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SITE-BASED DROPOUT IDENTIFICATION AND PRESCRIPTION PROCESS FOR
ALTERNATIVE EDUCATION IN A DIVERSE SCHOOL SYSTEM

by

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B.A. June 1967, Randolph-Macon College
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A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of
the Requirements for the Degree of

DOCTOR OF PHILOSOPHY

URBAN SERVICES

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ABSTRACT

SITE-BASED DROPOUT IDENTIFICATION AND PRESCRIPTION PROCESS FOR
ALTERNATIVE EDUCATION IN A DIVERSE SCHOOL SYSTEM

William P. Krupp
Old Dominion University, 2000
Director, Dr. Robert Lucking

This study developed a school site-based dropout identification and prescription process for student placement in alternative education programs in a school system with diverse residential environments--urban, rural, and suburban. The dropout performance-based and measurable predictor variables selected through discriminate function analysis were total retentions, yearly average of absences, total out-of-school suspensions, the state competency tests passed on time, total administrative hearings, and yearly average of poor grades. The combination and nature of these variables allow for early detection of potential dropouts.

While subtle differences existed between the urban, suburban, and rural prediction formulas, the variables selected produced prediction formulas with accuracy rates of 88.1% overall, 85.7% for urban, 94.2% for suburban, and 97.7% for rural students. Total retentions and passing the competency tests on time had the largest unstandardized canonical discriminate function coefficients in the overall, rural, and urban prediction formulas. Administrative hearings and passing the state competency tests on time variables were found to have positive impacts on students staying in school.

The significant events that the research suggested should trigger the identification process include:

- 1) Retention for the second time,
- 2) Average school absences of 15 days or more,
- 3) Failing two or more subjects,
- 4) Five or more cumulative out-of-school suspensions,
- 5) An administrative hearing,
- 6) Failing the state competency tests,
- 7) Averaging two or more family generated school transfers,

The researcher's policy recommendations are that once activated by triggering events, the screening process should be by a site-based early intervention team which can use the research generated discriminated function formulas to evaluate the severity of dropout risk, prescribe the appropriate type of education program from a continuum of services, and develop individualized alternative education plans with long term, short term, and exit goals.

With dropouts failing to pass the state competency tests on time at a rate five times that of non-dropouts and the increased pressure on schools that their students perform well on mandated competency testing will amplify the demand for early detection of potential dropouts with additional, diverse, and more individualized dropout prevention programs.

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And finally, Linda Krupp who gave up eight years of vacations, weekends, nights, and summers with her husband so he could complete course work, an internship, dissertation research, and writing. She has been a most supportive and understanding wife.

To Linda and Worth I dedicate this paper for any good that may come out of my findings and efforts.

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Old Dominion University

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CHAPTER I

INTRODUCTION

Students who drop out of school prior to completing graduation requirements present problems not only to schools but to society as a whole. According to the National Dropout Prevention Center, school dropouts cost themselves and the country \$200 billion in lost earnings and unrealized tax revenues, earn \$6,415 less each year than high school graduates, constitute 82% of the prison population, and make up 60% of the adults on welfare (National Dropout Prevention Center, 1991). Businessmen are concerned that they may have to spend billions of dollars teaching dropout workers to read, write and count (Callison, 1994). Dropout prevention programs serve the interest of not only schools but also government, businesses, and society as a whole by predicting potential dropouts, and providing intervention programs which will hold students in school, and lead to their eventual graduations and subsequent lives as productive members of society.

STATEMENT OF THE PROBLEM

The problem is to develop and validate a reliable school site-based dropout identification and prescription process for student alternative education placement in a school system with diverse community types. This study proposes to examine the impact of selected variables as possible influences on students' decisions to drop out of school prior to graduation, and to examine significant triggering events which may precede those decision.

Secondly, the researcher proposes to develop a school site-based identification process that considers subtle student differences, personal factors, accurate and up-to-date information, and functions in a timely manner. The dropout predictor variables selected will be research based, case study generated, and include a new variable that has had an impact on Virginia's students only since 1990-- state-mandated competency testing. The proposed process, if adopted, may be activated by school personnel, law enforcement and court officials, community service workers, family members, and students themselves.

Students do not suddenly decide that school has no value, that they should shut themselves off from contact with school peers, and that they should drop out. As their school careers continue, students begin to develop characteristics and behaviors that predate dropping out of school, and some of these risk factors appear as early as the third or even first grade (Sween, 1989). School staffs need to examine established risk factors, and include the new element of state-mandated student assessment through competency testing. School personnel should systematically review personal, home, and school characteristics and behaviors. When high dropout risk factors become evident the school system should provide intervention programs to prevent a student from dropping out of school. Given solid research and personal knowledge of students, school personnel could provide individualized intervention programs to help potential dropout students remain in and graduate from high school. The key is to identify dropout risk factors early enough so that intervention programs can be developed, approved,

and implemented before the student's course toward dropping out becomes irreversible.

Alan Vaughan (1991) examined dropout data from Chesapeake, Virginia, and suggests that guidance counselors should perform an annual review of student files to find potential dropouts: however, this practice may not be feasible due to time restraints and the sheer volume of information which must be collected and screened. The proposed identification process, focusing on individuals, would be triggered by ongoing significant events which occur throughout the year. Significant triggering events may include retentions, excessive absences, administrative hearings, special education evaluations, health or family concerns, academic difficulty, or court or law enforcement involvement.

REVIEW OF THE LITERATURE

Many of America's founding fathers saw an educated electorate as a means to promote and protect democracy from tyranny. With the Civil War and The Morrill Land Grant Bill of 1862, the task of education began to include more economic goals. During the Cold War years education became an instrument of national defense (Berube, 1991). Today, global economic competition heightens the need for educated workers. Kelley and Gaskell (1991) state that "leaving school before graduating from 12th grade is no longer perceived as just an individual tragedy or mistake in judgment, but as a threat to economic prosperity and national security" (p. 1).

Many dropout studies "don't provide much insight into what preceded that decision" (Dougherty, 1989, p. 7). Deschamps (1992)

reviewed 32 dropout studies conducted between 1982 and 1991. The dropout studies' data collection was accomplished through examination of school records, interviews with dropouts, interviews with school personnel and/or analysis of the database from The High School And Beyond Survey (Deschamps, 1992).

The major dropout characteristics typically studied include gender, ethnicity, single parent family, socioeconomic status (SES) or income, sibling(s) dropping out, pregnancy, absenteeism or tardiness, discipline problems, retentions, academics, achievement test scores, participation in extracurricular activities and poor teacher relations (Deschamps, 1992). Peng & Lee (1992) state in their study that a student possessing only two at-risk characteristics, such as low SES or low test scores, was at the critical point for predicting dropping out of school. Prediction reliability was increased only slightly when three or more characteristics were present. New data concerning school dropouts may alter some preconceived notions as to who are school dropouts.

Vaughan (1991) states that the student characteristics of attendance, school transfers, mother's education, and retentions are dominant predictors of potential school dropouts. Results from studies reported from 1987 through 1991 showed significant dropout predictors clustering around school attendance, retentions, grades, discipline problems, socioeconomic status, family intactness, and single parent households (Alpert & Dunham, 1986; Deschamps, 1992; Franklin, 1992; Frase, 1989; Kortering, Haring, & Klockars, 1992; Morris, Ehren, & Lenz, 1991; Peng & Lee, 1992; and Vaughan, 1991).

Peng & Lee (1992) warn that the interdependence and impact of at-risk characteristics should be carefully considered. Looking for easy answers is dangerous, and some current models for predicting dropouts are oversimplified and imprecise. In practice, a profile representing the typical dropout is too ambiguous to be useful. For example, the Houston Independent School District using a state mandated model found that 40 to 50 percent of secondary school students had at least one state-identified at-risk characteristic of dropping out. The prediction accuracy rate was less than 14%, and many dropouts were not being predicted (Gaustad, 1991).

RATIONALE OF THE STUDY

Much research has been done on the gross characteristics of school dropouts. In fact, there is an extensive body of literature dating back to the late 1950's and early 1960's. Following World War II writers began to see the connection between dropping out of school and the labor market. A high school diploma became a valued requirement in the post industrial labor market (Dorn, 1993). The previous extensive research tends to dwell on clusters of characteristics or circumstances of dropouts which are well-recognized by the lay public. Yet, there remains subtle differences in school, family, and personal characteristics between at-risk students who drop out and students who remain and graduate. As society changes new factors and relationships must be examined.

The purpose of this study is to:

- 1) Examine a new potential influence in the lives of students--

state-wide competency testing in Virginia;

- 2) Develop a policy and a process by which potential school dropouts are identified, evaluated, and served by dropout prevention programs;
- 3) Help shape drop out prevention policy initiatives by school policy makers.

Central to the process is a school site-based early intervention team which has personal and up-to-date knowledge of the individual student, can evaluate the urgency of the situation, will make specific recommendations for alternative education placement, and will develop the student's alternative education plan.

