (p. 8,9).

The Problem

The term dropout has been viewed from a variety of perspectives. For example, dropouts have been defined (Tannenbaum, 1966; Orr, 1987; Cervantes, 1965; Morrow, 1986; Hahn, et. al., 1987). Efforts have been made to quantify dropouts (Hahn, 1987; Miller, 1964; Tyler, 1964; Orr, 1987). They have been described in terms of ethnicity, race, class, and socio-economic status (i.e. SES) (Orr, 1987; Kaufman and Lewis, 1968; Ruby, 1987; Cervantes, 1965). A number of indicators of the potential for dropping out have been identified (Jenifer, 1989; Barrington and Hendricks, 1989; Amos and Southwell, 1966; Reyes, 1968; Wilkinson, Frazier, Stewart, & Ligon, 1989; Kagan, 1988; Orr, 1987; GAO, 1986; Children's Defense Fund, 1974).

There has been much research and analysis of dropouts. This has made a lot of information available. These efforts, along with changes in societal expectations, may have contributed to an increase in high school graduation. The individual and societal consequences of dropping out, however, require continued effort to increase the percentage of high school graduates and the reduction of dropouts. A plethora of data has been and continues to be generated on students. Much of these data are contained in student cumulative records. The problem of concern is how a practitioner views and actually uses these data for decision making leading to a reduction in dropout potential. An accumulated history of school failure exists for many

students by late elementary or middle school. This is made worse by many school practices including retention, tracking and ability grouping, standardized curriculum and expulsion (Wheelock and Dorman, 1988).

Reasons For Dropping Out

Reasons for dropping out, from the dropout's point of view, have been provided (Dillon, 1948; Orr, 1986; GAO, 1986; Ekstrom, et. al., 1986; OERI, 1987).

School related reasons for dropping out have been delineated (Dade County Grand Jury Report, 1984; Children's Defense Fund, 1974). Dropout prevention and intervention have been discussed (Orr, 1987; Sinclair and Ghory, 1987; OERI, 1986; NIE, 1978; Sullivan, 1966; Gordon and Wilkerson, 1968; Rees, 1968; Ascher, 1968; Willis, 1987).

There is obviously a wealth of information which focuses on the dropout. From the viewpoint of a practitioner this knowledge may have little impact in the way schools operate. The decisions, policies and practices used may prove less than effective, regarding the potential dropout. The practitioners may lack the necessary feedback when their students move on to the next teacher's classroom (Smith and Shepard, 1987). The next teacher may not review the cumulative file data of new students. Many may feel that such a review may promote biased opinions. They prefer to get to know a student, over time, on their own terms. It has been said that this approach gives a new start to

students unencumbered by documented data from the past. Such an approach may prohibit the opportunity to implement intervention strategies early in a new school year. The systematic approach of analyzing existing data could reveal areas of student need. These areas then could become targets for prevention, and if necessary intervention.

Purpose Of The Study

The purpose of the research was to determine if there is a difference in potential dropout indicators, at the elementary level, for the cohorts of the classes of 1989, 1990, and 1991 who have been graduated from high school and those which have not been graduated.

Related purposes are:

1. To learn more about selected factors associated with dropping out, so that these factors may be addressed more adequately.
2. To discover ways of reducing the generation of factors contributing to the potential for dropping out of school.
3. To propose a way of analyzing data which will be useful to schools in their study of the dropout phenomena (i.e. the disaggregation of data by selected indicators and concomitant analysis to illuminate what may be suggested for dropout potential).

Significance Of The Study

There have always been consequences associated with dropping out. These consequences have had implications for both the society and the individual. these societal and individual consequences have, however, very different

implications now than they did in either 1900 or 1965.

Societal And Individual Implications

Toffler (1970) has characterized the history of our society as developing from an agrarian society to an industrial society. The next stage, to which society is moving is one emphasizing information and service. This "new" society will require citizens with different skills than those needed for success in either the agrarian or the industrial societies. As society is transformed, greater requirements become the criteria for success. This places demands on schools for offering students the means to acquire needed skills. Toffler (1970) has written

...if agriculture is the first stage of economic development and industrialism the second, we can now see that another stage - the third - has been reached. In about 1956 the United States became the first major power in which more than 50 percent of the non-farm force ceased wearing the blue collar of the factory or manual labor. Blue collar workers were outnumbered by those in the so-called white collar occupations - in retail trade, administration, communications, research, education, and service categories. Within the same lifetime a society, for the first time in human history, not only threw off the yoke of agriculture, but managed within a few brief decades to throw off the yoke of manual labor as well (p. 16).

The Employability Skills Task Force of the "Governor's Commission On Jobs And Economic Development" (1988), for the state of Michigan, has summarized some implications these circumstances have for the individual, for education and for society.

Technological advances heightened domestic and international competition [and] challenge American workers to be more skilled than ever before. In fact,

American survival in the global economy will depend on the preparation and quality of the nation's human resource pool. More than anything else, the vitality of the country's education and training systems will determine our success in keeping the jobs we have and securing new ones (p. 1).

The types of skills necessary for participation in today's society are vastly different than those needed in the past. It has been said that "...the new jobs being created in our economy require higher levels of schooling than they once did, according to the U.S. Bureau of Labor Statistics. Fully 52 percent of the new jobs require one or more years of college ...thirty four percent of new jobs require no more than a high school education..." (Governor's Cabinet Council on Human Investment, 1988, p. 4). It has also been stated that the U.S. Department of Labor noted that "...of the fastest-growing job categories, all but one - service occupations - will require more than the median educational level (12.6 years of school today; 13.5 years in 2000)" (Governor's Cabinet Council on Human Investment, 1988, p. 4). Success for children, more than ever, will depend upon education. Many children, however, are at-risk of not continuing their education (Dougherty, 1989). There is a myriad of reasons for children being at-risk. "Substance abuse, delinquency, pregnancy, poverty, and low educational achievement are all familiar indicators of the plight of many young people. ...About 22 percent of children live in poverty, drug and alcohol abuse have risen 60-fold since 1960; teenage homicide is up 200 percent for whites since 1950; teenage arrests doubled from 1960 to 1980; teenage

unemployment is up 35 percent for whites and 60 percent for non-whites since 1961" (p. 3). An increasing number of dropouts are minority persons, who are making up an increasing number of the public school population (Dougherty, 1989; Center for Education Statistics, 1986). Kaufman and Lewis (1968) have suggested that dropping out of school is "...predominantly a nonwhite phenomenon" (p. 6). The consequence of dropping out of school, for these, and any other persons, is limited opportunities (Center For Education Statistics, 1986). Limited education is equated with limited employment prospects, limited income potential, and, therefore, a limited future.

Dropout Cost. Costs associated with dropping out are essentially human costs.

Inadequate education or skill levels do not cause poverty, crime, teen pregnancies, spouse or child abuse, and other human tragedies, but there is nevertheless a close correlation between these problems and literacy levels. The earnings of adults with less than a high school education are sharply constrained, affecting their ability to support a family. The limits of their education create low self-esteem and feelings of inadequacy, attitudes which can make them poor employees or prevent them from pursuing employment or training opportunities, including those for which they qualify. The resulting personal frustration too often results in substance abuse or abusive behaviors. Ultimately, parents who cannot read to or help build the reasoning skills of their children, pass on to a new generation a legacy of low literacy levels, personal frustration and limited horizons (Governor's Cabinet Council on Human Investment, 1988, p. 3).

Left unabated these conditions become self perpetuating. The outcome is detrimental for the individual and society as well. The school's role is to prepare youth to become fully contributing participants in society.

Schooling is characterized by Johnson (1985) as an initiation and rite of passage.

Initiation and rite of passage are primary vehicles for the reproduction and regeneration of culture and society. ...Public schooling is mass initiation and rite of passage adapted to the educational requirements of stratified, multi-cultural, nation-state societies. Like any other prepubescent initiation and rite of passage situation, elementary schooling separates children from their families, transmits core social and cultural information, shapes appropriate feelings, behavior, and habits of mind, and ceremonially confers status identities to those successfully completing the passage... (Johnson, 1985 pp. 8,9).

Not all persons are as "successful" as others in completing this initiation and rite of passage.

Research Questions

Questions of interest are as follows.

- (1.) Are there differences in student characteristics between students who have indicators of dropout potential and dropout and students without such indicators who graduate?
- (2.) Why do some students remain in school and other students dropout of school when the indicators of the potential to dropout suggest that all of these students may drop out?
- (3.) Are the indicators of potential dropout status different for students who have only attended one elementary school than they are for students who have attended more than one elementary school?

Definitions

Definition of terms for this study are as presented below.

Children At-Risk: Those children who are at-risk for a number of social problems characterized as being indicators of potential dropouts. Therefore, they are at-risk for dropping out of school.

Citizenship: The degree to which persons exhibit the proper behavior, relative to school rules, and social custom.

Another way to look at it is to consider the extent to which a person is a responsible member of the school community (i.e. students, teachers, parents, principal, other school personnel). Citizenship will be quantified, in terms of a letter grade, on a four point grading scale. A citizenship grade below 2.0 is considered an indication of an area of potential concern. This is also referred to as a behavior problem.

Cohorts: Persons who entered the 9th grade together and graduated or should have graduated, from senior high school at a specified time with all other persons belonging to the same group.

Compensatory Education: Remedial and or supplemental educational services that are in addition to the regular curriculum which is provided for all students, with the exception of special needs students.

Dropout: A person who leaves school prior to graduation and does not enroll in another school.

Grade Point Average: The mathematical average of reported grades. Below 2.00 is considered an indication of a possible at-risk individual. Computed grade point average will consist of grades from arithmetic, reading/grammar, handwriting/penmanship, spelling, social studies/history, and general science.

Indicators Of Potential For Dropping Out: Characteristics, behaviors and/or circumstances which suggest increased possibility for a student dropping out of school prior to completion. More than one of these potential dropout indicators, on a student's cumulative record, indicates this student is at greater risk than those with one or none of these potential dropout indicators. For the purpose of this study, the indicators of dropout potential, which are of interest, are (a) low rate of attendance, (b) high retention rate, (e) low standardized test results, (f) behavior problems. Dropout indicators (a) through (e) are easily quantifiable. Dropout indicator (f), however, is more subjective. This subjective indicator is documented on the student report card as a letter grade on a four point scale.

Mobility: This term refers to transfer between schools. Students who come from families who move frequently will usually attend more than one school. Attendance in more than one school, in the same school year, is considered an indicator of high mobility.

Non-graduate: A dropout.

Poor Attendance: Eleven or more absences and/or tardies, within a semester, suggest poor attendance patterns.

Retention Rate: This term refers to the number of times a child has been retained within a grade, as opposed to being promoted to the next grade. Being retained one time or more is considered to be an indicator of an at-risk person.

Standardized Test: A norm referenced test used to test student academic achievement. The Iowa Test of Basic Skills was used to test cohorts in this study.

Methodology

The population for this study is composed of the cohorts of the graduating classes from the years 1989, 1990, and 1991 of the school district within which this study was conducted. The records of these cohorts (i.e. records for grades 4 and 5) were reviewed relative to the selected indicators of the potential to drop out. These indicators were compared to reveal any differences in potential dropout indicators.

Additional data were generated through interviews with identified potential dropouts who graduated, dropouts and graduates. Interview questions were based on the review of literature and critiqued by practitioners, in the field.

Data used to conduct this proposed study are:

1. Attendance records for each child in grades 4 and 5.
2. GPA for each student.
3. Number of retentions for each child
4. Number of times moved and frequency of moves
5. Reading and math standardized test average score
6. Documentation of citizenship grade

Delimitations

The depth and breadth of variables related to dropouts and their potential for dropping out far exceeded the scope of this study. No attempt was made to critique educational programs. The quality of the curriculum or the efficacy of the delivery of instructional services was not a focus of this research. Therefore, the type, quantity or quality of instructional materials was of no interest. Instructional techniques, approaches, and/or methods, although important, were not of concern for the purposes of this study. The importance of effective teaching was recognized by this writer. However, the quantification of teaching ability was not a part of this study.

The analysis of school district support systems was not within the scope of this study. Therefore, no review of social work, counseling, psychological, evaluation, and other support services was made.

It was recognized that schools do not exist in a vacuum. There are a number of forces, existing within the environment, which impact the school in various ways. These forces and the dynamic interrelationship between them and the school was not a consideration of this study. It was apparent that the effectiveness of the school program, in part, was dependent upon the community. The relationship between home and school, however, was not examined. Succinctly stated, the motivation for this research was to describe not to evaluate. All efforts were directed toward

this goal. The pursuit of this goal was carried out at the elementary school level. Data related to student performance in grades pre-school to third grade, although important to a student's success in grades 4 and 5, were not included in this study. This was due to a difference in format used for grades in pre-school to third grades.

Limitations

Given the methodology of this study, the generated data and consequent findings were limited to describing the population of the study. Caution must be given in any attempt to generalize the findings. Generalization should be limited to the use of the process of analysis of potential dropout indicators relative to their grade level incidence, as a means for decision making. Use of this tool may help generate data useful in directing future efforts.

There are several limitations impacting the analysis of data. Analysis of potential dropout indicators was limited to those indicators readily available in the student cumulative record. SES data in the form of parent income or the cost the family paid for lunch in the federally funded lunch program were not available for this study's cohorts. Standardized test data were limited to an average of reading and math scores. Therefore, quantitative analysis of potential dropout indicators were limited to attendance, grade point average, mobility, retention, citizenship grade as a measure of behavior, and an average of reading and math

standardized test scores. Analysis was limited to looking for a difference among four identified groups on these potential dropout indicators. Qualitative analysis was limited to an interview of selected individuals. The school district, within which the study was conducted, serves a small community with limited rental housing and a high incidence of home owners. Thus, the incidence of movement between schools was quite limited and reduced the data necessary to study the potential dropout indicator mobility.

Overview

The first chapter included an introduction with historical perspective, problem statement, significance of the problem, purpose, definitions, methodology, delimitations and limitations. The next chapter contains the review of literature. It includes issues relating to dropouts, such as questions, definitions, estimations, class and ethnicity, characteristic indicators, reasons for dropping out, and factors affecting dropping out. Chapter three includes the methodology with research questions, hypotheses, instrumentation, data collection, and summary. Chapter four contains the findings, with an introduction, summary of data, research questions and hypotheses. The research questions and hypotheses are addressed by quantitative indicator data and qualitative indicator data. Other qualitative data, regarding cohort feelings about elementary school and thinking about dropping out of school, are presented. A summary of findings is also included.

Chapter five contains an introduction, summary of the study, summary of findings, conclusions, implications, and reflections.

CHAPTER II

REVIEW OF LITERATURE

Several facets of the dropout phenomena are reviewed in this chapter. The section "Dropouts - What Do We Mean?" illuminates the term dropout, and estimation of characteristic indicators are highlighted. Reasons for dropping out are discussed. Factors affecting dropping out are discussed. Human and societal costs are reviewed. A summary is provided.

Dropouts - What Do We Mean?

What are dropouts? Who is most likely to drop out? Where do they come from? Are some persons born to be dropouts or are they made? Some insights into these questions are provided in the related literature.

The term dropout has various definitions. Tannenbaum has said "the term 'dropout' generally refers to pupils who leave school before earning a high school diploma" (1966 p. 4). Orr (1987) has defined a dropout as "...a student who withdraws from school without a high school diploma and without enrolling elsewhere" (p. 1). Cervantes (1965, p. 196) has defined a dropout as "any youth who for any reason, except death, has left school before graduating from high

school without transferring to another school." Morrow (1986, p. 39) has provided a more comprehensive definition. He has written "the term 'dropout' has been used to designate a variety of early leavers: (1) pushouts - undesirable students; (2) disaffiliated - students no longer wishing to be associated with the schools; (3) education mortalities - students failing to complete a program; (4) capable dropouts - family socialization did not agree with school demands; and (5) stopouts - dropouts who return to school, usually within the same academic year." The "...all-inclusive definition adopted by the Current Population Survey, ...defines dropouts as 'persons neither enrolled in schools nor high school graduates.' It doesn't exclude from this definition such persons as 'pregnant teenagers' or 'needed at home'. If you aren't in school and you haven't graduated you're a dropout" (Hahn, A., Danzberger, J., Lefkowitz, B., 1987, p. 11).

The definition of children at-risk includes having ability but low motivation, with associated characteristics. Kagan (1988) has noted how teachers defined children at-risk. "An at-risk student is one who (a) has sufficient intellectual ability but consistently obtains low grades, [or] (b) has low motivation and appears indifferent to school, ...[or] (c) appears to have marginal ability and becomes frustrated or withdrawn because of a lack of success..." (p. 320).