Researchers recommend that school systems should consider additional student characteristics or circumstances to improve the accuracy of their prediction model (Vaughan, 1991; Deschamps, 1992). Guidance counselors, teachers, school nurses, and administrators should be able to fill gaps in school records' information and provide up-to-date details (Vaughan, 1991). To improve accuracy and reliability, this study will use a research identified group of predictor variables and the input from school staff members who have personal knowledge of the individual subjects.

Writers for The National Dropout Prevention Center recommend that rather than relying on a nationally devised set of characteristics to identify dropouts, localities should develop their own identification process due to subtle variation between communities and use only those characteristics applicable to their own student population (Wells, Bechard, & Hamby, 1989). While this advice may be

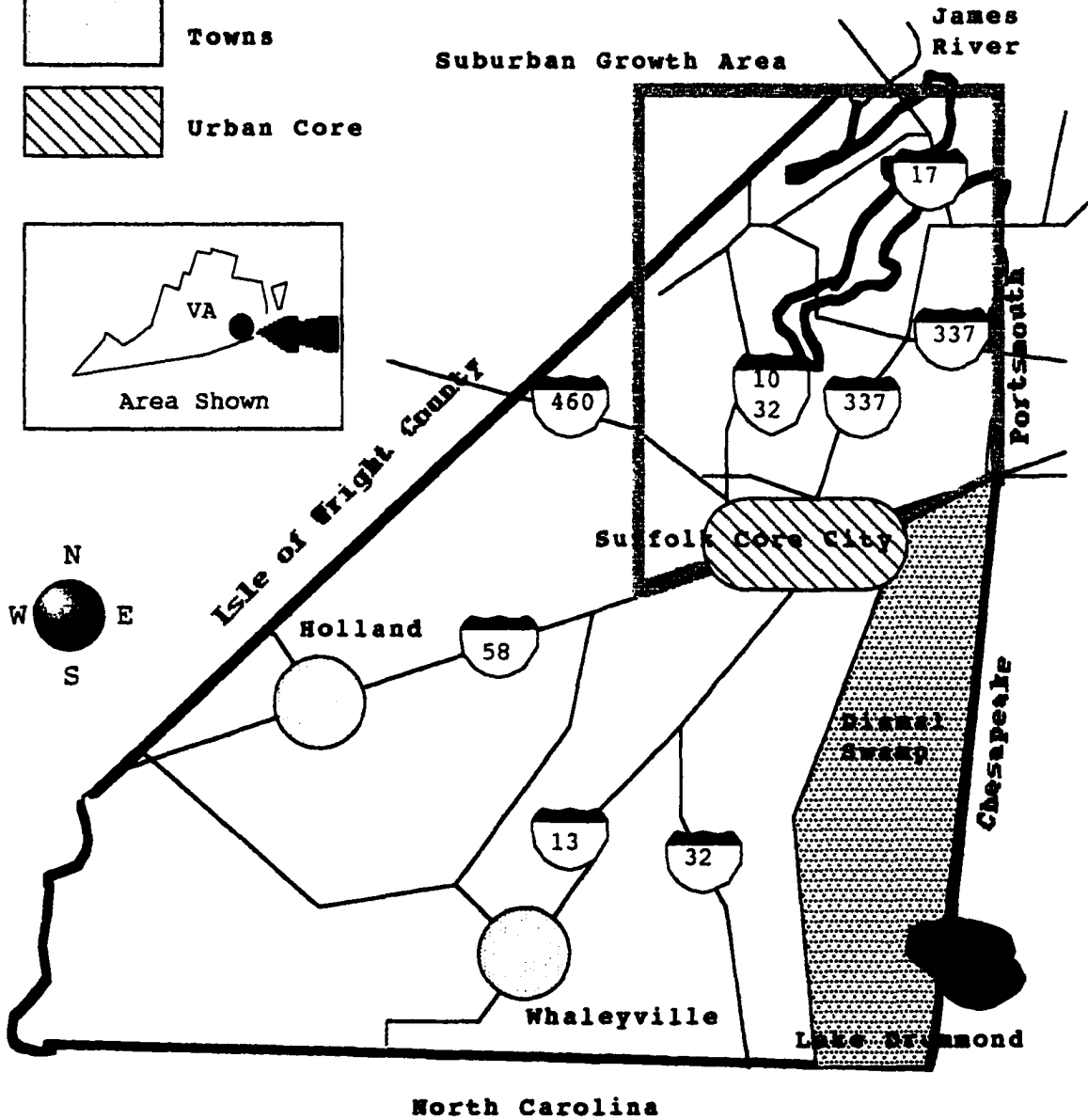
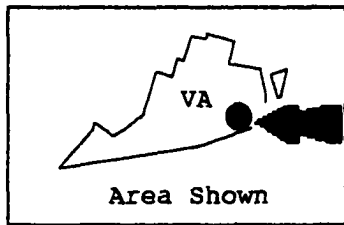
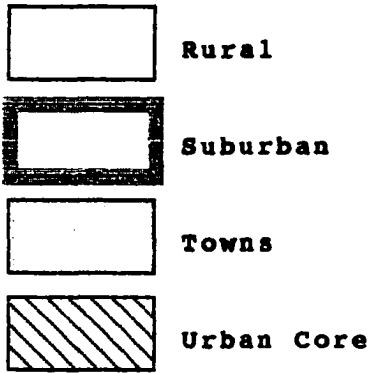
sound, many school systems do not have the resources or time to develop their own data based identification system.

The proposed student population to be studied comes from the the City of Suffolk located in the southeastern portion of Virginia often called Tidewater, Virginia. Suffolk's unique development provides the researcher with a student population coming from four distinct and identifiable residential environments-- rural, suburban, town and urban core. Suffolk began to develop in the 1700's along the Nansemond River as a center for commerce and shipping. In 1742, the colonial General Assembly officially recognized Suffolk as a town. The surrounding area of Nansemond County was formed in 1637 as Upper Norfolk County, renaming itself Nansemond County in 1642. In 1910, Suffolk was incorporated as a city. Suffolk City, Nansemond County, and the incorporated towns of Holland and Whaleyville merged into a single city in 1974 (Suffolk Department of Community Development, [SDCD], 1990). Suffolk City consists of 430 square miles, making it the largest city in land area in Virginia and the 11th largest in the United States (Landmark Communications, Inc., 1997b). In 1995, Suffolk's population exceeded 55,000 with a white population of 53% and an African-American population of 46%.

As reported in the 1995 census, the education level of head of households with less than a high school degree was 25%; 45% were high school graduates; 17% completed some college; and 14% had a college degree or more (Landmark Communications, Inc., 1997a). Suffolk is bordered by Isle of Wight County to the west, the James River to the north, the Cities of Chesapeake and Portsmouth to the east, and North

Map I

Suffolk City Residential Environments



Note. Based on Map From 2005 General Plan, Department of Community Development (1989), Suffolk, VA. See area maps on pages 165-169.

Carolina to the south (Suffolk Office of Community Planning and Development, [SOCP], 1995).

Suffolk, while becoming increasingly urban, has four distinct residential environments: urban central core, suburban, small towns and rural. The central core city is composed of the original city of Suffolk and the surrounding high and medium density populated areas. The two subject unincorporated towns of Holland and Whaleyville, are located in the southwestern and southern sectors of the city. Despite consolidation politically, the two small towns have maintained a unique sense of independence. A rapidly expanding suburban growth area is located in the northern end of the city and on the fringe of the core inner city. The remaining land area is rural, including farms, The Dismal Swamp, sparsely populated areas, woodlands, and wetlands.

RELEVANCE TO URBAN EDUCATION

Contained within the Suffolk's school system are 11,000 students coming from a core central city, rural areas, small towns, and growing suburban areas. Students coming from each type of residential environment can be identified with the assistance of the city school system and the city planning department using zoning district maps and individual lot's zoning classifications. This study will examine the characteristics of student dropouts in order to determine if there are subtle differences between dropouts from diverse residential environments. Research indicates that students coming from urban and rural areas have more drop out risk factors and higher drop out rates than students coming from suburban environments, but little research has been done to see how these populations emerge in a single

city with diverse residential environments (Peng & Lee, 1992; McMillian, Kaufman, Husken, & Bradley, 1992).

Suffolk is part of the Norfolk/Virginia Beach/Newport News Metropolitan Statistical Area. Yet standing alone, Suffolk can be considered urban by applying the following criteria as profiled by Phillips & LeGates (1981):

- 1) Suffolk is an incorporated municipality with over 2,500 people with a core city population density exceeding 1,000 residents per square mile (US Census Bureau, 1995);
- 2) Suffolk contains urbanized areas with a total city population of over 50,000 people (Landmark Communications, Inc., 1997a);
- 3) Suffolk is an integrated labor market retaining 52.6% of its work force and drawing commuters from other areas (SOCP, 1995). Only 3 percent of the work force is employed in farming, forestry, or fishing (Greater Hampton Roads, 1997);
- 4) Suffolk's core city contains high and medium density residential areas, transportation hubs, and high intensity commercial and industrial areas resulting in a "highly urbanized downtown area" (SDCD, 1990, p. 63).