Estimation of Dropouts

Some effort has been given to quantify or estimate dropouts. Over time there has been a reduction in the number of school-aged dropouts. Some estimates suggest that "...one-third of all youth will never finish high school" (Miller, 1964, p. 11). Other estimates offer different assessments of the problem. Tyler has stated that "...40 percent of American youth drop out before completing high school. This is a large figure, though considerably smaller than those of earlier periods" (Tyler, 1964, p. 5). Other estimates indicate that "fourteen to 25 percent of students entering high school will not finish. Of the fall 1983 ninth-grade class of 3.3 million, 470,000 to 830,000 students will drop out before graduating. Of the 16.8 million youth aged 18 to 21 in 1983, as many as four million had been or still were high school dropouts" (Orr, p. 7, 1987).

To count dropouts, the U.S. Government Accounting Office uses the definition "persons neither enrolled in schools nor high school graduates" which was adopted by the Current Population Survey (Hahn, A., Danzberger, J., Lefkowitz, B., 1987, p. 11). The estimating of dropouts has also been done relative to ethnicity, race, class, and SES. Orr (1987) recognizes that some students are more prone to drop out than others. "According to the High School and Beyond Survey, a national longitudinal survey of 30,000 randomly selected 1980 sophomores" there are some

interesting differences in regard to the sources of dropouts (Orr, 1987, p. 7). Although 14 percent of the sophomores will become dropouts only 12 percent of the white sophomores will drop out, whereas 17 percent of the black sophomores will drop out, and 19 percent of the Hispanic sophomores drop out (Orr, 1987). Orr (1987) has also stated that "urban youth are 50 percent more likely to drop out than rural youth. White students in the South and West are almost [sic] more likely to drop out than are those in the Northeast and the North Central states, while the reverse is true for black students" (p. 7).

Class And Ethnicity

Class. Class differences have been found to have some important implications for the dropout situation. Kaufman and Lewis (1968) saw the situation relating to dropouts as a lower-class problem. They saw a clash between cultures. The culture of the school replicates middle class culture with its associated values and beliefs. When the clientele is from the lower class they bring values and beliefs far different from those supported by the schools. Kaufman and Lewis have written "there can be no doubt that dropping out is, on the whole, a lower-class problem. At the same time, the public school system, as it is presently operated, is essentially a middle class institution, set up to transmit and reinforce middle class values and goals" (p. 16). The consequence of this conflict is the dropout problem. Those

students who can adjust to school demands may graduate. Those who fail to adjust become dropouts.

Ethnicity. "The disproportionately large number of dropouts within minority and low-socioeconomic groups substantiates the notion that students will most likely submit to the preponderance of environmental risk factors rather than overcome them" (Ruby, 1987, p. 20). Cervantes (1965) has written "...though the dropout cuts across all ethnic, social class, and geographic lines the overwhelming percentage originates in the blue and lower-white collar socioeconomic classes" (p. 197). Ruby (1987) has suggested that the "...highest dropout rates are found in areas where there are large minority populations and fewer English-speaking students. Research shows that the dropout rate for Native Americans living in an urban setting may be as high as 85 percent, while the Puerto Rican dropout rate varies between 70 and 80 percent. The black rate surpasses the white rate by 40 percent, with the Hispanic dropout rate 50 percent higher than the white dropout rate..." (p. 5).

Characteristic Indicators

Within the literature, indicators of dropouts are characterized in a number of ways. Many of these indicators were identified by several authors, whereas some were unique to one particular study or another.

Academic Performance

The most significant indicator was poor academic performance (Ascher, 1986; Cervantes, 1965; Lezotte and Passalacqua, 1978; Middleton, 1979; Tannenbaum, 1966; Ruby, 1987; Kaufman and Lewis, 1968; Smith and Lincoln, 1988; Lambert, 1964; OERI, 1987; Timberlake, 1980). Lezotte and Passalacqua (1978) have written "...the best single predictor of subsequent school achievement is previous or current achievement" (p. 6).

Some interesting implications for the academic performance of dropouts have been identified. Under the the auspices of the National Child Labor Committee, Dillon (cited by Middleton, 1979) made a most comprehensive study of the dropout situation. He found that as students proceeded through the levels of schooling from elementary to junior high to senior high there was a constant academic performance regression. There was a "high frequency of grade or subject failure in the junior and senior high schools" (p. 22). The dropouts have higher levels of alienation, feelings of insecurity, and lack of interest in school work. Tannenbaum (1966) reported that "...84 percent of the dropouts were in classes at least one year below grade levels they should have reached at the time of withdrawal" (pp. 13, 14). A circular behavior syndrome

(Kaufman and Lewis, 1968) has been noted to be associated with this set of circumstances. This syndrome is one in which "...low accomplishment tends to lower aspirations, which in turn leads to even lower accomplishment, and so forth" (p. 17). The outcome of current achievement" (p. 6). this is school failure and far too many eventually dropping out of school. The failure produced by this situation may be viewed from a different perspective. In writing about "children at-risk" Smith and Lincoln (1988) have written "they are said to be failing in school, and yet it is clear that it is we who are failing to educate them" (p. 8).

Failing Grades

Grades, another view on academic performance, were found to be an important indicator (Jenifer, 1989; Barrington and Hendricks, 1989; Amos and Southwell, 1966; Reyes, 1968; Wilkinson, Frazer, Stewart, & Ligon, 1989; Kagan, 1988; Orr, 1987; GAO, 1986; Children's Defense Fund, 1974). Failing grades were viewed as an accurate predictor. As high as eighty percent of the eventual dropouts may be initially identified by this indicator (Barrington and Hendricks, 1989). A survey from the High School and Beyond (Orr, 1987, p. 8) found that "...one third of all dropouts reported leaving school because of poor grades." Potential dropouts tend to be older, on the average, than their classmates (Reyes, 1968; Wilkinson, Frazier, Stewart & Ligon, 1989; Williams, 1985). These older students have

been labeled as overaged (Reyes, 1968; Wilkinson, Frazer, Stewart & Ligon, 1989; Williams, 1985).

Mobility

Mobility was another important indicator (Amos and Southwell, 1966; Cervantes, 1965; Reyes, 1968; Timberlake, 1980). Amos and Southwell (1966) viewed mobility as high movement "...between elementary schools..." (p. 444). Another term used was "... Frequent change of schools..." (Cervantes, 1965, p. 198). Reyes (1968) focuses on the family moving frequently. From either focus of the family moving or consequently the child changing school, the end result was mobility.

Standardized Test Results

Standardized test data, as a measure of achievement, were also strong indicators of a potential dropout (Cervantes, 1968; Lambert, 1964; and Reyes, 1968). Potential dropouts were "...two years behind in reading or arithmetic..." (Cervantes, 1968, p. 198). Lambert (1964, p. 60) calls this indicator "...poor scholastic aptitude". Some schools used lack of basic skills, revealed by standardized test results as one of several at-risk indicators (Reyes, 1968).

Failure/Retention

Another strong indicator of potential dropouts was

failure/retention (American Association of School Administrators, 1979; Amos & Southwell, 1966; Cervantes, 1965; Hahn et al., 1987; Jenifer, 1989; OERI, 1987; and Williams, 1985). For example, the American Association of School Administrators has suggested that among the "strongest predictors of dropout...[was] academic failure..." (p. 30). Failure was among a number of school related indicators identified by Amos and Southwell (1966). Retention was among common factors which are indicators of potential dropouts, suggested by Jenifer (1989). It has been written "...D and F students who have repeated a grade stand a far greater chance of leaving school than those who proceed from grade to grade on schedule..." (OERI, 1987, p. 3). Dropouts were found to have higher rates of retention than other students (Williams, 1985).

Behavior

There was some agreement that behavior problems are another indicator of a potential dropout (Cervantes, 1965; Coley & Goertz; Kentucky Dropout Prevention Advisory Commission, 1985; OERI, 1987; Sims, 1989; Lambert, 1964; Slavin & Madden, 1989; Williams, 1985). Behavior problems were among the twenty characteristics of potential dropouts identified by Cervantes (1965). For Coley and Goertz (1987) behavioral problems was one of their at-risk indicators.

Reasons For Dropping Out

A Kentucky State Department study dichotomized the reasons students leave school into two categories (Kentucky Dropout Prevention Advisory Commission, 1985). These were school related and non-school related reasons.

School-Related Reasons

Among school-related reasons was a pattern of conflict with teachers and peers, along with feelings of harassment from school authorities. The OERI (1987) used the term misbehavior to identify this potential dropout indicator. "...Misbehavior while in school can signal trouble. Students who have been suspended, are chronically truant, or have been in conflict with the law have a higher-than-average chance of dropping out" (p. 3). Sims has characterized disruptive behavior as one of the predictive behaviors of children at-risk. She has also suggested that some children at-risk "...will experience some difficulty with the law, use drugs, become involved in some form of gang-related activity..." (p. 141). Slavin and Madden (1989) referred to potential dropout indicators as risk factors. Behavior problems were among these factors. Williams (1985) found that dropouts misbehaved more and were sent to the principal's office more than those who were likely to persist in school. School experiences that are perceived as unpleasant and non-supportive reinforce each other and may prove to be a facilitating factor in dropping out of school.

The reason that students drop out of school were as diverse as the students themselves. They ran the full spectrum of possibilities. It was realized that factors related to motivation for decision making and concomitant action taken by persons were complex and interrelated. There was no single reason for dropping out of school. There were a number of reasons related to the context within which one exists (Timberlake, 1980). This notion is based on the idea that individuals, schools, and society are interconnected. "Society provides the framework within which children and youth live and learn, and inevitably affects what they bring to school and the ways in which they put their school experiences to work" (Stratemeyer, 1977, pp. 208-221). The school experience may offer significant conditions which may promote motivation for dropping out or staying in school. In other words, some schools were "...characterized by a prevalence of failure while others..." were not (Dade County Grand Jury Report, 1984, p. 16). The school experience from the learner's perspective, "...ordinarily represents little more than an arrangement of subjects, a structure of socially prescribed knowledge, or a complex system of meanings which may or may not fall within his grasp. Rarely does it signify possibility for him as an existing person, mainly concerned with making sense of his own life-world" (Maurice Merleau-Ponty, cited by Green, 1977, pp. 237-253). This suggests there is a milieu within which the motivation for dropping out may develop, for some

students.

Approximately two thirds of the United States prison population are school dropouts. Many inner city residents who have an addiction to drugs are dropouts. The majority of teenage pregnancies happen to dropouts (Cordtz, 1989).

Student-Related Reasons

Dropouts have offered their own rationale for their dropping out. Work was among the reasons. Dillon (1948) noted that the majority of the dropouts in his survey left school for work related reasons. (Orr, 1987, p. 8) ...Both males and females reported work as a reason for dropping out. A few students reported health reasons as a factor. A General Accounting Office (GAO) government report provided several self-reported reasons persons drop out. For example "...preference or need for work" (GAO, 1986, p. 13). Among students' behavior indicators, associated with dropping out of school, is employment (Ekstrom, et al, 1986).

In a Children's Defense Fund survey (1974) the most frequently reported reason for dropping out was the children "did not like school". " 'Not liking school' may be the child's words, but it is the policies and practices of schools that provoke them" (Children's Defense Fund, 1974).

Everyone agrees that the way young people experience school is the most frequently cited reason for quitting early. But what does it mean? Children who fail to learn? Or schools who fail to teach? The first are called 'dropouts'. The second are called 'pushouts'. Interestingly, youngsters blame the school less for their failures than might be expected. When asked why they dropped out, more than a third of all the boys

say, 'Because I had bad grades,' 'Because I did not like school.' Only one in five drop out because they could not get along with the teacher and only 13 percent are expelled. These figures underestimate the institution's willful decision not to teach children. Referrals to special education have become a common way to solve class control problems by pushing some youth out of the mainstream. One district suspended additional referrals because at current rates, the entire pupil population would have been placed in special education within three years... (Mann, 1986, p. 5).

Smith and Lincoln (1988) refer to potential dropouts as "children at-risk" "...who are said to be failing in school, and yet it is clear that it is [educators] ...who are failing to educate them" (p. 8). If we believe that our students are failing to learn, when in the view of Mann (1986) we are failing to teach, in effect we are blaming the student for our inability to teach. A San Diego survey of dropouts (Office of Educational Research and Improvement, U.S. Department of Education, 1987) revealed typical reasons for dropping out: boredom, teachers said they were stupid, courses not challenging, and didn't like school.

Factors Affecting Dropping Out

There were a number of important factors which influence conditions related to a student's dropping out of school. Some of these factors had serious implications for the individual dropout. However, since the individual who drops out of school must exist, one way or another, on some level of society the decision to dropout had societal ramifications as well. Literature important to these factors will be reviewed. "Poor academic performance and

poverty encompass many personal and social pressures that have long been known to be impediments to educational achievement. These pressures and other factors may be the actual reasons for dropping out" (Orr, 1987, p. 6).

Geographical Differences

It has been indicated that the dropout situation has a different impact on different groups (Kaufman & Lewis, 1968; Orr, 1987; Ruby, 1987). Just as it has been stated for different groups of persons it has also been postulated for different geographic regions of the country. A study conducted by Hahn, Danzberger, and Lefkowitz (1987) provides support for this position. "The Southwestern states suffered the highest dropout rate of 21 percent, with 18 percent in the Northeast, 11 percent in the Southeast, and 9 percent in the Northwest. Dropout rates were lowest in the midwest where student bodies are more homogenous and where the suburban/small town character of a greater percentage of the schools often means small class sizes. As might have been expected, dropout rates were twice as high in the larger cities than in the smaller cities (25 percent vs. 13 percent)" (p. 13).

Employability

Persons who dropped out of school had a more difficult time finding employment. Peng and Taki (1983) have reported that 27 percent of dropout students, who were studied in the

"High School and Beyond" study, sponsored by the National Center for Education Statistics (NCES), "...were unemployed or dissatisfied with their work and were looking for work. The majority of those who worked full- or part-time were engaged in low-skilled jobs. Most of the dropouts regretted their decision to leave school prematurely" (p. 2). Beekman (1987) had taken a similar position regarding the employment prospects of dropouts. "Unemployment rates are very high among high school dropouts and dropouts earn less future income than do high school graduates" (p. 2). Beekman (1987) reported on a study conducted in Dade County, Florida and in Wisconsin. Dropouts in the Florida study were found to earn the minimum wage, whereas dropouts in the Wisconsin study reported earning less than the minimum wage. Dropouts, particularly youth who drop out, were least likely to find employment. They had severe limitations on their employment opportunities (Orr, 1987). "The limited employment opportunities translate into cumulative lifetime earning differences..." between dropouts and high school graduates (Orr, 1987, p. 9).

Human And Societal Cost

The child and the school were significantly impacted by "...social, political and economic pressures" (Berkowitz, Chwast, & Shattuck, 1971). "The consequence of dropping out of school leaves a significant personal and societal impact on tax paying citizens. For example, school dropouts tend

to be disproportionately represented among youth who commit acts of vandalism and violence, who become teen parents, and who exhibit dysfunctional behavior such as homicide and suicide" (Jenifer, 1989, p. 3).

Smith and Lincoln (1988) view the dropout problem as one of undereducation, which may have some profound effect, in the near future.

The crisis of the undereducation of a body of students constituting one in three in our classrooms, is growing each year as a proportion of our educable young. Dominant in this body are the children of poverty - economically, culturally, racially, and ethnically disadvantaged. They have come to be called youth 'at risk' because they are at-risk of emerging from school unprepared for further education or the kind of work there is to do. Often they are ready only for lives of alienation and dependency" (p. 8).

Guthrie and others (1989) had identified several important factors associated with dropping out of school. They suggested that more than 700,000 students drop out of school yearly. "That's the equivalent of shutting down three medium-sized high schools every day" (p. 2). Even when dropouts return to school and either complete high school or earn a GED (i.e. General Education Diploma) certificate most fail to acquire skills to be productive societal contributors. "Instead they enter ... the world of urban communities where they confront welfare, homelessness, or jail ..." (p. 2).

Dropouts also precipitate huge social cost. Billions of dollars are lost in tax revenues. Billions more are lost by business and industry on employee training. "In an increasingly competitive world economy, these sacrifices we

simply can no longer afford to make" (p. 2).

The Children's Defense Fund (i.e. CDF) (1987) news letter points out the loss to the dropout and society. "A recent estimate of the total lifetime earnings loss by dropouts who would have graduated from high school in 1981 alone was \$228 billion, with an approximate loss of \$68.4 billion in tax revenue" (p. 2).