The City of Suffolk faces many of the same problems that plague other urban centers. Suffolk experiences extensive substandard housing, a concentration of minorities and low income households in a core central city, an unemployment rate exceeding 8% in the core city, and a substantial number of families in public housing units and/or receiving vouchers and certificates under federal Section 8 Rental Assistance program (SOCP, 1995). Suffolk's violent crime rate is only

slightly lower than other major urban cities in the area (Hall, 1998). The school system has a high student grade failure rate of 10% as compared to the Virginia average failure rate of 5% (Glass, 1996). Suffolk's high schools' dropout rates of 4% and 9% are below and above the state average of 5%, and are representative of the Tidewater area's urban, suburban, and rural school systems' dropout rates (The Virginia-Pilot, 1997b and Virginia Department of Education, 1997).

RESEARCH QUESTIONS AND HYPOTHESIS

Question 1

Are there consistent early warning signs common among dropout students from different residential environments?

Hypothesis 1

Through statistical analysis the researcher will examine potential early warning signs common to school dropouts. The study also will examine the predictor variables' impact on dropouts from different residential environments. The results of this examination may allow school personnel to identify students at-risk and provide intervention programs at the earliest possible time in the students' school careers to prevent dropping out. In addition to research identified predictors, the researcher will include competency testing results, and case study generated predictor variables to examine their impact on students' decisions to drop out or to stay in school. The study will attempt to determine predictor variable useful at the earliest grades.

Question 2

What site-based early identification process and policy can be developed to reasonably identify potential dropout students for intervention programs and help shape policy decisions?

Hypothesis 2

Using the statistical results from question 1, process can be developed with values and cutoff points that can reasonably predict potential dropouts based on information collected from school records, teachers, school nurses, guidance counselors, administrators, and dropouts or knowledgeable adult family members. With a school level identification system, such information becomes more manageable, personal, timely, and reliable.

Question 3

How can a site-based early intervention team use these results to identify and evaluate the severity of dropout risk, as well as prescribe the appropriate type of dropout alternative education program?

Hypothesis 3

Using significant events to trigger the site-based process, the identification and intervention process becomes more timely and responsive by using the most current information gathered from school records and personnel. An early intervention team can use this knowledge to provide the appropriate type, goals, and duration of the dropout prevention alternative education program.

METHODOLOGY

Research Design

This study has a number of components. The first is a series of case studies where the researcher examines the subjects' school records and interviews school staff members to identify potential

predictor variables recorded. This to validate predictor variables as identified in the literature and to determine if there are additional predictor variables unique to the subject population. The second component is causal-comparative and the statistical procedures to be used are multiple regression and discriminant analysis. Once the significant predictor variables through multiple regression are identified, discriminate analysis will be used to classify subjects into one of two distinct groups, in this case dropouts and non-dropouts. The criterion variable is membership in one group or the other. The predictor variables are established factors associated with dropping out of school, the new variable of competency testing, and additional variables which are established through a review of student records and multiple regression as being significant. Discriminate function equations are to be produced allowing the subject to be placed in one group or the other (Ary, Jacobs, & Razavieh. 1990).

In this causal-comparative component the predictor variables already exist (ex post facto) and can not be manipulated. The researcher is examining the sequence of events which precede dropping out of school. Multiple discriminate function analysis will be conducted to determine if a common predictor equation or different equations are applicable to students at different grades during their school years, or if students coming from different residential environments require different prediction equations. The initial task of the research is to determine which dropout predictor variables are related to the criterion variables of dropping out or staying in school, and to determine the predictor variables' relative strength of

contribution to the criterion variable. The data will come from individual students' cumulative records including discipline and special education testing files. Face-to-face interviews with school personnel will provide up-to-date information, and in-depth, less tangible data. Additional data will be obtained through structured interviews with a sample of dropout students themselves or knowledgeable adult family members. The data will then be used to support and develop a site-based dropout identification and prescription process and policy for alternative education programs.

The third component of the study is descriptive in which the researcher will collect and analyze data, and then prepare to help shape policy. The researcher will examine what factors or circumstances precede the students' decisions to drop out, thus establishing a group of triggering events which would start the identification and prescription process. A structured survey will be used to collect and report dropout students' and adult family members' responses to questions.

Subjects

For the purpose of this study, dropouts shall be identified by using the Virginia Department of Education's definition as a "pupil withdrawn for other reasons and not entering another school" (Virginia Department of Education, [VDOE], 1991, p. 1). Using this definition, approximately 200 9th-12th grade students of the Suffolk Public Schools were identified by their schools as school dropouts for Virginia state reports in 1996-97. For report purposes these students were coded as W8's. To determine if additional unreported students had

dropped out or were W8's in grades 6th-8th, the researcher will request the Suffolk's middle schools to supply the names of dropouts in 6th - 8th grade. The school system's and schools' data bases will be examined to eliminate students who were misidentified as dropouts, had entered other schools or institutions, or who had returned to another Suffolk school. Student records will be investigated and school personnel will be interviewed to further identify actual school dropouts.

Sampling Procedures

Subjects will be quota sampled. After eliminating students who were misidentified as dropouts, 100 accessible dropout subjects will be selected on a quota basis to include students in proportion to the overall number of dropout students from the four residential environments and genders. Also, 25 of the dropout subjects will be selected on a quota basis to be surveyed. Quota sampling will be used to insure that typical cases from the diverse residential environments will be represented (Ary, Jacobs, & Razavieh. 1990).

Instrumentation

A uniform data collection procedure will be developed by the researcher, drawing from other school systems' alternative education identification forms and reviewing the literature and sample forms from the National Dropout Center. The form will be refined through the input of administrators and teachers involved in the Suffolk school system's at-risk programs. A five question interview questionnaire will be developed to examine students' responses to dropping out, as well as the impact of the Literacy Passport Tests on their decision to

leave school.

Predictor Variables

The predictor variables shall include, but not be limited to, attendance, school transfers, grades, standardized test results, state mandated testing, retentions, suspensions, and the state-mandated competency results. Several of the predictor variables are in fact proxy factors with a variety of components. For example, frequent school transfers have been found to be a significant predictor variable and may serve as a proxy factor indicating family instability, frequent occupational or residential changes, divorce, or other disruptive family factors.

Criterion Variable

The criterion variable is dropping out of school or staying in and/or graduating. Substantial effort must be taken to insure that subjects are in fact dropouts and not incorrectly identified.

Data Analysis

After the data have been tallied, analysis through multiple regression will be used to determine each variables' relative level of impact or significance on the criterion variable. Eliminating the less significant predictor variables, discriminate function analysis will be used to determine the predictor equations that can enable classification of students as potential dropouts, stay-ins, or graduates.

POLICY IMPLICATIONS

The goal of the researcher is not only to collect and analyze data but also to raise consciousness and provide a basis for a change

in policy, procedures, and program implementation (Creswell. 1994). The researcher expects to participate in shaping school board policy in the system's initiative to provide effective alternative dropout prevention programs.

PROTECTION OF HUMAN SUBJECTS

The research data collected involving student records, observations by school personnel, and interviews with students or knowledgeable adult family members shall be retained in a confidential and secure manner. Tabulated data will have direct and indirect identifying information removed so that the subjects will not be placed at risk during the research process or in the reporting of results.

DEFINITION OF TERMS

Terms relevant to this research are defined below:

1. Alternative Education-- Any program or school that provides alternative learning experiences, subject matter, and/or teaching methodology that is not generally offered to students of the same age or grade level in traditional school setting (Young, 1990).
2. Criterion Variable-- The dependent variable or factor that determines the subject classification.
3. Diverse School System-- A school system which contains four distinct and identifiable residential environments-- rural, town, suburban, and urban core.
4. Dropout-- "Pupil withdrawn for other reasons and not entering another school" (VDOE, 1991, p. 1).
5. Dropout Rate-- The proportion of students leaving high school in a single year without completing a high school program. This is

expressed as the "event" drop out rate (McMillen, 1997).

6. Non-dropout-- High School graduate or a student still enrolled in school (stay-ins).
7. Predictor Variable- Characteristics or factors that can be utilized to predict potential school dropouts.
8. Site-based-- A shared governance structure where school level professionals and staff members are empowered to make decisions. In this case, decisions concerning a student's eligibility and placement in alternative education programs.
9. Triggering Events-- Factors or circumstances preceding a students' decision to drop out which would alert the school staff to a potential school dropout and would start the identification and prescription process.
10. Urban-- An incorporated municipality with over 2,500 people with a core city population density exceeding 1,000 residents per square mile (US Census Bureau, 1995);

LIMITATIONS OF THE STUDY

1. By design the researcher eliminated variables that previous studies had considered significant such as mother's educational level, parent's occupation, number of siblings, parent and sibling school dropouts, income and single parent homes. Excluding some variables was done to limit information to that available, measurable, and performance based, but not subject to misinformation.
2. Privacy laws restrict access to information including eligibility for free or reduced meals, and involvement with the

- courts or law enforcement.
3. In a trial run through several records it became apparent that interviews with school personnel were imperative. The researcher found that if a child entered a school system in the elementary grades and continued his career without withdrawal, reentry, or interruption, the initial registration information is not up-dated. Significant changes can occur over a period of years in parent's occupation, family structure, number of siblings, or even with whom the student resides.
 4. Significant information is not recorded such as the parents' educational level or income. Reliance on interviews to obtain accurate information in these areas is awkward and tenuous.
 5. Discipline records and special education testing results may have been separated from the student's general cumulative records and not forwarded to the next school. Discipline records are limited to the years recorded by the system's central office during the years 1992-1997.
 6. Record transfers between schools and school systems are not always complete or fully recorded. Different school systems do not test, grade, or record the same information, or in the same way.
 7. Essential information such as pregnancy, marriage, family dropouts, involvement with the law or courts, and hours of employment prior to leaving school are not recorded in student records.