School Practices

A number of critical factors relating to the dropout have been discussed by Wheelock and Dorman (1988). Wheelock and Dorman (1988) felt that "...holding students back does not improve achievement and, in fact, intensifies rather than remediates students' lack of success..." (p. 5). Smith and Shepard (1987) saw the move away from social promotion and the resultant increase in retention as having serious consequences. First, "...retention practices are poorly documented, because there are no standardized and reliable national longitudinal data on what has always been a local or state issue" (p. 130). Secondly, they question the effectiveness of stricter promotional policies as a means to increase achievement. "The body of evidence addressing this assumption...is almost uniformly negative. Indeed, few collections of educational research are so unequivocal. The most comprehensive of the several reviews of research on retention is a meta-analysis... The consistent conclusion...is that children make progress during the year

in which they repeat a grade, but not as much progress as similar children who were promoted" (p. 130). They further note that in addition to the use of retention for academic failure it is also used to attempt to correct immaturity. Children were placed in programs, such as transitional grade programs, in order to have a year to grow. The net effect was the same as retention. Children were older than others in the same grade and had an additional year added on to their time in school prior to graduation. Both retention and transitional grade placement resulted in a child being overaged as compared to his classmates. The end results of such practices had some serious consequences for the student at-risk.

Teachers generally lack feedback on what happens to their pupils after they move on to other grades. Pupils who did not seem out of place entering first grade at age 7 can later drive themselves to junior high and sometimes are legally eligible to buy alcohol and to be drafted for military service well before it is time to graduate from high school. It is more difficult to keep adults in a public school program, and those who study the dropout problem note that the tendency to drop out prior to graduation is increased for students who are overaged for their grade... (p. 131).

Tracking and ability grouping have been viewed as compounding factors in school failure. Wheelock and Dorman, (1988) viewed this practice as relegating students who fail to lower tracks and consequent lower quality education. "This sorting function begins in the elementary grades but becomes formalized in the middle grades as achievement gaps between poorer and wealthier students widen..." (p. 11). Increasingly, some states and local districts are basing promotion and graduation requirements on a single standardized test score. "As a result, both teachers, parents, citizens, and students have come to equate improved test scores with improved education despite evidence to the contrary..." (p. 11). Standardized curriculum and instruction can profoundly affect the quality of an educational experience. This is viewed as less than desirable when such standards cause instruction to be based on standardized test requirements. Teachers begin to teach to the test. Instruction should be based on "real knowledge..." (p. 12). The lack of teaching credibility and authenticity of the curriculum may be cause for school dropouts. Standardized tests should only constitute a part

of the program of student needs assessment. Other school actions were viewed as having a negative effect on students at-risk. "A variety of other district and school based practices compound the consequences of lack of success and frequently dovetail with policies of non-promotion, tracking, misuse of standardized testing, and standardized curriculum to send messages of rejection to vulnerable students..." (Wheelock and Doorman, 1988, p. 13). An example of such practices was the use of grade attainment as a prerequisite for participation in extra curricular activities. This may increase the academic motivation of some students but reduce motivation for some children at-risk (Wheelock and Doorman, 1988). Other punitive school practices were the use of expulsion from school for the chronically truant and suspension for misbehaving.

...negative perceptions of school discipline among many vulnerable students derive in part from students' experience of rules as arbitrary and in part from the failure of adults in school to distinguish between discipline and punishment. This failure is institutionalized through such school-based practices as placement of students in unstructured and unsupervised in-school suspension, failure to help students learn to negotiate conflict or talk about differences as an alternative to fighting, and failure to provide students with genuine opportunities to propose, discuss, revise, or appeal school rules. In such a climate, vulnerable students are likely to receive signals that they must either conform or leave, with few opportunities in between for negotiating terms which give them a sense that their ideas, opinions, or needs make a difference in the way the school responds to them (Wheelock and Doorman, 1988, p. 15).

Punitive school practices have not been limited to expulsion or suspension from school. Corporal punishment

has also been used. (Kozol (1967) documented the use of beatings as a means to control children.

"Many people in Boston are surprised, even to this day, to be told that children are beaten with thin bamboo whips within the cellars of our public schools and that they are whipped at times for no greater offense than for failing to show respect to the very same teachers who have been describing them as niggers" (p. 9). This type of punitive practice alienated children from the school.

Some of the ways school resources have been allocated have been called "savage inequalities" (Kozol, 1991). Average expenditures per pupil in New York in 1987 were some \$5,500. In the highest spending suburbs...funding levels rose above \$11,000, with the highest district in the state at \$15,000... (p. 83). This inequality between school districts is also noted to exist between schools within the same New York School District (Kozol, 1991). Schools described as having large numbers of poor minority students had the worse facilities, the poorest teachers, and less equipment than those with higher percentages of middle class students. In Kozol's view students with the greatest needs received least from the allocation of school resources. Students with the least need received the greatest allocation of school resources. This type of practice serves to institutionalize school practices that place children at-risk at a great disadvantage. The result may be continued alienation of these persons from the school. The

attitude of some persons is that "money...is crucial to
[the] rich...but will be of little difference to the poor"
(Kozol, 1992, p. 35).

Summary

Schools are an important institution in our society. They are charged with the responsibility of instilling learning processes, developing skills, and inculcating values within our youth. Schools help to prepare youth to be ready for assuming their rightful place within the society. They are an important aspect in societal renewal. This has been the historical role of the school. There has been relative success in this mission. Graduation is one of a number of measures which are some indication of the schools' success. The expectation of this measure has changed over time. Initially the expectation was that all students would not graduate. This has changed to the expectation that every student should graduate. The consequence of this philosophy has been a reduction in the dropout rate (Kaufman & Lewis, 1968; Wehlage and Rutter, 1986; Center for Education Statistics, 1986) and consequently an increase in the graduation rate (Tanner, 1972).

Even though the rate of graduation has increased, some students still drop out. The consequences for dropping out are serious for the individual and society. For example, dropouts have a difficult time finding employment (Peng & Taki, 1983; Beekman, 1987; Orr, 1987). Dropouts are disproportionately represented among youth who commit criminal acts (Jenifer, 1989). Estimated loss of income for dropouts is in the hundreds of billions and societal tax

losses in the billions (Children's Defense Fund, 1987). These facts indicate some serious implications for the dropout.

It was interesting to note that this situation exists in spite of all that is known about dropouts. For example, dropouts have been defined (Tannenbaum, 1966; Orr, 1987; Cervantes, 1965; Morrow, 1986; Hahn et. al., 1987; Kegan, 1988). They have been quantified (Hahn et al., 1987; Miller, 1964; Tyler, 1964; Orr, 1987). They have been estimated relative to ethnicity, race, class, SES (Orr, 1987; Kaufman & Lewis, 1968; Ruby, 1987; Cervantes, 1965). Characteristic indicators of potential dropouts have been identified (Ascher, 1986; Cervantes, 1965; Lezotte & Passalacqua, 1978; Middleton, 1979; Tannenbaum, 1966; Ruby, 1987; Kaufman and Lewis, 1968; Smith and Lincoln, 1988; Lambert, 1964, OERI, 1987; Timberlake, 1980). School practices, policies and procedures have been known to impact the motivation to drop out (Kaufman & Lewis, 1968; Smith & Lincoln, 1988). There was no problem in regard to information on dropouts. More to the point, the locus of the problem may reside in the what and how of the handling of existing information. Concomitantly, feedback on the consequences of decision making by teachers regarding their students is imperative. For example, the use of grade retention as a means of improving lack of academic success was detrimental (Wheelock & Dorman, 1988; Smith & Shepard, 1987). There was a cycle for failure which begins in the

elementary and continues through junior and senior high school. For some, the formal education aspect of this cycle was broken only upon dropping out. For these persons, however, the cycle continued, on another level, as a life of failed dreams and aspirations became the norm. This attitude leads to other social problems, criminal behavior, and even death.

CHAPTER III

METHODOLOGY

Introduction

Within this chapter the means and methods necessary to the implementation of the research are provided. Included are stated research questions, hypotheses, instrumentation, and the plans for data collection and analysis.

Two types of data were used in this study: quantitative and qualitative. The use of both of these was necessary to provide a picture of early indicators of dropout potential. Quantitative analysis was limited to student cumulative record data. These data were readily available to educators. Effective analysis and use of these data may prove helpful in an attempt to reduce factors associated with the potential to drop out. Qualitative analysis was limited to a field study of selected individuals. This was conducted by an interview of these persons. Data generated by interview revealed how individuals perceived their school experience. Their feelings, attitudes, and beliefs were also shared. These data may prove useful in helping educators work with

potential dropouts, to help them succeed in graduating. The best feedback on the success of school may come from those whom the school serves - or has failed to serve adequately.

The population of concern for the proposed study was the cohort classes of 1989, 1990, and 1991 for the school district within which the study was conducted. The population was grouped into the following groups:

1. Graduates without dropout indicators.
2. Graduates with dropout indicators.
3. Non-graduates without dropout indicators.
4. Non-graduates with dropout indicators.

The records of these cohorts, for grades 4 and 5, were reviewed relative to the selected indicators of the potential to drop out. These indicators were presented and compared to reveal any potential statistical differences among the groups. For the purpose of initial analysis the presence of two or more indicators was considered evidence of increased dropout potential.

Additional data were generated through a field study. The field study consisted of interviews with identified persons from each group, in an effort to identify any differences on responses to interview questions.

Setting

The school district, in which the study was conducted, was located in a Mid-Michigan community. The community was a township with a population of 10,805 residents. It was a collection of residential, commercial, and industrial areas. The school district had 1,686 students. It was comprised of one senior high school, one middle school, two elementary schools, and one child development center. The district was made up of approximately 76% black, 12% white, 11% Latino, and 1% other. The elementary school population, in grades pre-K through 5th grade, consisted of approximately 890 students. School A, the district's child development center, had 357 students (80% black; 9.8% white; 10.2% Latino) in pre-K through 1st grades. This center also had a "Pre-primary Impaired Program" which was a half day program serving handicapped children three to six years of age. Elementary school B had 270 students (69% black; 15% white; 16% Latino) in second through fifth grades. Elementary school C had 263 students (89% black; 6% white; 4% Latino; 1% other) in second through fifth grades. The middle school was made up of grades six through eight and had 373 students. It was involved in a middle school accreditation process developed by the State of Michigan. The high school had grades nine to twelve and had 423 students. It was a comprehensive four year high school, accredited by the University of Michigan.

Research Questions

Questions considered essential to addressing the purpose of this study are enumerated below.

- (1.) Are there differences in student characteristics between students who have indicators of dropout potential and drop out and students without such indicators who graduate?
- (2.) Why do some students remain in school and other students drop out of school when the indicators of the potential to drop out suggest that all of these students may drop out?
- (3.) Are the indicators of potential dropout status different for students who have only attended one elementary school than they are for students who have attended more than one elementary school?

Hypotheses

Introduction

This study was concerned with determining if there was a statistical difference in potential dropout indicators for cohorts of the classes of 1989, 1990, and 1991 in the school district within which the study was conducted. As a result of this being a post hoc study the cohorts were divided into (1) graduates and (2) non-graduates. For the purposes of this study more specific division between cohorts was necessary. Therefore, cohorts, of interest in this study, were as follows:

1. Graduates without dropout indicators
2. Graduates with dropout indicators
3. Non-graduates without dropout indicators
3. Non-graduates with dropout indicators

Statement

The hypotheses are as presented below.

1. There will be no difference among groups on the rate of attendance.
2. There will be no difference among groups on grade point average.
3. There will be no difference among groups on mobility.
4. There will be no difference among groups on retention rates.
5. There will be no difference among groups on standardized test scores.
6. There will be no difference among groups in behavior problems (i.e. report card grade for citizenship).

Instrumentation

Introduction

Data necessary to address the research questions were obtained from two sources. The first source was the cumulative records. Data obtained from this source were limited to the specified potential dropout indicators. The second source of data was the interviews of individuals. Interview data provided insight into the perceptions, feelings and responses of individuals to the elementary school experience, relative to the specified indicators of dropout potential and other motivating factors.

Cumulative Records

Cumulative records contained all necessary post hoc documentation. Data of interest were:

1. Attendance records for each child in grades four and five.
2. GPA for each student.
3. Number of retentions for each child.
4. Number of times moved to different school.
5. Reading and math standardized test average score.
6. Documentation of citizenship (i.e. report card code).

Interviews

Interviews were conducted with dropouts and graduates. The interview questions were developed to acquire more information about dropouts and their perceptions relating to potential dropout indicators and their elementary school experience. The researcher constructed questions after studying the literature on dropout characteristic indicators, reasons for dropping out, affective dropout factors, and programs for prevention, intervention, and remediation. Care was given to construct interview questions that were related to the purpose of the study. The interview questions were designed to elicit specific responses in sharing their feelings about their elementary school experience. The concern was to see if there was a difference among individuals on their feelings about the role of potential dropout indicators in their school experience. It was also of interest to see if there was a difference among cohorts in their feelings and beliefs about motivating factors within their elementary school experience. The original questions were presented to practitioners, in the field, for their critique. The interview questions were representative of the review of literature, the purpose of the study, and their input. These questions are presented below.

- I. **How would you describe yourself while in elementary school, in terms of each of the following words?**
Please explain each description.

1. Attendance (How often absent?)
2. Mobility (How often did you move?)
3. Retention (Number of times failed a grade level?)
4. Standardized test scores (How well did you do?)
5. Citizenship (Behavior relative to school rules?)

Select a rating for each of the descriptions you used in response to the list of words.

1. Attendance (How often absent)
 - (a) Poor
 - (b) Fair
 - (c) Good
 - (d) Excellent
2. Failing grades (Estimate how many)
 - (a) Poor
 - (b) Fair
 - (c) Good
 - (d) Excellent
3. Mobility (How often changed elementary schools)
 - (a) Not at all
 - (b) Seldom
 - (c) Often
4. Retention (Number of times failed a grade level)
 - (a) Once
 - (b) Twice
 - (c) Three
 - (d) More than three
5. Standardized test scores (How well did you do)
 - (a) Poor
 - (b) Fair
 - (c) Good
 - (d) Excellent
6. Citizenship (Behavior relative to school rules)
 - (a) Poor
 - (b) Fair
 - (c) Good
 - (d) Excellent

II. How did you feel about elementary school when you were a student? Please explain.

- a. What did you like best?
- b. What did you like least?
- c. What influenced you the most?
- d. What person influenced you the most?

Please rate how you felt about elementary school.

- (a) Poor
- (b) Fair
- (c) Good
- (d) Excellent

III. Did you ever think about dropping out of school? Please explain.

- (a) YES; If yes, when did you first consider it?
- (b) NO

IV. If you graduated from high school, why were you able to remain in school? If you dropped out of school, why did you drop out? Please explain.

If you graduated, rate the reasons that influenced you to graduate.

- (a) Poor/Little Influence
- (b) Moderate Influence
- (c) Strong Influence

If you dropped out, rate the reasons that influenced you to drop out.

- (a) Poor/Little Influence
- (b) Moderate Influence
- (c) Strong Influence

If you dropped out did you later return to school?

- (a) Yes
- (b) No

If you dropped out and later returned to school did you graduate?

- (a) Yes
- (b) No

Data Collection

Data collection was conducted in two phases. The first phase consisted of the collection of cumulative record data. These data were limited to the identified potential dropout indicators at the fourth and fifth grades, due to the inconsistent record keeping format for pre-K to third grades. The cumulative data collection sheet is provided in Appendix A. The second phase consisted of conducting interviews with graduates and dropouts. These persons were volunteers who responded to a letter sent to all 182 individuals in the study. A copy of the cover letter is provided in Appendix B. Any information used to identify individual group membership was destroyed subsequent to research completion. This procedure assured research participant confidentiality. A copy of the interview explanation and consent form is provided in the Appendix C.

Interview Recording

Interviews were recorded by means of tape recorder and pen and paper.

Data Analyses

This study was concerned with the extent of difference among groups on specific indicators of the potential for dropping out of school, prior to high school graduation. The dependent variables were the indicators of dropout potential. There were six indicators of dropout potential

which were of interest for this study. The independent variable was group membership. This study was essentially an analysis of the difference between four groups on identified potential dropout indicator variables. Analysis of potential dropout indicator variables was done in two ways. These were quantitative, which included analysis of variance, and multivariate analysis of variance, and qualitative which consisted of cohort interviews. Analysis of variance was used because the dependent variables (i.e. potential dropout indicators) were interval data. There were also more than two levels of independent variables (i.e. four groups) which were nominal and categorical data. This was done in order to address the hypotheses. Multivariate analysis of variance was used to address research questions. All potential dropout indicator variables were compared among specific groups. This was an analysis of multiple variables among multi groups. Qualitative analysis was based upon comparing and contrasting interview responses. Interview questions were based on the review of the literature. They were designed to reveal group opinions, feelings and values about their elementary school experience, potential dropout variables, and motivating influences.

This study was a comparison of existing data. The analysis of data was limited to data contained in the cumulative records of cohort graduating classes of 1989, 1990, and 1991 of the school district within which the study

was conducted. Summary data tables were compiled to display potential dropout indicator statistics for each group. Data analysis was conducted at a .05 alpha level of significance.

Summary

Data collection and analyses procedures were described in this section. These procedures, which were conducted in two phases, included data collection from cumulative records and data collection from cohort interviews. Obtained cumulative record data were limited to grades four and five due to the inconsistent format used for grades pre-K to third. Interviews were conducted with individuals from each of the cohorts. Procedures were implemented to assure the anonymity of research participants thereby protecting confidentiality.

Summary

This chapter presented the means and methods necessary to the implementation of the research. The population of interest was identified as the cohort classes of 1989, 1990, and 1991 for the school district within which the study was conducted. Groups of interest consisted of the following:

1. Graduates without dropout indicators.
2. Graduates with dropout indicators.
3. Non-graduates without dropout indicators.
4. Non-graduates with dropout indicators.

The purpose of the proposed research was stated as to determine if there was a statistical difference in potential dropout indicators among groups. Questions pertaining to the purpose were presented. Related hypotheses were also stated.

Two sources of data were identified: (1) the cumulative records for grades four and five; and (2) interviews. Data obtained from cumulative records consisted of specific indicators of dropout potential. Interview questions based upon the review of literature and critiqued by practitioners were constructed. Interview responses were compared and contrasted.

CHAPTER IV

PRESENTATION OF FINDINGS

Introduction

The presentation of findings includes both quantitative and qualitative data. Quantitative data were derived from cumulative records. Qualitative data were derived from interviews.

The incidence of potential dropout indicators for each group comprised the quantitative data. Groups and the respective data were categorized in terms of the presence (i.e. = 2) or absence (i.e. 2) of indicators and cohort graduation or dropout status, as portrayed in Table 1.

Table 1

Cohort and Potential Dropout Indicators

No.	Cohorts	Indicator Label	<u>n</u>
1	Graduates without dropout indicators.	< 2	130
2	Graduates with dropout indicators.	> =2	30
3	Non-graduates without dropout indicators.	< 2	16
4	Non-graduates with dropout indicators.	> =2	6
TOTAL			182

The interview consisted of questions designed to elicit responses which would provide an understanding of the elementary school experiences of the four groups. In this inquiry, four potential dropout indicators were included in the interview as opposed to the six investigated in the quantitative part of this study. These were attendance,

retention, standardized test scores, and citizenship. Excluded from the interview inquiry were mobility and grade point average. Mobility was excluded due to the discovered characteristic low mobility of the community. This caused this potential indicator to be of little consequence. GPA was excluded due to the fact that GPA data for the elementary level were not reported to students during the years the cohorts attended. These data had to be computed, by the researcher, for the quantitative part of the study. Therefore, such information was unknown to the cohorts.

Letters of explanation, requesting interview participants, were sent in two phases to the entire population of 182 persons. The first phase was the initial contact. The second phase was follow up to remind individuals of the project and again to request their participation. The population was divided into groups, as enumerated in Table 1, based upon their number of potential dropout indicators and graduation or non-graduation status. Interviews were conducted with volunteers from the study population.

Thirty-four persons responded to the request to be interviewed. There were 12 who responded no. Twenty-two persons responded yes. Five of these persons could not be scheduled. Only 17 of these were able to be scheduled and actually interviewed. A total of six graduates without dropout indicators were interviewed. Four graduates with dropout indicators were interviewed. Four non-graduates

without dropout indicators were interviewed. Three non-graduates with dropout indicators were interviewed.

They were asked four sets of questions about their elementary school experience. One set of questions was developed from four of the six indicators of dropout potential. As noted above, neither mobility nor GPA were referred to in the interview. The other three questions were designed to reveal the feelings, perceptions, and responses of students to their elementary school experience.

First, they were asked to describe themselves in terms of attendance, retention (i.e. grades failed), standardized test scores, and citizenship (i.e. behavior regarding school rules). They were asked to rate each of these descriptions. Rating choices were a. poor, b. fair, c. good, and d. excellent. Second, they were asked to explain how they felt about elementary school. This included sub-questions regarding what they liked best, least, and a description of their most important influence. They were also asked to rate this question the same as the first question. Third, they were asked if they ever considered dropping out of school. If they had considered dropping out they were requested to identify when they considered dropping out of school. Fourth, they were asked why they were able to graduate or in the case of the non-graduates why they dropped out. Both graduates and non-graduates were asked to rate the influence of reasons for their decision to graduate or drop out. The rating options were a. poor influence, b.

moderate influence, or c. strong influence. Option a. poor was modified to a. little influence when some respondent confusion over this rating choice was noted.

Their responses are presented below as a summary and rating response to each interview question. Interview rating responses are provided in detail in appendices E, F, G, and H.

Population, Graduate, And Dropout Summary Data

The population of interest contained both graduates and non-graduates or dropouts. The population consisted of persons who had attended the school district in which the study was conducted in grade five. These persons also had complete cumulative records. Persons with incomplete records or those who attended school outside the school district during fifth grade were excluded from the study. There were 182 individuals in the population, including 160 graduates and 22 non-graduates or dropouts. Data were obtained from the cumulative records of these cohorts. Mean and standard deviation data were computed for the population, graduates and dropouts in terms of potential dropout indicators.

Attendance was viewed in terms of the number of days absent (see Table 2). The highest mean number of days absent was found among dropouts. Dropouts also had the highest standard deviation. Graduates had the lowest mean number of days absent. Graduate standard deviation for

attendance was below the standard deviation of the population.

Table 2

Population, Graduate, and Dropout Summary Data
For Attendance

GROUP	IND	MEAN # OF DAYS ABSENT	SD	#CASES
POP.	ATT	7.3805	7.5360	182
GRADUATE	ATT	7.1687	7.1697	160
DROPOUT	ATT	8.9205	9.8722	22

ATT: Attendance

The highest mean GPA score was attained by graduates. The lowest mean and standard deviation GPA scores were attained by dropouts (see Table 3).

Table 3

Population, Graduate, and Dropout Summary Data
for GPA

GROUP	IND	MEAN GPA	SD	#CASES
POP.	GPA	2.6606	0.5803	182
GRADUATE	GPA	2.6920	0.5827	160
DROPOUT	GPA	2.4318	0.5190	22

GPA: Grade Point Average

All groups had a mean and standard deviation retention score near zero. Only one individual had been retained in the graduate group. This person was also included in the population. Dropouts had a mean and standard deviation retention of zero. (See Table 4.)

Table 4

Population, Graduate, and Dropout Summary Data
For Retention

GROUP	IND	MEAN # RETENTIONS	SD	#CASES
POP.	RET	0.0055	0.0741	182
GRADUATE	RET	0.0062	0.0791	160
DROPOUT	RET	0.0000	0.0000	22

RET: Retention

Behavior was documented by a grade for citizenship. The mean citizenship grade for graduates was slightly above that for the population. Graduate citizenship standard deviation score for citizenship was slightly below the

standard deviation score for the population. Dropouts had a lower mean and greater standard deviation for citizenship than did the population or graduates (see Table 5).

Table 5

Population, Graduate, and Dropout Summary Data
for Citizenship

GROUP	IND	MEAN CITIZENSHIP GRADE	SD	#CASES
POP.	CIT	2.8023	0.7187	182
GRADUATE	CIT	2.8384	0.7022	160
DROPOUT	CIT	2.5398	0.7975	22

CIT: Citizenship

Standardized test scores were obtained from an average of reading and math scores on the Iowa Test of Basic Skills. The mean standardized score for graduates was above that attained by the population. Graduate standard deviation was near the standard deviation for the population (see Table 6).

Table 6

Population, Graduate, and Dropout Summary Data
for Standardized Test Scores

GROUP	IND	MEAN SCORES	SD	#CASES
POP.	IAVG	47.2605	18.7806	182
GRADUATE	IAVG	48.0089	18.8218	160
DROPOUT	IAVG	41.8177	17.9575	22

IAVG: Iowa Test of Basic Skills

The mean score and standard deviation for mobility for all groups was near zero. (See Table 7.)

Table 7

Population, Graduate, and Dropout Summary Data
for Mobility

GROUP	IND	MEAN SCORES	SD	#CASES
POP.	MOB	0.0385	0.1928	182
GRADUATE	MOB	0.0250	0.1566	160
DROPOUT	MOB	0.1364	0.3513	22

MOB: Mobility

Note, that within this population neither retention nor mobility are highlighted factors, whereas the other categories show distinct differences (see Table 7). The reader is reminded again mobility and retention in the district, where the study was conducted, were nil. Therefore, there was no basis for studying mobility and retention in this context.

Previously the indicators were presented and discussed individually. For the purpose of comparisons the indicators are presented together in Table 8.

Table 8

Population, Graduate, and Dropout Summary Data
by Indicator

GROUP	IND	MEAN	SD	#CASES
POP.	ATT	7.3805	7.5360	182
GRADUATE	ATT	7.1687	7.1697	160
DROPOUT	ATT	8.9205	9.8722	22
POP.	GPA	2.6606	0.5803	182
GRADUATE	GPA	2.6920	0.5827	160
DROPOUT	GPA	2.4318	0.5190	22
POP.	RET	0.0055	0.0741	182
GRADUATE	RET	0.0062	0.0791	160
DROPOUT	RET	0.0000	0.0000	22
POP.	CIT	2.8023	0.7187	182
GRADUATE	CIT	2.8384	0.7022	160
DROPOUT	CIT	2.5398	0.7975	22
POP.	IAVG	47.2605	18.7806	182
GRADUATE	IAVG	48.0089	18.8218	160
DROPOUT	IAVG	41.8177	17.9575	22
POP.	MOB	0.0385	0.1928	182
GRADUATE	MOB	0.0250	0.1566	160
DROPOUT	MOB	0.1364	0.3513	22

ATT: Attendance
 GPA: Grade Point Average
 RET: Retention
 CIT: Citizenship
 IAVG: Iowa Test of Basic Skills Average Score
 MOB: Mobility

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Research Questions

Research questions were concerned with ascertaining differences among specific groups on the indicators of dropout potential. Within this section of the study quantitative and qualitative findings are presented relative to the research questions. The quantitative data were obtained through statistical analyses of the indicators of dropout potential contained in cumulative records. Summary statistics were computed on indicator data for each group. Multivariate analysis of variance (i.e. MANOVA) was used to determine if there was a difference among groups on the indicators of dropout potential, when taken together. Univariate F tests were used to specify which indicators of dropout potential were different among cohorts. MANOVA and Univariate F tests were used to address research questions. The qualitative data were derived from interviews. Interview responses were compared to determine if there was a difference between groups on interview questions. Congruence between quantitative and qualitative findings was considered to provide a broader basis for data interpretation.

Research Question One

Research question one was concerned with ascertaining if there were differences in student characteristics between students who have indicators of dropout potential and drop out and students without such indicators who graduate. This

question focused on the differences in characteristic indicators of dropout potential between Group 1, graduates without dropout indicators, (i.e. graduates < 2 indicators) and Group 4, non-graduates with dropout indicators (i.e. dropouts ≥ 2 indicators).

Quantitative Indicator Data. Multivariate tests of significance (see Appendix I) were used to determine if there was a significant difference between Groups 1 and 4 on the indicators of dropout potential. In each instance the multivariate test statistic had an observed significance of F sufficient to indicate a difference between Groups 1 and 4 on characteristic potential dropout indicators, with $F = 10.39868 (4,131) \quad P < .05$. Univariate F - tests were calculated to see which dependent variable elicited significant F statistics. The results, delineated in Appendix I, illustrate that all variables did so.

Qualitative Indicator Data. Characteristics of interest are contained within expressed responses on the interview questions. Interview question one required the individuals to describe themselves while in elementary school in terms of the indicators of dropout potential. These potential indicators and respective findings are as presented below.

Attendance. Group 1, graduates without dropout indicators, provided responses indicating high rates of attendance. This potential indicator was rated as good by

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one person in this group. Excellent was the attendance rating selected by five of the six persons in this group. Group 4, non-graduates with dropout indicators provided both high and low ratings of attendance. Poor was the rating selected by one individual in this group. Excellent was selected by the other two members of this group. Group 1, graduates without dropout indicators had a less varied response than Group 4, non-graduates with dropout indicators. This was apparent in the previously noted attendance ratings. There was some difference between these two groups on the attendance indicator.

Retention. The majority of Group 1, graduates without dropout indicators, had not been retained. Their descriptive comments were indicative of this fact. This was also apparent in their rating of retention. This rating was identified as excellent by five of the six members of this group. Poor, however, was selected by one individual. There was one person without dropout indicators who had been retained. Although retention is a potential dropout indicator, one such indicator does not meet the criterion (i.e. dropout potential ≥ 2 indicators) of identifying persons at greater risk of dropping out of school. Most of the Group 4, non-graduates with dropout indicators had been retained at least once and at most twice. Poor was selected by two of the three members of this group. Excellent was the rating indicated by the one person who had never been retained. Even though this person had never been retained,

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he stated that he had been "lifted" through the grades. He indicated that he had a low performance and little understanding of some basic skills. Therefore, he would have been a prime candidate for retention. More Group 4 members, non-graduates with dropout indicators, had been retained than Group 1, graduates without dropout indicators. There appears to be some difference between these two groups on retention.

Standardized Test Scores. Group 1 members, graduates without dropout indicators were more positive about their standardized test scores than Group 4, non-graduates with dropout indicators. Comments revealed that the Group 1 members, graduates without dropout indicators, perceive themselves as having performed better on standardized tests than the self perception of Group 4, non-graduates with dropout indicators. Good was the performance rating selected by all of Group 1, graduates without dropout indicators. Group 4, non-graduates with dropout indicators, rated themselves no higher than fair, which was selected by one of the three persons in this group. Poor was selected by the other two members of this group. There was some difference between these groups on the standardized test score indicator.

Citizenship. All of Group 1, graduates without dropout indicators described themselves as having good to excellent citizenship. Good was the rating selected by 1 member of

this group. Excellent was selected by the other five members of this group. Not all of Group 4, non-graduates with dropout indicators, provided positive citizenship descriptions. One person stated citizenship descriptions that were in opposition to fair citizenship. These descriptions included "I did not like to follow directions." "I wouldn't listen to the teacher's explanation." This individual, however rated herself as fair. Excellent was selected by the other two members of this cohort. The majority of Group 4, non-graduates with dropout indicators, rated themselves similar to Group 1, graduates without dropout indicators. The range of the rating for Group 4, non-graduates with dropout indicators started at a lower rating (i.e. fair) than did the rating (i.e. good) for Group 1, graduates without dropout indicators. There appears to be some difference among these cohorts on the citizenship indicator.

Feelings. Individuals were asked how they felt about elementary school when they were students. They were asked to explain their answer and indicate what they liked best and least and describe their most important influence.

Group 1, graduates without dropout indicators, expressed all positive feelings about elementary school. Learning (i.e. science, math, learning new things) was identified by three of the six graduates without dropout indicators as what they liked best. The other half was equally divided between peers, teachers, and extra

curricular play activities at one each.

Group 4, non-graduates with dropout indicators, had some similar descriptions about elementary school, but also expressed some differences. They, too, expressed positive remarks about peers and learning. Learning for them, however, came from experiences outside the regular classroom (i.e. field trips). The regular classroom experience was described as boring. Things learned from field trips were most meaningful for one individual. Another of this group liked art and playing with kids best. Learning was liked best by two of three persons in Group 4, non-graduates with dropout indicators. Play activities were liked best by the other individual in this group. One of these persons stated that elementary school was not liked.

Learning (i.e. English, punctuation, reading, word problems) was also liked least by Group 1, graduates without dropout indicators. This was identified as liked least by three of six persons in this group. This was the same number that liked learning best. They identified different things liked best (i.e. field trips) than the things identified as liked least (i.e. academic subjects taught in the classroom). Some peers were liked least by one of six persons in this group. This is the same number of persons in this group that liked some other peers best. Other (i.e. nothing, lack of community activities) was selected liked least by two of the six persons in this group. All of Group 4, non-graduates with dropout indicators, had diverse

responses to what they liked least (i.e. being lifted through the grades, nothing, punishment). Therefore, other was the rating assigned to these diverse responses. There appears to be some difference between groups on their feelings about elementary school.