8. Additional research is necessary to determine if students identified and reported by schools are in fact dropouts. Students may have withdrawn and entered another educational situation such as a private school which may not require record transfers, a home-school situation, or another school system where the request for records has been delayed or misdirected. In some cases it was a matter of incomplete record keeping.

While the selected school system has diverse residential environments, ethnicity is limited to primarily white or African-American students. Further, a significant number of students attend private schools, or are home-schooled. The sample of students may be unique to Suffolk and the conclusions derived may not be easily generalized to other school systems' student populations.

CHAPTER II

REVIEW OF RELATED LITERATURE

The purpose of this chapter is to provide a review of the literature relevant to this study. A second task is to present the theoretical framework for this study based on previous research. The review will address the statistical profile of dropouts based on the results of previous studies, the significant predictor variables, the interdependence of variables, process for identification of potential dropouts, and success rates of selected identification process.

Dropout Predictor Variables

Researchers have identified many factors associated with a student dropping out of high school prior to graduation. These factors are generally categorized as school-related factors, socioeconomic factors, academic performance or school-success factors, family factors, discipline factors, individual factors, and personal factors. The problem is to specify which factors can be selected to provide the most promising means to successfully identify potential dropouts. A secondary problem is to isolate which factors are associated with dropping out. Most factors do not stand alone, but are interrelated. One can not identify dropout factors as causes, but merely symptoms of a predisposition to abandon efforts to succeed in school (Vaughan, 1991). Tables 1 and 2 list some factors cited in the literature as significant in identifying potential school dropouts. The researcher's task is to reduce this list to a manageable and quantifiable number of variables.

Table 1

Potential Dropout Factors

<u>School-Related Factors</u>	<u>Socioeconomic Factors</u>
Over-aged	Residential Environment
Mental Ability Level	Free/Reduced Meals (SES)
Attendance	Income Level
Alternative Education	Ethnic Background
Special Education	Educational Level Of Parent(s)
Retentions	Occupational Level Of Parent(s)
School Transfers	Parent(s) Employment Status
Extracurricular Participation	<u>Family Factors</u>
	Parental Influence/Monitoring
<u>Academic Performance /School Success</u>	Home Language (ESL)
Grade Point Average (GPA)	Family Intactness/Single Parent
Grades (D's, F's, Us, Ns)	Abuse/Dysfunctional Family
Achievement Scores	Siblings Dropping Out
Composite Score	Family Problems/Responsibilities
Reading Scores	Foster Child
English Scores	<u>Discipline Problems</u>
Math Scores	Discipline Referrals
Social Studies	Suspensions Expulsions
Gateway/Passport Tests	Court/Law Evolvment
	Drug/Alcohol use

Note. From: Alpert, Geoffrey, & Dunham, Rodger, (1986); Deschamps, (1992); Franklin, (1992); Frase, (1989); Kortering, Haring, & Klockars, (1992); Morris, Ehren, & Lenz, (1991); Peng & Lee, (1992); Vaughan, (1991); and Weber, (1988).

Table 2

Additional Potential Dropout Factors

<u>Individual Factors</u>	<u>Personal Factors</u>
Sex and gender	Attitude towards school/teachers
Pregnancy/teen parent	Adjustment problems
Peer group pressure	Problems with school's staff
Health issues/ medication	Self-esteem
Marriage	Emotional handicap
Physical handicap	Interest in school
Learning styles	Reaction to school control
Out of school activities	Acceptance by peers
School associated work- DE, Co-op	Perceived relevance of school
Non-school related work number of hours worked	Family attitude towards education

Note: From: Alpert, Geoffrey, & Dunham, Rodger, (1986); Deschamps, (1992); Franklin, (1992); Frase, (1989); Kortering, Haring & Klockars, (1992); Morris, Ehren, & Lenz, (1992); Peng & Lee, (1992); Vaughan, (1991); and Weber, (1988).

Statistical Profile of Dropouts

National studies estimated that slightly less than 30% of students in the U.S. entering high school drop out of school without earning a high school diploma (Weber, 1988). Male and female drop out rates are comparable, with male students making up 54.6% of all dropouts (Descamps, 1992; McMillen, 1997). Ethnicity remains a drop out factor, but improvement in the black students' high school

completion rate has decreased the drop out rate gap between black and white students to 4.5% for white students and 6.4% for black students. Hispanic students are more likely to dropout than either black or white students. The Hispanic dropout rate is almost double that of black students at 12.4% (McMillen, 1997). Students with Limited English Proficiency (LEP) drop out at a rate of 21% (Weber, 1988). Students from homes where little or no English is spoken (ESL) dropped out at a higher rate than students from English-speaking households (McLaughlin, 1992). Hispanic students with limited English speaking ability or in English as a Second Language instruction programs dropped out at a rate of 72% (McMillen, 1997). Students from low income families are more likely to drop out than students from middle and high income families (McMillen, 1997; Weber, 1988). Romanik & Blazer (1990) found that dropouts participated in the free and reduced meal program at a rate nearly twice as high as regular students and at-risk students. Students coming from low income families and with parents with less than a high school education are more likely than other students to drop out of school (Peng & Lee, 1992; Romanik & Blazer, 1990; Tomlinson, Frase, Fork, & Gonzalez, 1993). Students who are retained and fall behind their age-peers in school are more likely to drop out (McMillen, 1997). As the grade-level age gap widens, the higher the probability of the student dropping out (Wilkinson & Frazer, 1990). Being retained, failed, or held back separates students from their age-peer groups. While some educators attempt to minimize the effects, a student is still stigmatized as a failure, slow, or somewhat different from those who move on to the next grade.

Vaughan (1991) found retentions to have the strongest correlation to dropping out. Students who are retained drop out at twice the rate of students who have never been retained (McMillen, 1997). Students who have been retained two or more years are nearly four times more likely to drop out than students who have never been retained (McMillen, 1997; Bachman et al. 1972). Males are more likely to be retained than females, and black students are more likely to be retained than white or Hispanic students; however, female students who are retained are more likely to drop out than male students who have been retained (McMillen, 1997). Being retained seems to have more impact on females than males, and females tend to leave school earlier than male dropouts (Fine & Zane, 1991). Retention in the early elementary grades seems to have less impact on students than retention in the middle and high school grades. Students who are retained in kindergarten through third grades are less likely to drop out than students who are retained in the middle and secondary grades (McMillen, 1997). Dropouts demonstrate a higher level of absenteeism than at-risk or regular students (Romanik & Blazer, 1990; Frase, 1988). Romanik and Blazer (1990) and Vaughan (1991) found that the average dropout was absent approximately 28 days per year. Vaughan (1991) found excessive absences to be a more significant dropout predictor in schools serving a higher proportion of urban students. Students coming from urban and rural areas are more likely to drop out than students from suburban areas (Peng & Lee, 1992; Tomlinson et al. 1993).

Contrary to the general perception that discipline problems are a sure sign of dropping out, school dropouts were suspended slightly

less than at risk-students at a rate of 3.2 suspensions for dropouts and 3.6 for at-risk students who do not drop out (Romanik & Blazer, 1990). Another misconception concerns "latch-key" students. Romanik and Blazer (1990) found that being home alone without adult supervision or a "latch key" child showed little significant difference between dropouts, at-risk, and regular students.

Students with mental, physical, and/or emotional disabilities tend to dropout at only a slightly higher rate of 14.6% than students without disabilities at a rate of 11.8%. Within this group, disabled students with mental illness and mental retardation are the most likely to drop out (McMillen, 1997).

While students coming from "broken homes" with one parent absent appear to have a higher dropout risk factor (Romanik & Blazer, 1990), the impact of single parent homes on students is diminished when other associated factors such as single incomes, more limited resources, and time with children are considered (Peng & Lee, 1992). Single female parent homes as a group are not uniform. They may be headed by never-married, teen-aged, low income mothers, to well-educated, older, financially secure professionals. In the case of single mothers, child rearing is "related to her temperament, how she's been raised, the support she receives from the larger community, and the role of her own mother or adult in her life" (Arney, 1996, p. J2). An additional family factor does have an impact on dropping out. Students with siblings who dropped out have a higher drop out risk factor than students with siblings who have not dropped out (Peng & Lee, 1992; Romanik & Blazer, 1990; Tomlinson et al. 1993).