Influences. Most important influences described by Group 1, graduates without dropout indicators, were parents by three of the six members of the group, teachers by two of the six members of the group, and science by one member of the group. This group unanimously agreed on their feelings about elementary school. Good was the rating selected by all of this group when they rated their feelings about elementary school. Group 4, non-graduates with dropout indicators, identified most important influences as peers by two of the three group members, parents were selected by the remaining member of the group. The ratings for this group's feelings about elementary school were equally distributed between poor, fair, and excellent at one person each. Group 1, graduates without dropout indicators, were more influenced by parents and teachers than peers. Group 4, non-graduates with dropout indicators, were more influenced by peers than by parents. Teachers were not reported as an influence for this group. This group's expressed feelings were more diverse than those expressed by the Group 1, graduates without dropout indicators. There was some difference among these groups on their most important influence.

Thoughts Of Dropping Out. Did you ever think about dropping out of school? If they responded yes, they were asked to indicate when they considered dropping out. Only one member of Group 1, graduates without dropout indicators, considered dropping out of school. Dropping out was never considered by the other five members of this group. Dropping out of school was considered by two of the three members of Group 4, non-graduates with dropout indicators. Just one person in this group never considered dropping out. This person did, however, eventually drop out. There was a difference found on the consideration of dropping out of school for these cohorts.

Factors Contributing To Remaining In School. The graduates were asked why they were able to remain in school or why they dropped out. Both graduates and non-graduates were asked to rate the reason provided for graduating or dropping out. Group 1, graduates without dropout indicators, reported that parents, peers and personal goals were the influential reasons for staying in school. Motivating influences for remaining in school were reported as strong by all members of this cohort. Group 4, non-graduates with dropout indicators, said family problems, and school problems precipitated by an insensitive teacher and "ineffective" principal were influential reasons for dropping out. Influential reasons for dropping out of school were rated as strong by all members of this group.

Both groups reported strong reasons for their decision to either drop out or remain in school.

There was some difference found on interview responses concerning potential dropout indicators, feelings about elementary school, most important influences, and thinking about dropping out of school. Quantitative and qualitative data analyses suggested there were differences among groups, on potential dropout indicators. Other qualitative data revealed differences among groups on their perceptions and feelings about their elementary school experience. Graduate groups had more positive feelings and agreed more about their feelings regarding elementary school than did dropout groups.

Research Question Two

Research question two was concerned with ascertaining why some students remain in school and other students drop out of school when the indicators of the potential to drop out suggest that all of these students may drop out. This question was concerned with differences between Group 2, graduates with dropout indicators, (i.e. graduates ≥ 2 indicators) and Group 4, non-graduates with dropout potential (i.e. dropouts ≤ 2 indicators).

Quantitative Indicator Data. Multivariate tests of significance (see Appendix J) were used to determine if there was a significant difference between Groups 2 and 4 on the indicators of dropout potential. In each instance the

multivariate test statistic had an observed significance of F insufficient to indicate a difference between cohorts 2 and 4 on characteristic potential dropout indicators with $F = 2.41278 (4,31) P > .05$. Univariate F - tests were calculated to see which dependent variable elicited significant F statistics. The results, delineated in Appendix J, indicate that only one out of four variables did so. This variable was attendance. All others failed to do so.

Qualitative Indicator Data. Group 2, graduates with dropout indicators, expressed a variety of reasons for staying in school despite having potential dropout indicators, even though half of them considered dropping out. These reasons were stated as social interaction with peers within the school environment, intrinsic motivation, a desire for upward mobility and support and encouragement from family. These persons actually liked being in school. Social interaction with peers through school activities was important to this group. Some of these individuals had an expressed desire to achieve personal goals. Included in this was the drive for upward mobility and success. The desire for higher education was also mentioned as an avenue to success. Fundamental to all of these things was family encouragement and support. The family provided the necessary material, psychological, and value-laden resources to motivate and guide these persons toward graduation.

Group 4, non-graduates with dropout indicators,

expressed diverse reasons for dropping out of school. These reasons were both personal and school related. Personal reasons emanated from a profound sense of confusion by a person who reportedly never considered dropping out of school. This person expressed a sense of overwhelming preoccupation with things other than school. The consequence of this preoccupation was the person had dropped out prior to realizing what had occurred. Another individual who reportedly possessed limited basic skills had made a school career out of social promotion dropped out after realizing that he wasn't going to graduate. School-related reasons influenced another person to drop out of school. This individual reported an insensitive teacher who was perceived as uncaring, and who reportedly made students and parents "feel small". Associated with this situation was an ineffective building principal with little or no influence over the teacher.

As expressed by these students, the reasons some students remain in school rather than drop out of school when the indicators of the potential to drop out suggest that they may drop out are family support and encouragement and intrinsic motivation to succeed and be in school. Concomitant to this is a feeling of belonging in school as a welcome participant.

The only difference in potential dropout indicators identified between Groups 2 and 4 was in the area of attendance. Qualitative data derived from the interview

directly asked Groups 2 and 4 the question: Why did they stay in school or drop out? Their response to the question provided some insight. It seemed like individuals in Group 2 were able to remain in school due to family support. Individuals in Group 4 may have dropped out due to limited parental support.

Research Question Three

Research question three was concerned with ascertaining if the indicators of potential dropout status were different for students who had only attended one elementary school than they were for students who had attended more than one elementary school?

Data necessary to answer this question, quantitatively or qualitatively, were not attainable due to the nature of the school district within which the study was conducted. The school district had enough building capacity to serve the community with full pre-kindergarten through twelfth grade curricular and co-curricular programs. The size of the community, however, dictated less of a need for duplication of programs between buildings. This resulted in limited options for transfer between buildings.

Hypotheses

Hypotheses for this study were concerned with differences among cohorts on indicators of the potential to drop out. Hypotheses were stated in the null form. There would be no difference on potential dropout indicators among cohorts. One null hypothesis was stated for each of the six indicators of dropout potential.

This section of the study presents quantitative and qualitative findings as related to the statement of hypotheses. Analysis of variance (i.e. ANOVA) was the statistical method used to address hypotheses, which were concerned with group differences on individual indicators of dropout potential. ANOVA determined if there was a quantitative difference among groups on individual potential dropout indicators. The Scheffé statistical method specified between which groups the difference, on individual potential dropout indicators, was found. Qualitative findings were obtained from interviews. The concern was to determine a person's perceptions about his/her elementary school experience, as related to specific indicators of dropout potential. The task was to record comments and self ratings for each of the indicators of dropout potential. For the purpose of the interview only four out of six potential dropout indicators were used. These were attendance, retention, standardized test scores, and

citizenship. Grade point average and mobility were not used. Grade point average at the elementary school level was not computed and reported to the groups. Therefore, individuals would have no way of knowing these data. Mobility, due to the nature of the community and school district, was rendered almost non-existent. See Appendix D for interview rating responses.

The null hypotheses stated there would be no difference among groups on any of the potential dropout indicators. Each null hypothesis, is provided below with related quantitative and qualitative findings.

Hypothesis: Attendance

There will be no difference among groups on the rate of attendance.

Quantitative. As indicated in Table 9, the minimum number of days missed ranged from 0.00 for Group 1, graduates without dropout indicators, and Group 2, graduates with dropout indicators, to 2.50 for Group 4, non-graduates with dropout indicators. The maximum number of days ranged from 16 for an individual in Group 3 to 47 and 48 days missed in Groups 4 and 1 respectively. The mean number of days missed ranged from 6.10 for Group 3 up to 16.42 for Group 4.

Table 9**Mean And Standard Deviation For Attendance**

GROUP	COUNT	MEAN	SD	MIN	MAX
1	130	6.9173	7.3560	.0000	48.0000
2	30	8.2583	6.2950	.0000	25.5000
3	16	6.1094	3.9812	1.7500	16.0000
4	6	16.4167	16.4033	2.5000	47.2500
TOTAL	182	7.3805	7.5360	.0000	48.0000

A one way analysis of variance was performed to determine if a difference existed in average attendance for each of the four groups. The results are presented in Table 10.

Table 10**ANOVA For Attendance**

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
Between Groups	3	566.7749	188.9250	3.4624	.0175
Within Groups	178	9712.5634	54.5650		
Total	181	10279.3383			

For the comparison of average attendance $F(3,178) = 3.4624$, was obtained with an observed significance of .0175. Therefore, the null hypothesis for attendance is rejected as the observed significance was less than the stated alpha of

.05. There were differences between/among the groups.

Post hoc analyses were performed to determine where the differences between the four groups were, on a pair wise basis. The outcome of these tests is listed in Table 11.

Table 11

Scheffé Attendance Group Difference Comparisons

		G	G	G	G
		r	r	r	r
		p	p	p	p
Mean	Group	3	1	2	4
6.1094	Grp 3				
6.9173	Grp 1				
8.2583	Grp 2				
16.4167	Grp 4	*	*		

(*) Denotes pairs of groups significantly different
at 0.05 level

GRP = Group

It can be seen from the results of the analysis that the difference was between Group 4, non-graduates with dropout indicators, and Group 3, non-graduates without dropout indicators, and Group 1, graduates without dropout indicators. The mean differences on attendance between

Group 4, non-graduates with dropout indicators, and Group 1, graduates without dropout indicators, and Group 3, non-graduates with dropout indicators, were significantly different at the alpha .05 level.

Qualitative. Findings revealed that most groups provided positive descriptions of attendance. Each group had individuals who rated themselves excellent on attendance. With the exception of dropouts with indicators, the other rating selected by all other cohorts was good. One person, in Group 4, non-graduates with dropout indicators, selected poor as a personal attendance rating. This indicates some difference between groups, on their perception about their attendance. The qualitative data supports the quantitative findings.

Hypothesis: Grade Point Average

There will be no difference among groups on GPA.

Quantitative. The minimum grade point average ranged from 1.25 for Group 2, graduates with dropout indicators, to 1.89 for Group 1, graduates without dropout indicators (see Table 12). The maximum grade point average ranged from 2.06, for Group 4, non-graduates with dropout indicators, to 4.00 for graduates without dropout indicators. Grade point average means ranged from 1.78 for Group 4, non-graduates with dropout indicators, to 2.86 for Group 1, graduates without dropout indicators.

Table 12

Mean And Standard Deviation For GPA

GROUP	COUNT	MEAN	SD	MIN	MAX
1	130	2.8600	.4880	1.8950	4.0000
2	30	1.9643	.3578	1.2500	2.7500
3	16	2.6772	.3501	2.0700	3.2150
4	6	1.7775	.2388	1.5200	2.0600
TOTAL	182	2.6606	.5803	1.2500	4.0000

A one way analysis of variance was performed to determine if a difference existed in average GPA for each of the four groups. The results are presented in Table 13.

Table 13

ANOVA For Grade Point Average

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
Between Groups	3	24.3941	8.1314	39.5965	.0000
Within Groups	178	36.5532	.2054		
Total	181	60.9473			

For the comparison of average GPA $F(3,178) = 39.5965$, was obtained with an observed significance of .0000. Therefore, the null hypothesis for GPA is rejected as the observed significance was less than the stated alpha of .05. There are differences between/among the groups.

Post hoc analyses were performed, to determine where the differences between the four groups were, on a pair wise basis. The outcome of these tests is listed in Table 14.

Table 14

Scheffé GPA Group Differences Comparisons

		G	G	G	G
		r	r	r	r
		p	p	p	p
Mean	Group	4	2	3	1
1.7775	Grp 4				
1.9643	Grp 2				
2.6772	Grp 3	*	*		
2.8600	Grp 1	*	*		

(*) Denotes pairs of groups significantly different
at 0.05 level
Grp - Group

Both Group 1, graduates without dropout indicators, and Group 3, non-graduates without dropout indicators, were found to have mean grade point average scores significantly different from the mean grade point average scores for Group 2, graduates with dropout indicators and Group 4, non-graduates without dropout indicators, at the alpha .05 level. Graduate and non-graduate groups without dropout indicators had significantly different GPA averages than graduates and non-graduates groups with dropout indicators.

Qualitative. GPA was excluded from the interview questions because GPA data were not reported for the elementary level during the years the groups attended. These data had to be computed by the researcher for the quantitative part of the study. Therefore, such information was unknown to the groups.

Hypothesis: Retention

There will be no difference among groups on retention.

Quantitative. There was a minimum of zero times retained, for all groups. The maximum number of retentions was one. This individual belonged to Group 2, graduates with dropout indicators. All other groups had maximum retention rates of zero. All groups had a mean rate of retention of zero with the exception of Group 2, graduates with dropout indicators. This group had a retention mean of .0333. Table 15 delineates mean and standard deviation scores for retention.

Table 15

Mean And Standard Deviation For Retention

GROUP	COUNT	MEAN	SD	MIN	MAX
1	130	.0000	.0000	.0000	.0000
2	30	.0333	.1826	.0000	1.0000
3	16	.0000	.0000	.0000	.0000
4	6	.0000	.0000	.0000	.0000
TOTAL	182	.0055	.0741	.0000	1.0000

A one way analysis of variance was performed to determine if a difference existed in average retention for each of the four groups. The results are presented in Table 16.

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Table 16

ANOVA For Retention

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
Between Groups	3	.0278	.0093	1.7087	.1669
Within Groups	178	.9667	.0054		
Total	181	.9954			

For the comparison of average retention $F(3,178) = 1.7087$, was obtained with an observed significance of .1669. Therefore, the null hypothesis for retention cannot be rejected.

Due to the retention hypothesis being tenable there was no need to perform post hoc analysis on the difference among cohorts on retention.

Qualitative. Findings revealed that graduates without dropout indicators selected good (e.g. one person) to excellent (e.g. five persons) on retention. All individuals comprising both groups, graduates with dropout indicators, and non-graduates without dropout indicators, rated themselves as excellent on retention. Good to excellent were the ratings selected by persons who never had been retained. Two individuals, in Group 4, non-graduates with dropout indicators chose the retention rating, poor. This indicates some difference between cohorts, on ratings and responses about retention. The qualitative data do not support the quantitative findings.

Hypothesis: Behavior

The behavior hypothesis stated, there will be no difference among groups in behavior problems (i.e. report card grade for citizenship).

Quantitative. The minimum grades for citizenship ranged from .25 for Group 3, non-graduates without dropout indicators, to 1.75 for Group 2, graduates with dropout indicators. The maximum citizenship grades ranged from 3.25 for Groups 2 and 4, graduates with dropout indicators and non-graduates with dropout indicators, respectively, to 4.00 for Group 1, graduates without dropout indicators. All groups contained individuals who attained citizenship grades above and below 2.00 (see Table 17).

Table 17

Mean And Standard Deviation For Citizenship

GROUP	COUNT	MEAN	SD	MIN	MAX
1	130	2.9762	.6578	.7500	4.0000
2	30	2.2417	.5704	1.7500	3.2500
3	16	2.6953	.7231	.2500	3.7500
4	6	2.1250	.9048	1.0000	3.2500
TOTAL	182	2.8023	.7187	.2500	4.0000

A one way analysis of variance was performed to determine if a difference existed in average citizenship

grades for each of the four groups. The results are presented in Table 18.

Table 18

ANOVA For Citizenship

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
Between Groups	3	16.2941	5.4314	12.5238	.0000
Within Groups	178	77.1955	.4337		
Total	181	93.4896			

For the comparison of average attendance $F(3,178) = 12.5238$, was obtained with an observed significance of .0000. Therefore, the null hypothesis for citizenship is rejected as the observed significance was less than the stated alpha of .05.

Post hoc analyses were performed, on a pair wise basis to determine where the differences between the four groups were. The outcome of these tests is listed in Table 19.

Table 19

Scheffé Citizenship Group Differences Comparisons

		G	G	G	G
		r	r	r	r
		p	p	p	p
Mean	Group	4	2	3	1
2.1250	Grp 4				
2.2417	Grp 2				
2.6953	Grp 3				
2.9762	Grp 1	*	*		

(*) Denotes pairs of groups significantly different
at 0.05 level
Grp = Group

The results of analysis show the difference was between Group 1, graduates without dropout indicators, and Group 4, non-graduates with dropout indicators, and Group 2, graduates with dropout indicators. Groups without dropout indicators had mean citizenship grades different than graduate and non-graduate groups with dropout indicators, at the alpha .05 level.

Qualitative. Findings revealed that graduates rated themselves similar to each other, within groups, on citizenship as a measure of behavior. These groups rated themselves good or excellent. Non-graduate groups selected similar ratings to each other, on citizenship as a measure of behavior. Graduates without indicators, rated themselves good (e.g. one person) and excellent (e.g. five persons). Non-graduates without dropout indicators, selected the

ratings fair (e.g. two persons) and excellent (e.g. two persons). Non-graduates with dropout indicators selected fair (e.g. one person) and excellent (e.g. two persons). Non-graduates without dropout indicators rated themselves fair or excellent. Individuals in each group rated themselves as excellent. The lower rating selected by graduates (i.e. good) is different from the lower rating selected by dropouts. This difference in responses and ratings indicates some difference between groups perceptions about their citizenship. Therefore, the qualitative data support the quantitative findings.