Standardized test scores are some of the strongest dropout predictors. The higher the reading, math, and study skills scores, the less likely the potential for dropping out of school (Wilkinson & Frazer, 1990). Wittenberg (1988) states that low academic achievement characterized potential dropouts and is the most common characteristic. Additional research showed that dropouts were not the weakest students academically. Standardized reading percentile scores of dropouts at the 35th percentile average fell between the regular students' average scores at the 48th percentile and the at-risk students' average scores at the 21st percentile. Math percentile scores show the same alignment with the 65th percentile average for regular students, 32nd percentile for at-risk, and 38th percentile for dropouts (Romanik & Blazer, 1990).

Students' feelings of being unsafe at school may lead to their dropping out of school, and economically disadvantaged students are more likely to be exposed to unsafe schools (Bekuis, 1995). Drug and alcohol abuse may be reflected in school failure, truancy, lack of commitment to education, and early dropping out (Jessor & Jessor, 1978).

Joan Gaustad (1991) writes that most dropout studies point to socioeconomic status, location, school behavior, and academic achievement as the most cited factors associated with dropping out. Dropping out is rarely the result of one factor, but an individual decision based on the interaction of a number of factors which accumulate over a period of time. Weber (1988) and Frase (1988) found that students coming from low socioeconomic, urban, single parent homes, and non-English speaking families were at a greater risk of

dropping out of school. Students in trouble with the law or with school authorities were also at a higher risk of dropping out of school. Peng & Lee (1992) state that demographic characteristics such as low family income, low parental education, single parent homes, low academic achievement, limited English proficiency, racial minority, and residence in an urban environment were highly significant risk factors in a student dropping out. Peng & Lee (1992) state that with multiple risk factors the chances for dropping out increase and that students with two or more risk factors have reached the significant level of predisposition toward dropping out. Deschamps (1992) in a meta-analysis of 32 empirical dropout studies reports that the most common stated characteristics are "ethnicity, low socioeconomic status, coming from a single parent family, a high rate of absenteeism, involvement in discipline incidents, grade retention, low academic performance and poor achievement test scores" (p.139). Franklin (1992) in a study of middle class dropouts found that they were typically chronic drug users, had involvement with the law, showed school misbehavior, and had academic and family problems.

Dropouts report that they had to work while attending school to support their families at a higher rate (30.2%) than at-risk (10.9%), or regular students (8.5%). It is suggested that students who work evenings rest less, eat less healthy meals, are too tired in school to pay attention or do homework, and find earning and spending money more rewarding and exciting than attending school (Steinberg, Brown & Dornbusch, 1996). D'Amico (1984) found that 20 hours per week was the critical point. Working fewer than 20 hours was beneficial,

and working more than 20 hours increased the risk of dropping out.

Romanik and Blazer (1990) found grades to be significant dropout predictors. In their research the highest dropout prediction accuracy or correct "hit" rate of 84.6% was based on grade point average followed by excessive absences at 59.6%, suspensions at 55.1% and the lowest reading stanine at 42.3%. Romanik & Blazer (1990) found D and F grades more useful than grade point average (GPA). They suggest that a grade point average can mask considerable F's and D's with A's and B's. Their rationale was that GPA is a cumulative figure; grades over the last grading period or semester present a more accurate picture of current disengagement or failure (Romanik & Blazer, 1990).

Dropouts may find school less than pleasurable, and feel left out, unconnected, uncomfortable, and simply leave. Dropouts are less likely to engage in extra-curricular activities, are more likely to displease teachers and administrators through poor behavior, grades, and work habits, and suffer discrimination by peers based on social status (Cusick, 1993). A student's lack of extracurricular participation may be a potential dropout prediction factor. Descamps (1992) reports that in reviewing seven dropout studies, while student extracurricular participation was low for both dropouts and graduates, extracurricular participation does have a significant impact on dropping out. Table 3 Summary Table of Significant Dropout Predictor Factors illustrates that drop out risk factors identified by researchers tend to cluster around academic and standardized test performance, single parent families, poor attendance, discipline problems, multiple school transfers and school grade retentions.

Table 3

Summary Table of Significant Dropout Predictor Factors

	Studies													
	Ping (1992)	Franklin (1992)	Kortering (1992)	Deschamps (1992)	Vaughan (1991)	Morris (1991)	Frase (1988)	Albert (1996)	Wagner (1991)	Rumberger (1990)	Baca (1989)	Barrington (1989)	Cairns (1989)	Fernandez (1989)
Ethnicity														
Single Parent														
Family/Intact	•	•	•	•		•	•	•			•			
Socioeconomic														
status/Income	•			•					•				•	•
Home														
Environment	•													
Pregnancy														
Absenteeism/														
Tardiness				•	•	•	•	•	•	•	•			
Discipline														
Problems		•	•	•			•	•	•	•	•		•	
School Transfers					•	•		•						
Grade Retention														
Academic				•	•	•	•		•	•	•		•	•
Performance									•	•	•	•	•	•
Achievement														
Test Scores									•		•	•		•
Law Or Court														
Involvement		•					•							
Parent Ed./														
Occupation	•				•									

• = Significant

Note. Alpert & Dunham, (1986); Deschamps, (1992); Franklin, (1992); Frase, (1989); Kortering, Haring, & Klockars, (1992); Morris, Ehren, & Lenz, (1991); Peng & Lee, 1992); and Vaughan, (1991)

Additionally, some researchers found that pregnancy, home environment, ethnicity, socioeconomic status, involvement with the law or courts, and parents' educational or occupation levels were significant dropout risk factors. Yet a majority of dropouts are not identified as at-risk (Gaustad, 1991; Tomlinson et al., 1993). Many dropouts do not fit the traditional profile (Romanik & Blazer, 1990). Significant numbers of dropouts do not come from the population groups that are associated with high drop out risks factors (Tomlinson et al, 1993). When based on national dropout statistics, dropouts were 54.5% males, 91.5% non-disabled, 73.3% non-retained, 54.3% white, 49.3% southern, and 56.1% from middle income level families (McMillen, 1997). Tomlinson et al. (1993) found that sixty percent of dropouts had a C average or better. Researchers have demonstrated that ethnicity by itself is less significant than the interaction with other factors such as Limited English Proficiency (LEP) (Wilkinson & Frazer, 1990). Frase (1988) found that black and white students' dropout rates varied little when social backgrounds were considered. Fernandez and Shu (1988) state that only Hispanic students dropped out at a higher rate than white or blacks even when adjusting for family income, academic achievement, and the educational level of parents. This may be associated with LEP. There seems to be little difference in dropouts and high school graduates who do not go on to college (Callison, 1994). Peng & Lee (1992) write that students with similar economic conditions and levels of parental education are neither more or less likely to drop out regardless of minority or majority group.

Dropouts do not conform to a single category. Some are removed

from school as undesirable students through suspension or expulsions, called "pushouts." "Disaffiliated" students no longer want to be associated with school. "Educational mortalities" simply do not complete their program or course of study. "Capable dropouts" are students who because of family or personal circumstances can not keep up with the demands of school. "Stopouts" are students who dropout and then return to school (Weber, 1988). As many as 7% of dropouts aged 18 through 24 do earn their high school credentials by passing the General Education (GED) Test (McMillen, 1997).

The collected national statistics on 1995 high school dropouts revealed that seventh grade marks the critical point in the beginning of the rise in the drop out rate. Hispanic students dropped out at the highest rate surpassing both white and black students. Foreign born students drop out at a higher and more disproportionate rate than native born students, and early retentions have less of an impact on dropping out than retentions in the middle or upper grades. A significant percentage of students, 20.1%, dropout at the age of 15-16, and only 9.9% wait until the twelfth grade to dropout. Before entering the 7th grade, over 10% of dropout students have already left school (McMillen, 1997).

Table 4 is based on the national figures for the 1995 high school dropouts and illustrates how actual dropout statistics can differ from the common layperson's perceptions of which students drop out of school early.