Hypothesis: Standard Test Scores

There will be no difference among groups on standardized test scores.

Quantitative. As seen in Table 19, the minimum group standardized test scores ranged from 8.75 for Group 4, non-graduates with dropout indicators, to 10.75 for Group 1, graduates without dropout indicators. The maximum group standardized test scores ranged from 30.50 for Group 4, non-graduates with dropout indicators, to 89.00 for graduates without dropout indicators. The mean standardized test score ranged from 21.08 for Group 4, non-graduates with dropout indicators, to 53.62 for Group 1, graduates without dropout indicators (see Table 20).

Table 20

Mean And Standard Deviation For Iowa Test Of Basic Skills

GROUP	COUNT	MEAN	SD	MIN	MAX
1	130	53.6217	15.6271	10.7500	89.0000
2	30	23.6868	10.1411	9.5000	52.7500
3	16	49.5931	13.9209	26.0000	76.0500
4	6	21.0833	7.9776	8.7500	30.5000
TOTAL	182	47.2605	18.7806	8.7500	89.0000

A one way analysis of variance was performed to determine if a difference existed in average standardized test scores for each of the four groups. The results are presented in Table 21.

Table 21

ANOVA For Iowa Test Of Basic Skills

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
Between Groups	3	26130.4751	8710.1584	41.1140	.0000
Within Groups	178	37709.9680	211.8538		
Total	181	63840.4432			

For the comparison of average Iowa Test of Basic Skills scores $F(3,178) = 41.1140$, was obtained with an observed significance of .0000. Therefore, the null hypothesis for standardized test scores is rejected as the observed significance was less than the stated alpha of .05. There are differences between groups.

Post hoc analyses were performed, on a pair wise basis,

to determine where the differences between the four groups were. The outcome of these tests is listed in Table 22.

Table 22

Scheffé' Iowa Test Group Differences Comparisons

		G r p	G r p	G r p	G r p
Mean	Group	4	2	3	1
21.0833	Grp 4				
23.6868	Grp 2				
49.5931	Grp 3	*	*		
53.6217	Grp 1	*	*		

(*) Denotes pairs of groups significantly different
at 0.05 level
Grp = Group

The mean standardized scores for Group 1, graduates without dropout indicators, and Group 3, non-graduates without dropout indicators, is significantly different than the mean standardized test scores for Group 2, graduates with dropout indicators, and Group 4, non-graduates with dropout indicators. Graduates and non-graduates without dropout indicators have standardized test scores significantly different from graduates and non-graduates with dropout indicators.

Qualitative. Findings revealed that all of Group 1, graduates without dropout indicators, rated themselves good on standardized test scores. There was greater variability among the ratings selected by Group 2, graduates with dropout indicators, and Group 3, non-graduates without dropout indicators. Group 2, graduates with dropout indicators rated themselves poor (e.g. one person), good (e.g. two persons), and excellent (e.g. one person). Group 3, non-graduates without dropout indicators, chose the ratings fair (e.g. one person), good (e.g. one person), and excellent (e.g. two persons). Group 4, non-graduates with dropout indicators, rated themselves poor (e.g. two persons, fair (e.g. one person). The variability of responses and ratings indicates some difference between perceptions about standardized test performance.

Hypothesis: Mobility

The mobility hypothesis stated: There will be no difference among groups on mobility.

Quantitative. As presented in Table 23, the minimum number of moves between elementary schools was zero for all groups. The maximum number of moves between elementary schools for three of the four groups was one each. These were Group 1, graduates without dropout indicators; Group 2, graduates with dropout indicators; and Group 3, non-graduates without dropout indicators. The mean number of moves ranged from .0000 for Group 4, non-graduates with

dropout indicators to .1875 for Group 3, non-graduates without dropout indicators.

Table 23

Mean And Standard Deviation For Mobility

GROUP	COUNT	MEAN	SD	MIN	MAX
1	130	.0154	.1236	.0000	1.0000
2	30	.0667	.2537	.0000	1.0000
3	16	.1875	.4031	.0000	1.0000
4	6	.0000	.0000	.0000	.0000
TOTAL	182	.0358	.1928	.0000	1.0000

A one way analysis of variance was performed to determine if a difference existed in average mobility for each of the four groups. The results are presented in Table 24.

Table 24

ANOVA For Mobility

SOURCE	D.F.	SUM OF SQUARES	MEAN SQUARES	F RATIO	F PROB.
Between Groups	3	.4574	.1525	4.3258	.0057
Within Groups	178	6.2734	.0352		
Total	181	6.7308			

For the comparison of average mobility $F(3,178) = 4.3258$, was obtained with an observed significance of .0057. Therefore, the null hypothesis for mobility is rejected as the observed significance was less than the stated alpha of

.05.

Post hoc analyses were performed, on a pair wise basis, to determine where the differences between the four groups were. The outcome of these tests is listed in Table 25.

Table 25

Scheffé Mobility Group Differences Comparisons

Mean	Group	G	G	G	G
		r	r	r	r
		p	p	p	p
		4	1	2	3
.0000	Grp 4				
.0154	Grp 1				
.0667	Grp 2				
.1875	Grp 3		*		

(*) Denotes pairs of groups significantly different at 0.05 level
Grp = Group

Analysis results show the difference among groups on mobility was found between Group 3, non-graduates without dropout indicators, and Group 1, graduates without dropout indicators. There was a significant difference on mobility found between graduate and non-graduate groups without dropout indicators at the alpha .05 level. Due to the maximum number of moves for groups with mobility being one, caution must be exercised when interpreting these data.

Qualitative. Mobility was excluded from the interview due to the discovered characteristic low mobility of the community. This caused this potential indicator to be of

little consequence.

Other Qualitative Data

Group qualitative responses regarding their feelings about elementary school and thinking about dropping out of school are presented within this section. Feelings were ascertained by asking individuals to identify what they liked best, least, and indicate their most important influence in elementary school. Most of their responses included 1. learning experiences, 2. peers, 3. teachers, 4. principal, 5. play activities, and 6. other. These response categories were developed by reviewing and categorizing actual responses. Individuals were also asked if dropping out of school was ever a consideration. If yes was the answer to this question they were asked when dropping out of school was first considered. They were asked to rate the influence on their decision to graduate or drop out. (See appendices E, F, G and H.)

Feelings About Elementary School

Group 1, Graduates Without Dropout Indicators.

Feelings expressed about elementary school were very positive for this group. It was reported by members of this group that they loved elementary school. Elementary school was liked best, along with high school, out of all the school years. Expressed feelings also included: "...really enjoyable", "...never any problems with peers", "...good

relations with teacher", and "...participation in school functions". There was an expressed sense of caring teachers who did their best to provide their students what they really needed. These persons felt that elementary school was a time and place where students were encouraged by friends, family, and their teachers to succeed.

Learning was reported by half of this group, as being liked best. Comments included science and math, learning new things, students and teachers. One expressive individual reported that in addition to learning new things, teacher attitudes and the way they taught made students "...anxious to learn more". The other half was equally divided between peers, teachers, and play activities at one for each selection. When asked what was liked least half of the group selected specific academic subjects (i.e. English, punctuation, reading, and word problems). Peers were identified by one member of the group as their most important influence. Responses categorized as other were a third of the total responses. One person said that there was nothing that was liked least. Another person identified the scarcity of extra curricular community carnival-type activities during their elementary school years as being liked least.

Parents were reported by half of the group as being their most important influence. Parents were said to use positive reinforcement and "...steadily encourage" their children to be the best they could be, while in school.

Teachers were identified by two members of this group as their most important influence. Teacher attitude toward their students, commitment to doing a job well, and guidance of their students was mentioned. It was noted that teacher attitude is more often reflected in the attitudes that students may develop about learning. This person went on to say attitude "...was the most important ... whether it was the principal, the teacher, the bus driver, whoever". Another individual member of this cohort, said science was the most important influence. In response to being asked to rate their feelings about elementary school, all group members selected good.

Group 2, Graduates With Dropout Indicators. Expressed feelings about elementary school ranged from ambivalent to conclusive. For example, persons reported that they "...guess it was okay..., I really ...don't know". Another comment expressed was that elementary school was "...liked but liked to play ball and would not finish his [school] work". Others described elementary school as very good and excellent.

Persons were next asked to identify what they liked best, least, and state their most important influence. Learning was reported by three of four members of this group as being liked best. They identified math and English as things they liked best about elementary school. The other person in this group stated that recess was liked most.

When asked to describe their most important influence

half of this group described their mother. They described their mothers as "...a very kind, gentle person, not selfish." Another mother was described as working really hard. The individual went on to say that "...she has shown me with hard work anything is possible." The school principal was described as a most important influence by one member of the group. Another individual described a sister as a most important influence. This sister was described as a high achiever, a member of the honor roll and the National Honor Society.

There was greater variance among expressed feelings about elementary school within this group. Fair was selected by one member of this group. Good was selected by half of the group. Excellent was selected by the other individual member of the group.

Group 3, Non-graduates Without Dropout Indicators.

Feelings about elementary school were expressed in several ways. Examples are as follows:

- I loved elementary school...
- It was all right. Teachers were nice and everything. They helped out a lot.
- Ah, I don't know...I don't really remember how I felt about it. It was something I had to do. I had to go to school.
- Well, to me elementary school was fairly good, but the way the administrators handled the discipline was not professional. ...Well by me being a mixed black male, I was highly discriminated against because I was ...light skinned and I had good hair...other students discriminated against me...I followed the rules of school, but by being like that and things I had to go through, it really made me...not perform. When I was in the third grade...I was constantly in fights all the time. I mean the students...didn't understand me, and what they were, they [Administrators] would discipline me over and over... they thought I was the problem, and I was not the problem. So what was their possible solution... they called in a psychiatrist, had me take ...test... My I.Q. was very high...but they said since I was like that, they had to place me in special education for a year. That's awful... A lot of people get misplaced in that... I took special ed from the third grade to the end, and then I came back to...[the regular school program]. I guess they thought that was a form of punishment of some sort... But, every since then...the problem was still there, and not only that, it affected me because when I was in elementary, I was doing so good, and for this to happen after that, I really didn't care any more...it was just like school wasn't there for me, you know. The problem was still there through high school.

When asked what was liked best about school the last individual, whose previous comment was presented last, said some of his teachers, carnivals, and different competitive activities... Things that the other individuals liked best were all the teachers and the way certain subjects were taught. Also mentioned was "one-on-one contact", and "going to school and seeing other classmates". Peers were liked best by one member of this group. Some teachers were liked best by the other three members of this group.

Comments indicating what this cohort liked least were "...all the work; ...to stay in one classroom; ...administrators, principals, some of the teachers". One person from this group went on to expound on what she disliked about teachers. "They...were funny acting. They tried to be your parents, and they weren't your parents. ...[They] tried to tell you...to do this and you have to do that, and talking down to you like you're their child." The distribution of what this group liked least was as follows: one person said some learning, one person indicated teachers, one person stated the principal, one person identified other (i.e. staying in one classroom).

Responses identifying what was most important in elementary school were father, mother, grandmother, and teachers. Comments about parents included statements about parental encouragement and support. Teachers were viewed as role models who were helpful. Teachers were selected by half of the group. Parents were selected by half of the

group. Feelings about elementary school were equally divided. Fair was selected by half of the group. The other half of the group said they felt good about elementary school.

Group 4, Non-graduates With Dropout Indicators.

Expressed feelings about elementary school ranged from "I liked it", "loved it", "it was fun", to "I did not like it".

When asked what they liked best individuals said recess, field trips, drawing and playing with other kids. One person mentioned learning. "...When we went on field trips, we learned different things, rather than when we learned them in the classroom, it was all boring." Another person selected "...drawing and playing with other kids." Ratings for this indicator of dropout potential were distributed with learning selected by two members, and play activities selected by one member of the group.

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Persons in this group selected other (i.e. being lifted through the grades, nothing, punishment) for what they liked least. All of these responses were allocated to the other category. Comments included "...I just didn't learn nothing. They just slid me through...."

In regard to punishment methods it was said:

standing up against the wall like a little first grader, having to write 1000 sentences for punishment, stupid stuff like that makes a kid drop out of school. Punishment is needed but it's all in the matter of how you use punishment. The teacher wouldn't write 1000 sentences. If you didn't finish, you would be kicked out of school, then some people would get kicked out for three days, and they come back and have to finish the sentences and if they don't finish them they're kicked out again. I mean that does not make any sense, so why would you kick somebody out because they didn't finish sentences. That's stopping them from their education and then they want to flunk them back a grade because they didn't finish their sentences. That's basically the point. They did not finish their sentences, they missed this amount of time in school from being expelled, and so we're holding them back a grade.

The diversity of responses caused all of the responses for this item to be categorized as other.

Descriptions of the most important influence included positive and less than positive experiences. For example, a person said "...I think my stepfather was, because he always helped me. He was always there when I needed...somebody to work with me." Another said "seeing the other kids doing all these different little projects... I mean, school work, math, and like I say, I'd love to be able to do it, but for some reason I've got a lock in my mind..." A person described influence coming from the home and school.

Mainly, I had problems at home. I would go to school and put up with the nasty attitude teachers. I would go to the office and talk to the principal about it. He would say this teacher is the teacher, that's her job. She has no right to talk to me like I'm her child. Yes she has a right to talk to me like I'm her student, but not like I'm her child, like go sit down, I'll help you when I get finished. They're talking to me like I'm stupid or something, you know, and the principal wouldn't do nothing.

When this person was asked if she had any positive influences she said "yes I did". She said "...I had a few good friends. They would help me stay out of trouble sometimes, because they had learned to adapt to the way she treated us, the way the detention was, and all that good stuff."

The most important influence described by two of three members of this group was peers. Parents was the category named by the other member of this cohort. Feelings about elementary school were equally distributed at one person each for the ratings poor, fair, and excellent.

Thinking About Dropping Out Of School

Group 1, Graduates Without Dropout Indicators. Only one person in this group thought about dropping out of school. This person expressed difficulty with getting started in the morning. All other persons in the group reportedly never considered dropping out of school. Motivating influences for staying in school and graduating were said to be parents, family and friends, and personal goals. Persons perceived schooling as stepping stones for further achievement and higher education. Parents convinced

one individual that a consequence of dropping out of school would result in being put out of the home. Influential reasons for staying in school were rated as a strong influence by all of the persons in this group.

Group 2, Graduates With Dropout Indicators. Half of this group considered dropping out of school. One out of four of this group thought of dropping out of school in junior high school. One out of four considered dropping out of school in high school. Reasons expressed for this consideration were depression due to family problems and the emotional ups and downs associated with growing up. Half of this group never considered dropping out of school. Influences motivating persons to graduate ranged from social interaction with peers within the school environment, intrinsic motivation for upward mobility through higher education, to family encouragement and support. Influences to stay in school and graduate were rated as strong by all members of this group.

Group 3, Non-graduates Without Dropout Indicators. The individuals comprising this group were equally divided between having considered or not considered dropping out of school at two of four persons for each category. Reasons for consideration of dropping out of school were as follows.

I wanted to run the streets. Didn't feel like being bothered with school. I didn't have to listen to what nobody told me in the streets, and in school I had to listen to the teachers telling me to do one thing and do this thing, and I don't like nobody telling me what to do." Another person, who only considered dropping

out when it happened stated [I] "didn't like the school I was going to. The people that were there. The teachers and everything were fine, but you know the other students and stuff. ...They just picked too much. I mean, they were constantly picking and I couldn't concentrate on my work.

Individuals who never considered dropping out stated:

I never really thought about dropping out. It just sort of happened. ...I was kicked out of ... [the school district] and enrolled in [another school district's alternative high school]...[for] fighting. Not for the whole year, but I was kicked out for like 10 days...I found out I was pregnant. ...my mother felt it was better, since I was pregnant, to go over to [an alternative school]... After having a baby, I was tired, doing household things, watching him too, and [having] a bigger responsibility. It was harder on me going to school with him."

Another person said "school became a nuisance. A place where I could not learn, that was very disruptive. It just became a place that was not worth getting up in the morning to go to learn." Influences that motivated individuals to drop out were rated as moderate by one person in the group and strong by three persons in the group.

Group 4, Non-graduates With Dropout Indicators. One person in this group didn't think about dropping out of school. Although this person reportedly didn't think about dropping out, this did occur. This individual commented "..."[there were] so many things I was thinking about. It was just one of those things that just happened, right at the moment, you know, a second's time. That was the worst mistake I ever made..." Dropping out of school was

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considered by two of three members of this group. Comments from these included "...when I thought I might graduate and didn't...it kind of let my sails out." Influences for dropping out for this person were "family problems, drinking, [and] stuff like that." Influences for dropping out for another individual became apparent in the elementary school.