COMPETENCY TESTING- A NEW VARIABLE

Competency testing is a new added requirement and hurdle for

Table 4

1995 Percentage Distribution of Dropouts By Major Characteristics

Gender	Male 54.6%	Female 45.4%			
Disability Status	Non-disabled 91.5%	Disabled 8.5%			
Place of Birth	Born in U.S. 74.2%	Foreign Born 25.8%			
Retention	Never 73.3%	One Grade 19.8%	Two Grades or more 4.1%		
Grade of Last Retention	K-3 19.9%	4-8 28.0%	9-12 30.1%		
Ethnicity	White 54.3%	Hispanic 26.6%	Black 17.1%		
High School Completion Rates	White 89.8%	Hispanic 62.8%	Black 84.5%		
Income Level	High 10.4%	Middle 56.1%	Low 33.5%		
Region	Midwest 18.2%	South 43.9%	West 28.1%	Northeast 9.9%	
Age Level	15-16 20.1%	17 18.8%	18 28.6%	19 17.6%	20-24 14.9%
Level of Schooling Attained	1st 1.6%	1st-4th 2.5%	5th-6th 6.1%	7th-8th 12.0%	
Without Graduating	9th 17.0%	10th 22.5%	11th 28.4%	12th 9.9%	

Note: From Dropout Rates in the United States: 1995, (Report No. NCES 97-473) by Marilyn McMillen (1997), Washington, DC: U.S. Department of Education, National Center for Education Statistics, pp. 6-48.

students attempting to graduate from high school. Joining other state legislatures, the Virginia General Assembly in 1988 mandated that before students can be considered ninth graders or receive a standard diploma they must pass all three areas of the Literacy Passport test, reading, writing, and mathematics. The reading test measures reading comprehension through multiple choice answers. The student is asked to choose the best word or words to fill in the blank left empty in the reading passage. The writing test requires a student to write a short essay on a selected topic. The essay is graded by a professional scoring contractor and evaluated on the skills of composing, style, sentence formation, word usage, and mechanics with composing and style weighted more heavily than other domains. Math skills are tested by multiple-choice problems which measure the student's knowledge of mathematics concepts, computation, and applications. Students begin taking the Literacy Passport test in the sixth grade and can continue taking the entire test or areas failed each year until they pass. After ninth grade, students are considered ungraded until they pass all three tests (Virginia Department of Education, [VDOE], 1996). According to the Virginia state results published in the 1996 spring report, a larger percentage of white students passed each test than black or Hispanic students. Females passed all three tests at a higher rate than males. Students with disabilities passed the tests at a substantially lower rate than students without disabilities. Students with limited English proficiency (LEP) passed all three tests at a 20% lower rate than English speaking students, with reading and writing test scores showing the greatest disparity (VDOE, 1996b).

Competency testing is seen by many as a means to foster excellence and restore public confidence in public schools. Others see the competency testing narrowing the school curriculum, encouraging teaching to tests, and having a negative impact on at-risk students, causing more school failures and dropouts. The reality is that competency testing is a permanent hurdle which all students must overcome to graduate (Corcoran, 1985), and there is no clear indication as to the impact on dropouts.

LITERACY PASSPORT PASS RATES

In comparing the school divisions' rankings on Literacy Passport pass rates in Table 5, with the dropout rates in Table 6 one would expect some level of congruency. There remains no clear relationship between Literacy Passport Tests' (LPT) pass rates and dropout rates except in the case of the most urban school system, Norfolk. Norfolk maintains the highest Literacy Passport failure rate and the highest dropout rates in the area. Conversely, Virginia Beach has the highest LPT pass rate and one of the highest dropout rates. Portsmouth with a low dropout rate has a high failure rate on the LPT tests (VDOE, 1997). The relationship between dropout rates and LPT failure rates appear not to be linear or given to easy explanation.

Bowers (1998) writes in "The Plight of Urban Schools", that Virginia's testing programs received an A in "Quality Counts '98: The Urban Challenge" a national report sponsored by Pew Charitable Trusts. The report highlights the negative effect of testing and higher standards on urban school systems. Students coming from urban schools "perform far worse, on average, than children who live outside central

cities on virtually every measure of academic performance. The longer they stay in school the wider the gap grows" (Bowers 1998 p. A4). In comparing urban schools to suburban or rural schools, urban schools generally are older, in need of repairs, and larger. Urban schools generally have less parental involvement, less experienced or qualified teachers, and lower expectations for students (Bowers, 1998). It must be noted that while Virginia received an A on Standards and Assessment other areas that have a significant impact on teaching and learning received no higher than a C+. Quality of teaching and equity funding for schools were each awarded a C. School climate rated a D. Adequacy and allocation funding for schools received a C+ and D+ respectively (Bowers, 1998).

Richard Trumble, Superintendent of Portsmouth Public Schools, echoes the concerns of urban educators, stating, "I think it is just incumbent on the public schools that serve children to not let the circumstances of birth or the places where you live become the determinant of what you might become in life" (Bowers, 1998, p.A4). Paul G. Valls, the Chicago School District's Chief Executive Officer states that "Yes, we want students taught to higher standards, and we're mandating a more back-to-basics curriculum, but along with the focus on accountability, we also realize that we need to provide our children with more academic support and resources than children elsewhere would otherwise need" (Olson & Gerald, 1998a).

Virginia has joined over 32 states in developing accountability programs with rewards and sanctions for schools based partially on test scores (Olson & Gerald, 1998b). There is concern that by

increased emphasis on competency testing, we may be shoving some students out the school house door, and adding to the dropout problem.

Table 5

Suffolk and Neighboring Cities' Literacy Passport 6th Grade Pass Rate
(Percentage of 6th grade students who passed all three Literacy Passport Tests.)

Pass Rate 95/96	Division	90/91	91/92	92/93	93/94	94/95	95/96
1	Virginia Beach	81	70	76	80	74	78
2	Newport News	71	59	69	70	67	71
3	Chesapeake	67	60	63	68	62	69
4	Hampton	70	61	65	63	56	59
5	Isle of Wight	69	65	61	70	65	58
5	Suffolk	46	47	58	57	49	58
6	Norfolk	60	50	52	53	44	53
6	Portsmouth	68	50	58	57	50	53
	Virginia State	72	63	69	70	66	70

Note: Based on 1997 Virginia Summary Report by Virginia Department of Education (1997), Richmond, VA.

AREA DROPOUT RATES

Dropout rates are commonly reported in three ways. The proportion of students leaving high school in a single year without completing a high school program are expressed as the "event" dropout rate. The "status" dropout rate reports dropouts as a proportion of

students within a specific age group. Status rates are generally higher than the event dropout rate. The status dropout rate is cumulative and considers all dropouts in the age peer group regardless of when they dropped out. The "cohort" rate measures what happens to a group of students over a period of time (McMillen, 1997). For the purpose of this study the event dropout rate will be used. This is the measure used in reporting dropouts to the State Department of Education. It must be noted that the results reported by the school divisions to the state include students in grades 7-12 while most high schools in the Tidewater area include only grades 8-12. This difference in reporting is revealed when comparing dropout rates for school divisions to that of individual high schools. Further, only students who are officially in seventh grade or in higher grades are reported at dropouts.

While the state dropout rate is 5%, Tidewater school divisions' dropout rates vary from 1-8%, and individual high schools' dropout rates vary from 1-16%. Suffolk's 1996 dropout rate as reported to the state for grades 7-12 was 4% with a dropout rate for Lakeland High School at 9% and Nansemond River High School at 4%. These statistics put one high school's rate at the high end of the continuum and the other slightly below the median. Table 6 demonstrates how rates can vary across and within divisions.

INTERDEPENDENCE OF VARIABLES

Weber (1988) found that many identification processes were overly simplified and resulted in large errors in correctly identifying the actual dropouts. A good example of how a "simple" predictor

variable can be complicated by many interrelated factors is pregnancy. Frase (1989) writes that female dropouts reported marriage and pregnancy as the second leading reason for dropping out following lack of interest. Research shows many underlying and interdependent significant factors. About 5% of teenagers give birth each year and

Table 6

Suffolk and Neighboring Cities' Dropout Rates 1991-1996

1996	Area Rank	Division/School	1991	1992	1993	1994	1995	1996
		Suffolk City Schools	6	6	6	5	3	4
9		Lakeland High	7	11	10	6	3	9
4		Nansemond River	9	6	6	7	2	4
		Isle of Wight Schools	4	4	3	1	0	1
1		Smithfield High	8	6	4	1	1	1
1		Windsor High	3	4	3	1	1	1
		Franklin City Schools	2	3	3	3	3	4
6		Franklin High	6	6	8	5	7	6
		Portsmouth City Schools	5	5	2	2	1	1
4		Woodrow Wilson	1	0	1	2	1	4
1		I. C. Norcom	1	0	2	2	1	1
1		Churchland High	4	3	1	1	1	1
		Chesapeake City Schools	3	3	3	4	4	3
7		Indian River	5	6	7	7	5	7
5		Great Bridge	5	4	6	7	5	5
4		Oscar F. Smith	11	9	7	8	10	4
4		Deep Creek High	3	4	5	5	5	4
2		Western Branch	2	2	4	4	2	2

Table 6 Continued

1996 Rank	Area Division/School	1991	1992	1993	1994	1995	1996
	Newport News Schools	5	5	4	5	5	4
7	Warwick High	19	19	16	11	7	7
6	H. L. Ferguson	3	4	4	9	4	6
4	Denbigh High	3	2	2	5	2	4
4	Menchville High	3	3	2	4	3	4
	Hampton City Schools	3	3	4	4	4	5
10	Hampton High	5	3	6	7	8	10
9	Phoebus High	8	9	8	7	6	9
5	Kecoughtan High	4	5	6	5	5	5
5	Bethel High	3	3	4	3	5	5
	Virginia Beach Schools	4	4	5	5	6	6
10	First Colonial	5	10	10	7	7	10
10	Salem High	7	7	7	9	12	10
9	Green Run High	4	10	11	10	8	9
9	Bayside High	5	5	8	5	8	9
7	Ocean Lakes					5	7
6	Frank W. Cox	4	5	5	6	7	6
6	Kempsville High	4	4	5	5	5	6
3	Princess Anne	4	4	6	3	3	3
3	Kellam High	6	6	5	4	4	3
3	Tallwood High			6	4	4	3
	Norfolk City Schools	6	6	7	8	8	8
13	Lake Taylor	7	7	14	13	13	16
12	Norview High	10	11	10	12	13	14
11	B. T. Washington	6	9	9	13	13	13
10	Granby High	10	12	15	14	14	10
8	Maurry High	10	9	9	11	10	8
	State Average	5	4	4	5	5	5
	Median = 6						Area Average = 5.36

Note: From "Web database project: Public School Performance" by The Virginia-Pilot, (1997b). (On-line) Available <http://data.pilotonlin.com/School/reption.cfm>; and 1997 Virginia Summary Report by Virginia Department of Education, (1997). Richmond, VA. (Dropout rate: Percent of students in grades 7-12 who dropout out of school)

96% of unmarried teenage mothers keep their children with them (Lachance, 1985). Young unwed mothers take on this demanding role before adult abilities and resources are attained, causing problems for themselves and their babies. Marital disruption and single parent homes can lead to less supervision, uncertain parental modeling, and greater permissiveness (Moore, Miller, Sugland, Morrison, Gleib & Blumenthal, 1997). More than one fifth of all school-leaving females, drop out because they are pregnant (Bempechat 1989). Females from lower socioeconomic status are more likely to become pregnant at a young age and drop out.

Researchers found that teenagers coming from a home with at least one biological parent absent have a greater chance of becoming pregnant than females from homes with both natural parents. Further, the mother's education level has an impact on pregnancy rates. Teenagers coming from homes where mothers are college graduates have a 10% less chance of becoming pregnant than do teenagers from homes with mothers who are high school graduates (Tomlinson et al. 1993). As the number of low-income peers decreases in a school, so does the probability of becoming pregnant (Evans, Oates, & Schwab, 1992). Females coming from low socioeconomic neighborhoods with limited aspirations may feel they have little to lose and engage in risky sexual behavior (Tomlinson et al. 1993). Males who act out are more likely to get attention, while silent females are neglected and simply disappear (Fine & Zane, 1991). **Figure 1: An Example of Interplay of Factors- Teenage Pregnancy illustrates how what seems to be a simple variable is affected by many underlying factors, such as socioeconomic**

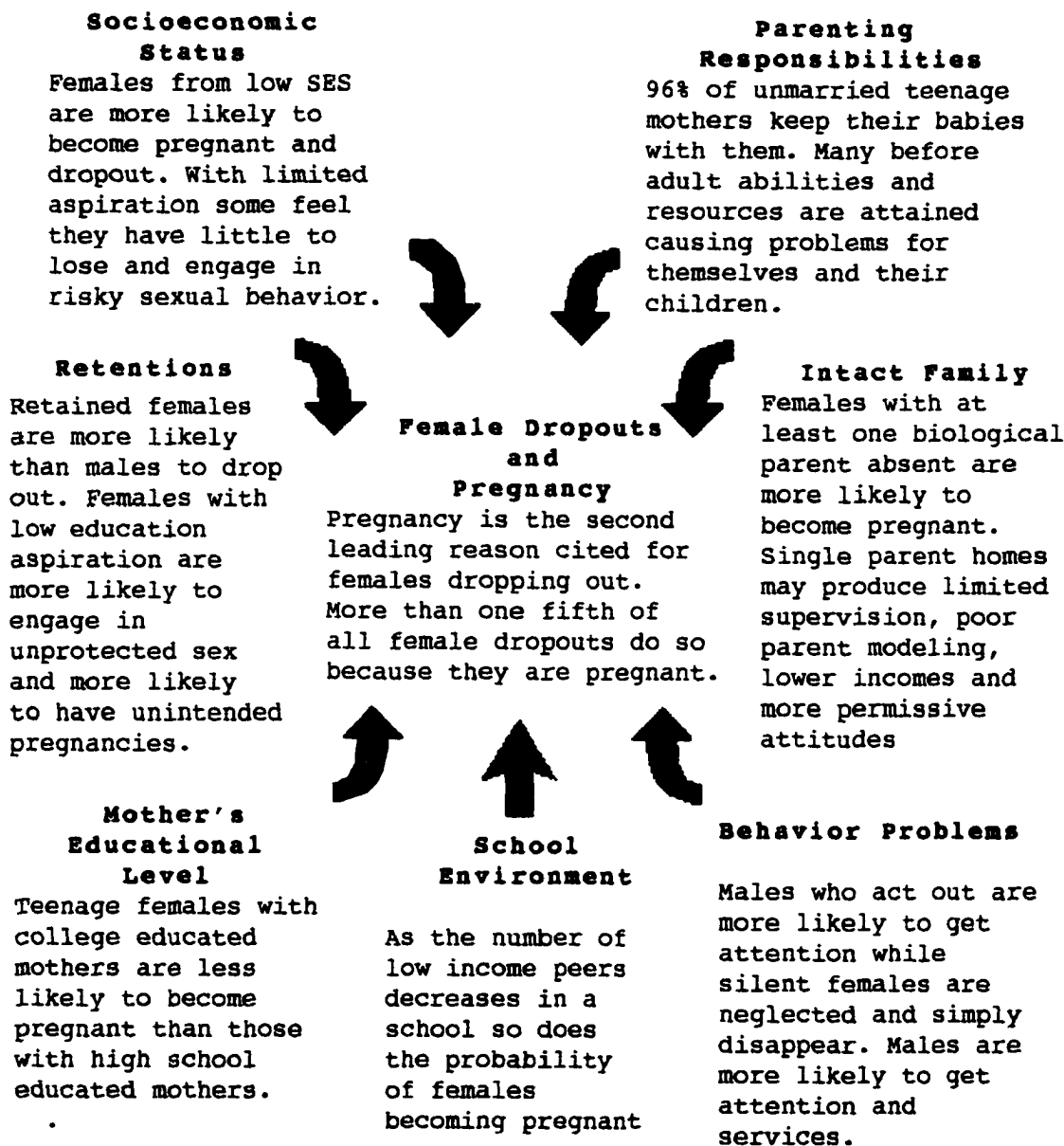


Figure 1. An Example of Interplay of Factors- Teenage Pregnancy
From Bempechat, 1989; Evans et al. 1992; Fine & Zane, 1991; Frase, 1989; Lachance, 1985; McMillen, 1997; Moore et al. 1997; Tomlinson et al. 1993.

class, family structure, the school environment, mother's education, retentions, gender differences, and intergenerational factors.

EARLY IDENTIFICATION

Butler (1989) writes that early intervention is the most cost-effective means to help disadvantaged students. As a CEO of a major company he reminds the reader that a product's quality is more costly to repair towards the end of a process than to build in quality from the start. By providing programs to help at-risk students early, the normal students are not robbed of valuable time and attention. Early intervention allows both at-risk "normal" students the opportunity to develop to their full potential (Butler, 1989). Barrington and Hendricks (1989) found that dropouts showed significant difference from stay-ins by the third grade in the areas of poor attendance, failing grades, and lower achievement test scores. Dweck and Leggett (1988) see early negative school experiences and feelings of inadequacies as having great impact upon later school experiences. Students' school adjustment problems may be identified in the elementary grades (Spivack, Marcus, & Swift, 1986). Finn (1989) found that by third grade future dropouts and stay-ins differed significantly in the areas of behavior, grades, retentions, and achievement scores. Wilcynski (1986) reported that academic performance, absenteeism, grade retention, and test scores of elementary students were significant predictors for future dropouts. Morris et al. (1991) were able to identify school dropouts in grades 4-8 with an accuracy rate of 73% to 88% by using such factors as absences, Ds & Fs in current grade, retentions, one or both natural parents in the home, standardized test scores in reading, language, and social studies, and the cumulative number of schools attended.

Table 7

Percentage of Correct Hits And Variables

Grade	% Dropouts	% Persisters	Predictor Variables
4	73	73	Absences, family structure, reading, social studies
5	88	84	Absences, Ds & Fs, schools, social studies, repeats
6	83	84	Absences, Ds & Fs, reading, schools, family structure, social studies
7	77	86	Ds & Fs, family structure, language, schools, social studies, repeats
8	75	83	Ds & Fs, family structure, reading, repeats, school

Note. From "Building a Model to Predict Which Fourth Through Eight Graders Will Drop Out in High School," by John D. Morris, Barbara J. Ehren, and B. Keith Lenz, (1991), Journal Of Experimental Education, 59, p. 290.

IDENTIFICATION PROCESSES SUCCESS RATES

In reviewing 100 dropout prevention programs, Weber (1988) found that many identification processes were overly simplified and resulted in large errors in correctly identifying the actual dropouts. He found that some identification processes used up to 43 variables and others used as few as four variables-- school achievement, attendance, reading or math performance, and emotional problems. Weber (1988) selected the

five best overall based on empirical results and practicality. In selecting the "best" Weber used the following criteria:

1. Specific identification variables;
2. Operation definitions;
3. Cutoff points;
4. Decision rule designating subjects as potential dropouts or completers using aggregate information.