... in the sixth grade, because there was one teacher that was uncontrollable. The principal couldn't even talk to her. She was so mean to everybody, even parents. Parents used to come in and talk to the principal about one teacher. Nothing happened. I don't think they used to talk to her about it. She was so mean, she would make you feel little, make you not want to come to school. I dropped out in the 9th grade because I got pregnant. I was dealing with some dumb boy. I have no problems with punishment there, the teachers, nothing. They had everything together [in] order, so it was basically me, when I got to high school. But, if I wouldn't have went through all that stuff in elementary school, maybe I would have learned more. I would have dealt better with my problems... So when I got to high school, I was like, man forget it, it ain't going to be nothing. It's going to be just like the rest of the schools...

Strong influence was selected by all members of this group **when** rating the influences on their dropping out of school.

Summary Of Findings

The research findings were presented in this chapter. Quantitative methods included the analysis of potential dropout indicator data by means of summary statistics, Analysis of variance (i.e. ANOVA), Scheffe group difference comparison, Multivariate analysis of variance (i.e. MANOVA), and Univariate F test. Interview data findings presented the results of the qualitative method. This method was the interview of individuals representing each group. Interview questions were designed to elicit responses indicative of individuals' perceptions regarding elementary school experiences. The focus of these were potential dropout indicators, personal feelings, and motivating influences. Responses were compared among groups.

Research questions were addressed quantitatively by statistical methods (i.e. MANOVA, Scheffé, and Univariate F test) using data from specific groups. Research questions were addressed qualitatively by means of comparing interview responses of applicable groups.

There were three research questions of concern. Research question one was: Are there differences in student characteristics between students who have indicators of dropout potential and drop out and students without such indicators who graduate? The multivariate test statistic had an observed significance of F sufficient to indicate a

difference between Group 1, graduates without dropout indicators; and Group 4, non-graduates with dropout indicators, on characteristic potential dropout indicators, with $F = 10.39868 (4,131) P < .05$. Univariate F tests were calculated to see which dependent variable elicited significant statistics. The results presented in Appendix I show that all did so. Interview responses of Group 1, graduates without dropout indicators, and Group 4, non-graduates with dropout indicators, on characteristic potential dropout indicators, suggest that there was a difference on potential dropout indicators. The quantitative and qualitative findings were in agreement that there was a difference in the characteristic indicators of dropout potential for the groups of concern.

Research question two was: Why do some students remain in school and other students drop out of school when the indicators of the potential to drop out suggest that all of these students may drop out? Group 2, graduates with dropout indicators; and Group 4, non-graduates with dropout indicators, are the focus of this question. The multivariate test statistic had an observed significance of F insufficient to indicate a difference between Groups 2 and 4. Univariate F test results, presented in Appendix J, revealed that only one of the variables yielded significant F statistics. This variable was attendance. All other variables failed to do so. Interview responses revealed that there was some difference between groups on the reasons

for staying in school when potential dropout indicators indicated an increased potential to drop out. The difference was the extent and quality of family support and nurturing. The quantitative and qualitative findings were incongruent with each other. This lack of agreement suggests that greater caution should be exercised when interpreting these findings.

Research question three: Are the indicators of potential dropout status different for students who have only attended one elementary school than they are for students who have attended more than one elementary school? Data were insufficient to address this question either quantitatively or qualitatively.

Hypotheses were addressed quantitatively by means of ANOVA and Scheffé group difference comparison. Hypotheses were addressed qualitatively through comparison of group interview responses, in terms of potential dropout indicators. Hypotheses of no difference among groups on the indicators of dropout potential were stated for each individual potential dropout indicator. All null hypotheses with the exception of one were rejected. There was a difference found among groups on the potential dropout indicators of attendance, GPA, mobility, standardized test scores and citizenship. The hypothesized no difference among groups on retention was untenable. Interview responses suggested that there was a difference on the indicators of dropout potential among groups. Congruence

between the quantitative and qualitative findings suggest broader support for a difference among groups on the indicators of dropout potential.

Other qualitative data illuminated group feelings about elementary school and consideration about dropping out of school. Interview responses indicated differences among groups regarding these other qualitative data.

CHAPTER V

SUMMARY OF STUDY, FINDINGS, CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS, AND REFLECTIONS

Introduction

This chapter contains an introduction, summary of the study, findings, conclusions, implications, recommendations and reflections. The summary of the study indicates what was to be accomplished by the study. The summary of the findings is a statement of what was found by the research methods. In the conclusions the quantitative and qualitative findings are discussed. The implications are a presentation of inferences related to the findings. The recommendations contain suggestions for school practice and for further study. In the reflections section of the chapter the researcher provides some personal ideas, opinions and suggestions.

Summary of Study

Schools have access to a plethora of data regarding students. A problem may be how these data resources are used to help reduce the generation of factors associated with increased dropout potential. These data resources are the cumulative record data and the feelings, perceptions, and responses of students to their school experiences.

The purpose of the research was to determine if there was a difference in potential dropout indicators, at the

elementary level, between graduates and non-graduates of the classes of 1989, 1990, and 1991 in the school district within which the study was conducted. Research questions and hypotheses were stated to provide greater specificity in terms of the stated research purpose. Quantitative and qualitative methods were used to pursue the purpose of the study. These methods of analysis revealed that there were differences in potential dropout indicators at the elementary level for the groups of the study.

Areas of importance, for this study, were as listed below:

1. To learn more about selected factors associated with dropping out, so that these factors may be addressed more adequately.
2. To discover ways of reducing the generation of factors contributing to the potential for dropping out of school.
3. To propose a way of analyzing data which will be useful to schools in their study of the dropout phenomena (i.e. the disaggregation of data by selected indicators and concomitant analysis to illuminate what may be suggested for dropout potential).

Data collection was conducted by two means: reviewing individual cumulative records and conducting interviews with individuals from each group. The cumulative records contained documentation of potential dropout indicators. The analysis of these data were conducted through the following statistical methods: summary statistics, analysis of variance (i.e. ANOVA), Scheffé' group difference comparison, multivariate analysis of variance (i.e. MANOVA), and univariate F test. Analyses were examined at the alpha

.05 significance level. Interviews were conducted to ascertain the quality of elementary school experience from the student's perspective. Their opinions, beliefs, and feelings about their elementary school experience, including potential dropout indicators and motivating factors, were of importance. Their responses were compared to reveal any differences among groups.

Summary of Findings

Research questions are enumerated below:

- (1.) Are there differences in student characteristics between students who have indicators of dropout potential and drop out and students without such indicators who graduate?
- (2.) Why do some students remain in school and other students drop out of school when the indicators of the potential to drop out suggest that all of these students may drop out?
- (3.) Are the indicators of potential dropout status different for students who have only attended one elementary school than they are for students who have attended more than one elementary school?

Findings which addressed research question 1 indicated agreement between the quantitative and qualitative data on the existence of a difference among specified groups on indicators of dropout potential. The multivariate test statistic had an observed significance of F sufficient to indicate a difference between cohorts 1, graduates without dropout indicators; and 4, non-graduates with dropout indicators on characteristic potential dropout indicators with $F = 10.39868 (4,131) P < .05$. The univariate F test provided evidence that all dependent variables elicited

significant statistics (see Appendix I). Interview responses of groups also suggested there was a difference on potential dropout indicators between Groups 1 and 4.

Findings which addressed research question 2 indicated disagreement between the quantitative and qualitative data on why some students remain in school and other students drop out of school when the indicators of dropout potential suggest that all of these students may drop out. Group 2, graduates with dropout indicators; and Group 4, non-graduates with dropout indicators, were the concern of this question. The multivariate test statistic had an observed significance of F insufficient to indicate a difference. Univariate F test results, (see Appendix J) revealed that attendance was the only variable to yield significant F statistics. All other variables failed to do so. Interview responses, however, revealed that there was some difference between groups on the reasons for staying in school when potential dropout indicators indicate an increased potential to drop out. These differences were parental support, intrinsic motivation, and a sense of caring from the school.

Findings which addressed research question 3 were insufficient to address the question of the impact of mobility on potential dropout indicators, among groups. This was due to the lack of mobility within the community and school district where the research was conducted.

Null hypotheses were stated for each individual

potential dropout indicator (i.e. Attendance, Grade Point Average, Retention, Citizenship, Standardized Test Scores, and Mobility). That is, hypotheses of no difference among groups on potential dropout indicators were stated for each potential dropout indicator. All null hypotheses, with the exception of the one for retention, were rejected.

Interview responses also suggested that there was a difference on the indicators of dropout potential among groups.

Other qualitative data indicated that there was a difference among groups on their feelings about elementary school and on thinking about dropping out of school.

Conclusions

Groups without dropout indicators and groups with dropout indicators had characteristics, as indicated by measures of their respective potential dropout indicator behaviors, consistent with their group status. Graduates without dropout indicators had higher rates of attendance, higher GPA scores, higher citizenship average grades and higher standardized test score means than non-graduates with dropout indicators. Interview responses suggested that group perception of themselves, relative to the potential dropout indicators, was also consistent with their group status.

Quantitative methods alone were insufficient to address the issue of difference between groups when both have indicators of dropout potential but one graduates and the other drops out. Qualitative methods can address some issues that are more difficult to address by other methods. Family support was the greatest single factor identified as the reason some students graduate and other students drop out when potential dropout indicators suggest they both should drop out.

Data were insufficient to determine differences among groups on dropout potential due to mobility.

Implications

Early identification of those potentially at greater risk of dropping out may be enhanced by developing broad quantitative and qualitative profiles. These profiles would be comprised of a list of characteristic behaviors indicative of groups with dropout indicators. This may provide a means to facilitate the early identification of those potentially at-risk. This early identification would enhance the implementation of intervention and remediation strategies by directing efforts toward those potentially at greater risk. Monitoring any change in the incidence of potential dropout indicator characteristics over time may provide evidence regarding the effectiveness of ameliorative efforts. Schools must become equally proficient in the application, analysis, and interpretation of quantitative and qualitative methods as a means for decision making.

Schools and families must work more closely together. More may be accomplished, on behalf of the student, with parental support. Schools must also find ways to support the efforts of families that may demonstrate the need for help, in providing support to their children. Parental involvement is "...desirable and even essential to effective schooling" (Comer, 1991, p. 271). The delivery of school programs and services is dependent upon parents and teachers working as partners.

Inter-district mobility was not a factor in the school

district where the study was conducted. This was due to the characteristic size of the community and consequently the school district. Small school districts that are in small communities with limited rental housing have limited options for mobility within the school district. More mobility between districts did occur; however, this was not of interest for the purpose of this study.

Procedures for the documentation, analysis, and interpretation of potential dropout indicator quantitative and qualitative data should be reviewed. The low incidence of retention may account for there being no statistical differences found among groups on this potential dropout indicator. Considering the mean number of moves for any cohort was less than one, the variable suspected of confounding mobility data may be group size. Groups may be products of environmental influences which imbued them with some distinct differences. These distinct differences may account for qualitative group differences on group feelings about elementary school and thinking about dropping out. Group beliefs, perceptions and values about school are products of their family and school experiences. These experiences reinforce the decisions groups make about staying in school or dropping out.

Recommendations

School Practice. The development of profiles for the early identification of individuals at greater risk of dropping out should be examined. The development of the profile must include an analyses of the character of the community and school district where it is to be used. This is due to the influence community and school district characteristics may have for the way individuals comprising groups may exhibit characteristic indicators of dropout potential.

Staff development efforts must be pursued to enhance the proficiency of educators in the interpretation and use of quantitative and qualitative methods. Schools must develop programs to encourage parental participation and support. Schools must also be prepared to be supportive of the needs of families. For example, school social workers, teachers and administrators could work together to provide parenting workshops for those families who need them. Schools must identify other agencies providing support services to families. A collaborative relationship must be developed between the school and these agencies. A directory of agency resources could be developed, identifying these organizations and the nature of support services they provide. The school would act as a referral agency when family needs exceed school resources.

Schools routinely generate a plethora of data. These

data can provide a comprehensive description of schools, classrooms and students. During the data collection phase of this study some problems were discovered. While the majority of teachers practiced good record keeping habits some records were found to be less than adequate. Missing or inconsistent methods of record keeping rendered some records usable for the purposes of this study. There is an urgent need for schools to devise means to assure the adequate documentation and use of existing data to aid in the reduction of factors leading to increased dropout potential. A consistent method of recording different kinds of data must be established and communicated to teachers. The types of data representative of potential dropout indicators must be identified and interpreted for their value in the early identification of those at-risk.

Further Study. The impact of mobility on dropout potential needs to be studied further. Consideration should be given to study the incidence of mobility between the school district, within which the study was conducted, and school districts with contiguous attendance boundaries. Mobility could also be studied in larger communities, having more rental housing options, with larger more diverse, school populations.

Care should be exercised in the interpretation of the differences found on retention and mobility due to the low incidence of these indicators. Continued efforts to study these indicators should be made. Such efforts should be

undertaken in an environment with a greater incidence of their occurrence.

During the formative stage of this study a pilot study was conducted in an elementary school located in another school district. The purpose of the study was to determine the extent of mobility in this school. Viewed in aggregate, only 43.37% of the students in grades junior first through six grades, currently attending one school have attended no other school. The extent of mobility in this school was found to be pervasive. Again, the task for a future study is to determine if mobility is related to dropping out when this factor is this extensive.

Further study should be conducted to include more information about family differences. These differences may be SES, participation in school support activities, parent level of education, and number of children in the family.

Reflections

This section contains the thoughts and beliefs of this researcher generated as a result of having conducted this study. Although the impetus for these ideas resides in the research findings some of what is presented may not be directly supported by the findings.

The development of a list of potential dropout indicators must be based on the idea that the list is not exhaustive. The combination of factors may be different among different individuals. Staff development programs are a means to facilitate this effort. Teachers must be provided inservice on the use of existing data as an effective tool in the reduction of dropout potential. When using existing data for decision making caution must be exercised not to generalize. There is no magic answer. Individuals will be less disposed to drop out by virtue of what the school does at the elementary school. Individuals must be treated by teachers as welcomed participants in school. Teachers must be encouraged to look at existing data, generate additional data and make decisions on a case by case basis, thereby addressing the needs of those at-risk.

Data analysis is rarely used for the early (i.e. elementary school) identification of those potentially at-risk of dropping out of high school. Analysis of elementary school data for the groups of this study indicated those at greater risk of dropping out in high

school were found to have characteristics different from those less at-risk. Analysis of data indicative of increased dropout potential is a means of early identification for the implementation of prevention strategies. Criteria for defining the minimal incidence for these indicators which suggests increased dropout potential along with data cut off points, must be established. This would allow for developing a broad profile characteristic of students at high or low risk for dropping out. As such, the profile may be a starting point for a broad identification of dropout potential. This broad profile may be viewed as a macro profile containing multiple micro information characteristic of different individuals. An inclusive qualitative profile of this group could also be developed delineating characteristic behaviors. The profile must be broad enough to address a range of possible behaviors attributed to individual differences. New behaviors encountered during the use of the profile must be added. Data indicative of potential dropout factors would be collected and computed through descriptive statistics. Students with mean and standard deviation scores similar to students at high or low risk for dropping out would be similar to their respective group. Prevention and remediation strategies would be directed toward reducing factors contributing to increased dropout potential. It is not expected that all at-risk students would have the same factors. The development of broad, inclusive quantitative

and qualitative profiles increases the chance of early identification of a wide range of at-risk behavior characteristics. Every potential dropout is not expected to have every potential indicator contained in the profile. A broad profile, however, increases the possibility to identify a range of individual behaviors. While advocating more effective use of data to get a broad profile of students one must still remember that the disposition to dropout is an individual matter. The profile is a tool used to direct us where to look.

For the purposes of this study, individuals were grouped within groups based upon similarities on the absence or presence of potential dropout indicators and graduation or dropout status. Again, it must not be assumed that everyone is alike that may be predisposed to drop out. Individuals comprising groups had diverse types and amounts of potential dropout indicators. Idiosyncratic circumstances may not be generalized beyond an individual's particular characteristic potential dropout indicators. This illuminated the imperative need to look beyond potential dropout indicator data in determining influences on decision making.

It is probably more important to look at the disposition to drop out in terms of an individual predisposition. Some individuals dropped out due to lack of family support and nurturing. Others failed to graduate because of school experiences which served to alienate them

from the school and in some cases from their peers. Some dropped out due to preoccupation with things outside the domain of the school. Several individuals dropped out due to being alienated from the school program. One individual was alienated due to insensitive teacher behavior. Another was alienated consequent to bigoted behavior that some peers directed toward a person of bi-racial heritage. Still another became alienated through a succession of social promotions leading to a failed graduation. Individuals comprising graduate groups also had diverse reasons for their decision to remain in school and graduate. In two cases the same individual school employee who was perceived as a facilitating factor in one person's decision to drop out was perceived as a motivating aspect for another person's decision to graduate.

Quantitative data are an adequate means of identifying those potentially at-risk of dropping out. The use of qualitative data can be a more direct means of revealing individual predisposition to drop out and ascertaining motivation for decision making. Used together these methods can provide an effective means for addressing the needs of those at-risk.

The interactive behavior of persons within the school can set the environmental tone. This can be an impetus for decision making and action. Under desirable conditions this can be an influence for graduation. Under less than desirable circumstances this can be an incentive for

dropping out. The principal is a key factor in the establishment of an environmental tone conducive to success (Lezotte, 1992). As an elementary school principal I realize the importance of helping teachers. Successful coordination, and direction of human and material resources is dependent upon the principal's role as a supportive, collaborative, authoritative facilitator. Under these conditions the teacher has optimum opportunity for successful teaching. The teacher must treat students as valued participants in the learning process. The experience that a student brings to the learning environment must be a respected starting point for the acquisition and refinement of additional knowledge and skills. Individuals with the highest predisposition to graduate provided interview responses which suggested that they perceived themselves to be part of an enjoyable experience that was school. Teachers and principals must embrace parents as valued partners in the student's educational support system. Parents and teacher respectively were the most identified factors in the facilitation of the decision to graduate. It is imperative that peer support, another important influential aspect, be directed toward more productive directions. Alienation or discrimination coming from peers, for any reason, must not be tolerated. All persons must be treated as important participants in the educational endeavor.

Parents were the only variable identified by

individuals in all groups as a most important influence.

The disposition to look toward parental support rather than peer support appears to be a grater factor for increased potential to graduate. Children for whom there is very little home support who turn to peers appear to be in greater risk for dropping out. Children for whom there is some home support and look to peers are at less risk of dropping out than those who look at peers as the primary source of support. Children who have diverse sources of support such as parents, teachers, and peers have the greatest potential for graduating. The need for support from various groups will vary over time as children develop through experience.

Schools must enter into collaborative relationships with individuals and organizations as a means of addressing an ever widening proliferation of student needs. Teachers must collaborate as a means of maximizing the delivery of instruction through joint planning and sharing of instructional resources. Schools must seek ways of addressing needs that may adversely affect a child's potential for success at learning, but are beyond school resources. Collaboration offers an opportunity to maximize success and minimize duplication through shared efforts and resources.

APPENDICES

Appendix A

Cumulative Data Collection Sheet

CUMULATIVE DATA RECORD SHEET

NAME _____ ID# _____

COHORT YEAR _____

[illegible]

Appendix B
Interview Letters

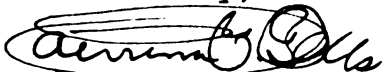
First Letter

LAWRENCE V. WELLS
2435 PERKINS STREET
SAGINAW, MICHIGAN 48601

Dear Friend:

I'm trying to learn more about things that help people be successful in school, and graduate. I also want to learn more about things that may cause people not to be successful in school, and not graduate. My goal is to help more people stay in school and graduate. As part of my study I need help from people who are high school graduates. I also need help from people who did not graduate from high school. I need your help. The interview will take 45 minutes or less. No record of the names of the people who help will be kept. Your participation is voluntary. If you would like to help please complete the bottom part of this letter and return it in the enclosed, stamped self addressed envelope. Please mail the letter today. I will contact you to set up a time for us to talk. Thank you for taking time to read this letter. If you have any questions feel free to call me at 759-3426. Thank you.

Sincerely,


Lawrence V. Wells

LAWRENCE V. WELLS
2435 PERKINS STREET
SAGINAW, MICHIGAN 48601

Please fill in the blanks. Check yes if you will be interviewed. Check no if you will not participate. Again, thank you for your help.

Name _____ Date _____

Phone Number _____

_____ YES, I will help.

_____ No, I will not help.

Please mail your response today.

Follow Up Letter

LAWRENCE V. WELLS
2435 PERKINS STREET
SAGINAW, MICHIGAN 48601

Dear Friend:

Please remember, on Date, 1992 I sent you a letter asking for your help. I haven't heard from you yet. I case you want to help I'm sending this second letter.

I'm trying to learn more about things that help people be successful in school, and graduate. I also want to learn more about things that may cause people not to be successful in school, and not graduate. My goal is to help more people stay in school and graduate. As part of my study I need help from people who are high school graduates. I also need help from people who did not graduate from high school. I need your help. The interview will take 45 minutes or less. No record of the names of the people who help will be kept. Your participation is voluntary. If you would like to help please complete the bottom part of this letter and return it in the enclosed, stamped self addressed envelope. Please mail the letter today. I will contact you to set up a time for us to talk. Thank you for taking time to read this letter. If you have questions feel free to call me at 759-3426. Thank you.

Sincerely,



Lawrence V. Wells

LAWRENCE V. WELLS
2435 PERKINS STREET
SAGINAW, MICHIGAN 48601

Please fill in the blanks. Check yes if you will be interviewed. Check no if you will not participate. Again, thank you for your help.

Name _____ Date _____

Phone Number _____

_____ YES, I will help.

_____ No, I will not help.

Please mail your response today.

Appendix C

LAWRENCE V. WELLS
2435 PERKINS STREET
SAGINAW, MICHIGAN 48601

INTERVIEW EXPLANATION AND CONSENT FORM

Explanation And Purpose

This interview is part of research to help learn more about things that help people be successful in school. It also will help learn more about things that may cause people not to be successful in school. As part of my study I need help from people who are high school graduates and people who did not graduate from high school. The interview consists of a few questions about school. It will take approximately 45 to 60 minutes to complete. No written record, audio recording, or other recording method of the names of the people who help will be kept. Please note, you indicate your voluntary agreement to participate, in the interview, by being interviewed. Questions should be directed to Lawrence V. Wells, 759-3426.

Name _____ Date _____
Cohort _____

Please answer each Question.

1. How would you describe yourself, while in elementary school, in terms of each of the following words? Please explain each description.

1. Attendance (How often absent)
2. Retention (Number of times failed a grade)
3. Standardized test scores (How well did you do)
4. Citizenship (Behavior relative to school rules)

Select a rating for each of the descriptions you used in response to the list of words.

1. Attendance (How often absent)

- (a) Poor
- (b) Fair
- (c) Good
- (d) Excellent

2. Retention (Number of times failed a grade)

- (a) Poor
- (b) Fair
- (c) Good
- (d) Excellent

3. Standardized test scores (How well did you do)

- (a) Poor
- (b) Fair
- (c) Good
- (d) Excellent

4. Citizenship (Behavior relative to school rules)

- (a) Poor
- (b) Fair
- (c) Good
- (d) Excellent

II. How did you feel about elementary school when you were a student? Please explain.

- a. What did you like best?
- b. What did you like least?
- c. Describe your most important influence.

Please rate how you felt about elementary school.

- (a) Poor
- (b) Fair
- (c) Good
- (d) Excellent

III. Did you ever think about dropping out of school?

Please explain.

- (a) YES: If yes, when did you first consider it?
- (b) NO

IV. If you graduated from high school why were you able to remain in school? If you dropped out of school why did you drop out? Please explain.

If you graduated rate the reasons that influenced you to graduate.

- (a) Poor/Little Influence
- (b) Moderate Influence
- (c) Strong Influence

If you dropped out rate the reasons that influenced you to drop out.

- (a) Poor/Little Influence
- (b) Moderate Influence
- (c) Strong Influence

Appendix D

Table 26

Mean And SD Summary Data

GROUP	IND	MEAN	SD	#CASES
POP.	ATT	7.3805	7.5360	182
GRADUATE	ATT	7.1687	7.1697	160
DROPOUT	ATT	8.9205	9.8722	22
GR 2 IND	ATT	6.9173	7.3560	130
GR =2 IND	ATT	8.2583	6.2950	30
DO 2 IND	ATT	6.1094	3.9812	16
DO =2 IND	ATT	16.4167	16.4033	6
POP.	GPA	2.6606	0.5803	182
GRADUATE	GPA	2.6920	0.5827	160
DROPOUT	GPA	2.4318	0.5190	22
GR 2 IND	GPA	2.8600	0.4880	130
GR =2 IND	GPA	1.9643	0.3578	30
DO 2 IND	GPA	2.6772	0.3501	16
DO =2 IND	GPA	1.7775	0.2388	6
POP.	RET	0.0055	0.0741	182
GRADUATE	RET	0.0062	0.0791	160
DROPOUT	RET	0.0000	0.0000	22
GR 2 IND	RET	0.0000	0.0000	130
GR =2 IND	RET	0.0333	0.1826	30
DO 2 IND	RET	0.0000	0.0000	16
DO =2 IND	RET	0.0000	0.0000	6
POP.	CIT	2.8023	0.7187	182
GRADUATE	CIT	2.8384	0.7022	160
DROPOUT	CIT	2.5398	0.7975	22
GR 2 IND	CIT	2.9762	0.6578	130
GR =2 IND	CIT	2.2417	0.5704	30
DO 2 IND	CIT	2.6953	0.7231	16
DO =2 IND	CIT	2.1250	0.9048	6

Appendix D

Table 26 (Continued)

Mean And SD Summary Data

GROUP	IND	MEAN	SD	#CASES
POP.	IAVG	47.2605	18.7806	182
GRADUATE	IAVG	48.0089	18.8218	160
DROPOUT	IAVG	41.8177	17.9575	22
GR 2 IND	IAVG	53.6217	15.6271	130
GR =2 IND	IAVG	23.6868	10.1411	30
DO 2 IND	IAVG	49.5931	13.9209	16
DO =2 IND	IAVG	21.0833	7.9776	6
POP.	MOB	0.0385	0.1928	182
GRADUATE	MOB	0.0250	0.1566	160
DROPOUT	MOB	0.1364	0.3513	22
GR 2 IND	MOB	0.0154	0.1236	130
GR =2 IND	MOB	0.0667	0.2537	30
DO 2 IND	MOB	0.1875	0.4031	16
DO =2 IND	MOB	0.0000	0.0000	6

Appendix E

Table 27

Interview Self Rating Responses On Indicators

ITEMS	GRAD	< 2 IND	GRAD > =2 IND	DO < 2 INDS	DO > =2 INDS
ATTENDANCE					
a. Poor	0	0	0	1/3	
b. Fair	0	0	0	0	
c. Good	1/6	1/4	2/4	0	
d. Excellent	5/6	3/4	2/4	2/3	
RETENTION					
a. Poor	0	0	0	2/3	
b. Fair	0	0	0	0	
c. Good	1/6	0	0	0	
d. Excellent	5/6	4/4	4/4	1/3	
STANDARD TEST					
a. Poor	0	1/4	0	2/3	
b. Fair	0	0	1/4	1/3	
c. Good	6/6	2/4	1/4	0	
d. Excellent	0	1/4	2/4	0	
CITIZENSHIP					
a. Poor	0	0	0	0	
b. Fair	0	0	2/4	1/3	
c. Good	1/6	1/4	0	0	
d. Excellent	5/6	3/4	2/4	2/3	

Appendix F

Table 28

Interview Self Rating Responses On Feelings About School

GROUP ITEMS	GRP 1 GRAD < 2 IND	GRP 2 GRAD > =2 IND	GRP 3 DO < 2 INDS	GRP 4 DO > =2 INDS
LIKED BEST				
1. Learning	3/6=	3/4	0	2/3
2. Peers	1/6	0	1/4	0
3. Teachers	1/6	0	3/4	0
4. Principal	0	0	0	0
5. Play	1/6	1/4	0	1/3
6. Other	0	0	0	0
LIKED LEAST				
1. Learning	3/6=	4/4	1/4	0
2. Peers	1/6	0	0	0
3. Teachers	0	0	1/4	0
4. Principal	0	0	1/4	0
5. Play	0	0	0	0
6. Other	2/6	0	1/4	3/3
MOST IMPORTANT INFLUENCE				
1. Learning	1/6	0	0	0
2. Peers	0	0	0	2/3
3. Teachers	2/6	0	2/4	0
4. Principal	0	1/4	0	0
5. Play	0	0	0	0
6. Parents	3/6	2/4	2/4	1/6
7. Other	0	1/4	0	0
PERSONAL FEELINGS RATING ABOUT ELEMENTARY SCHOOL				
a. Poor	0	0	0	1/3
b. Fair	0	1/4	2/4	0
c. Good	6/6	2/4	2/4	1/3
d. Excellent	0	1/4	0	1/3

Appendix G

Table 29

Interview Self Rating Responses On Thinking About School
Dropping Out Of School

ITEMS	GRAD < 2 IND	GRAD > =2 IND	DO < 2 INDS	DO > =2 INDS
a. YES Considered Dropping Out				
1. Elem Sch				
2. Jr. Hi Sch	1/6	1/4		
3. Sr. Hi Sch		1/4	2/4	2/3
b. NO	5/6	2/4	2/4	1/3

Appendix H

Table 30

Influence Rating Responses On Dropping Out Or Graduating
From School

	Reasons For Graduating		Reasons For Dropping Out	
ITEMS	GRAD < 2 IND	GRAD > =2 IND	DO < 2 INDS	DO > =2 INDS
a. Little Influence				
b. Moderate Influence			1/4	
c. Strong Influence	6/6	4/4	3/4	3/3

abl

alt

ES

fil

acc

fil

fab

fil

WAF

ATT

GPA

CIT

FAV

Appendix I

Table 31

Multivariate Analysis Of VarianceMultivariate Test of Significance (S = 1, M = 1, N = 64 1/2)

TEST	VALUE	EXACT F	HYPO. DF	ERROR DF	SIG.of F
Pillais	.24100	10.39868	4.00	131.00	.000
Hotellings	.31752	10.39868	4.00	131.00	.000
Wilks	.75900	10.39868	4.00	131.00	.000

Table 32

Univariate F - Test (1,134) D.F.

VARIABLE	HYPO. SS	ERROR SS	HYPO. MS	ERROR MS	F	SIG of F
ATT	517.54044	8325.63189	517.54044	62.13158	8.32975	.005
GPA	6.72018	31.00131	6.72018	.23135	29.04727	.000
CIT	4.15501	59.91733	4.15501	.44714	9.29232	.003
IAVG	6072.21285	31820.66456	6072.21285	237.46765	25.57070	.000

Appendix J

Table 33

Multivariate Analysis Of VarianceMultivariate Test of Significance (S = 1, M = 1, N = 14 1/2)

TEST	VALUE	EXACT F	HYPO. DF	ERROR DF	SIG.of F
Pillais	.23741	2.41278	4.00	31.00	.070
Hotellings	.31133	2.41278	4.00	31.00	.070
Wilks	.76259	2.41278	4.00	31.00	.070

Table 34

Univariate F - Test (1,134) D.F.

VARIABLE	HYPO.SS	ERROR SS	HYPO.MS	ERROR MS	F	SIG of F
ATT	332.79201	2494.51875	332.79201	73.36820	4.53592	.041
GPA	.17453	3.99857	.17453	.11761	1.48406	.232
CIT	.06806	13.52917	.06806	.39792	.17103	.682
IAVG	33.89106	3300.64446	33.89106	97.07778	.34911	.559

MICHIGAN STATE UNIVERSITY

OFFICE OF VICE PRESIDENT FOR RESEARCH
AND DEAN OF THE GRADUATE SCHOOL

EAST LANSING • MICHIGAN • 48824-1046

April 29, 1992

Lawrence V. Wells
2800 Germain
Saginaw, MI 48601

RE: EARLY INDICATORS OF DROP OUT POTENTIAL: A STUDY OF GRADUATES AND NON-GRADUATES IN A MID-WESTERN HIGH SCHOOL, IRB #92-206

Dear Mr. Wells:

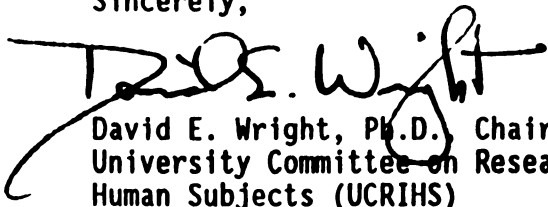
The above project is exempt from full UCRIHS review. The proposed research protocol has been reviewed by a member of the UCRIHS committee. The rights and welfare of human subjects appear to be protected and you have approval to conduct the research.

You are reminded that UCRIHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval one month prior to April 22, 1993.

Any changes in procedures involving human subjects must be reviewed by UCRIHS prior to initiation of the change. UCRIHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to my attention. If I can be of any future help, please do not hesitate to let me know.

Sincerely,



David E. Wright, Ph.D. Chair
University Committee on Research Involving
Human Subjects (UCRIHS)

DEW/pjm

cc: Dr. Charles Blackman

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