Weber (1988) was looking for programs which could efficiently and practically identify potential dropouts before they left school. The critical first step of any successful program is the identification of the students chosen to participate in the dropout prevention program. If too many completers were misidentified as potential dropouts, then limited allocated resources would be overextended and less effective. Weber (1988) states that many programs use identifiers which are too subjective, loosely defined, and less than systematic.

An identification instrument's value rests in the ability to correctly identify potential dropouts. By reviewing the success rate of Weber's "best" procedures which met his criteria, one finds that the rate of correct "hit" or correct identification of future dropouts was less than 50/50. The Potential Dropout Profile, the Variables, and Decision Rule, and the Dropout Prediction Instrument correctly identified potential dropouts at rates of 48%, 34%, and 30% respectively (Weber, 1988).

The Texas State At-Risk Criteria identified almost half of all secondary school students as being at-risk. This was far too many students to effectively provide intervention programs. The correct

"hit" rate ranged from 57.8% to 65.7% over a three year period. Over 30% of dropouts were not identified as at-risk using the state criteria. Many potential dropouts simply slipped through the overly broad identification net (Frazer, 1991).

Wilkinson & Frazer (1990) used discriminate function and stepwise regression analysis to develop a statistical equation to predict potential dropouts. Using 70 predictor variables and running separate analysis by ethnic groups the researchers achieved accuracy rates of 100% for Indian students, 89.5% for Asian students, 67.5% for white students, 71% for black students, and 79.4% for Hispanic students. The over-all correct "hits" for dropouts was 71% and 87.9% for stay-ins. With the study using students from Austin, Texas, the researchers warn that the results should not be generalized to less urban systems with less ethnic diversity. Contrary to many other studies, Wilkinson & Frazer (1990) state that students' family and other background information is not essential in developing a successful prediction process.

Table 8 gives a comparative view of Weber's selected best procedures. Attendance, grades, discipline problems, and retention or over-age are the most cited predictor factors.

Gaustad (1991) writes that more research is needed on younger students and the data collection should start in the elementary grades providing a basis for early intervention. Morris et al. (1991) have taken that step with impressive results. Using a limited number of variables, the researchers developed dropout predictors' accuracy rates of 73% to 88%. Focusing on absences, retentions, Ds & Fs,

Table 8

Procedures Selected By Weber As The Five Best Procedures For Predicting Dropouts

	Variables and Decision Rule	Dropout Prediction Instrument	Potential Dropout Profile,	Dropout Prediction, Austin Discriminate Analysis	Identifying Potential Dropouts
Attendance	•	•	•		•
Age Related to Classmates			•	•	
Years Repeated		•		•	
Grade Point Average	•	•		•	
Grades (current D's and F's)	•		•		
Reading Level or Scores			•		•
In Alternative School Program		•			
Discipline, Suspensions	•		•	•	•
Number of Schools Attended			•		
Number of Parents at Home		•			
Education Level of Father					•
Income Level					•
Black vs. Other Ethnic Origins				•	
Sex				•	
Chronological Age					•
Weekly Hours Worked on Non-farm Job					•
Participation in extra-curricular activities					•

Note. Based on An Evaluation of Selected Procedures for Identifying Potential High School Dropouts by Weber, James M. (1988), Columbus, Ohio: National Center for Research in Vocational Education. (ERIC Document Reproduction Service No. ED 311 348), pp. 36-47.

standardized test scores, and school transfers, Morris et al. (1991) were able to achieve dropout prediction accuracy rates of 73% at fourth grade, 88% at fifth grade, 83% at sixth grade, 77% at seventh grade, and 75% at eighth grade. While the relative sample sizes were small, ranging from 48 to 201 students, and the researchers were limited by missing and diverse data collection procedures, the procedure presented was inexpensive and an efficient initial screening instrument. The researchers recommend that after the initial screening, professionals should make the final decision as to placement in dropout prevention programs (Morris et al. 1991).

Vaughan (1991) achieved a dropout prediction accuracy rate of 93%. Using regressive analysis to eliminate the least predictive variable, Vaughan achieved the 93% accuracy rate by using only absences, retentions, school transfers, and mother's educational level. By adding achievement test scores the accuracy rate was improved to 95%. Vaughan (1991) suggests that the identification process occur at the building level, and that school systems should adopt policies designed to provide early identification and intervention programs.

Table 9: Identification Instruments' Success Rates summarizes the predictor variables and success rates for selected identification procedures. The results demonstrated that an efficient identification process can be developed by using a relatively limited number of predictor variables. Coupled with a site-based team of professionals who have first hand knowledge of students, early and accurate identification of potential school dropouts appears to be possible. Using the criteria used by Weber (1988) to select the best procedures

Table 9

Identification Instruments' Success Rates

	Dropout Prediction Instrument	Variables and Decision Rule	Potential Dropout Profile	Texas State At-Risk Criteria	Wilkinson & Frazer Discriminate Analysis	Morris et al. 5th Grade Predictor	Vaughan's Dropout Predictor
Success Rate	30%	34%	48%	58%	71%	88%	93%
Gender	•				•		
Ethnicity	•				•		
ESL/LEP			•		•		
Attendance		•	•			•	•
Retentions/ Over-aged	•		•	•	•	•	•
GPA	•	•					
DS & Fs		•	•	•		•	
Special/Ed. Exceptionality			•		•		
Standardized test scores			•	•	•	•	
Discipline Problems Suspensions	•	•	•		•		
School Transfers			•			•	•
Family Income					•		
Mother's education							•
Failed One or more "Passport" test				•			
Chapter I/ Migrant programs					•		
New to District					•		

Note: From Frazer (1991); Morris et al. (1991); Romanik & Blazer (1990); Vaughan (1991); Weber (1988); Wilkinson & Frazer (1990)

of specific identification variables, operation definitions, cutoff points, and decision rules based on aggregate information, a research supported and practical policy can be developed for placement in alternative education programs.

STUDENTS' REASONS FOR DROPPING OUT

Students' top ten reasons for dropping out as reported by Romanik & Blazer (1990) are similar for males and females, with the exception

Table 10

Top Ten Reasons For Dropping Out

	Ranked By Response Percentage		
	Total	Male	Female
A. Lack of Interest	1	1	1
B. Family/Personal Problems	2	2	3
C. Failing Grades	3	4	4
D. Maternity/Paternity	4	10	2
E. Dissatisfaction With Principals or Teachers	5	3	5
F. Unhappy School Experience	6	5	7
G. Financial Needs	7	6	9
H. Working Took Too Much Time	8	7	10
I. Medical/Health Problems	9	8	8
J. Marriage	10	9	6

Note: Based on Reasons for Dropping Out of School and Assessment of Risk Factors: A Comparison of Dropouts, "At-Risk," and "Regular" Students by Dale Romanik and Christine A. Blazer, 1990, Miami, FL: Dade County Public Schools, Office of Educational Accountability (ERIC Document Reproduction Service No. ED 337 512) pp. 22-23.

of the factors based on biology and cultural expectations. The majority of reported reasons for dropping out cited for both females and males is no more than one or two ranking places apart. The most cited reason for dropping out was lack of interest, followed by family or personal problems, and failing grades for males, and pregnancy for females. The U.S. Department of Education (1990) reports similar results when asked which drop out reasons applied to them. "Did not like school" was reported as the most cited reason for dropping out of school by both males and females. The responses tend to focus on school and personal factors, such as getting along with others, difficulty with academics, pregnancy, and the need to work.

Self-reporting responses from dropouts must be viewed with some caution. Researchers suggest that retrospective answers may well be distorted by time, multiple answers, individual perceptions, or rationalizations for their actions (Tomlinson et. al, 1993: Romanik & Blazer, 1990).

With the multiple answers reported and the fact that percentages add up greater than 100%, one can see that many dropouts cite more than one reason as to why they dropped out of school. Factors such as lack of success, lack of relevance or connection between school and the student's real world, difficulty in getting along with adults and other students, the need to work, and pregnancy, appear to be common characteristics among most dropouts (Payne, September, 1997).

With the addition of state-mandated competency testing, students may face yet another barrier to graduation and another potential factor in the decision to drop out of school.

Table 11

Dropouts' Reasons For Dropping Out

Rank	By Response Percentage		
	Total	Male	Female
1. Did not like School	51.2	57.8	44.2
2. Was failing in school work	39.9	46.2	33.1
3. Could not get along with teachers	35.0	51.6	17.2
4. Could not keep up with school work	31.3	37.6	24.7
5. Was pregnant	31.0	—	31.0
6. Felt I didn't belong	23.2	31.5	14.4
7. Could not get along with students	20.1	18.3	21.9
8. Was suspended too often	16.1	19.2	12.7
9. Had to get a job	15.3	14.7	16.0
Found a job	15.3	18.6	11.8
10. Friends dropped out	14.1	16.8	11.3
Could not work and go to school at the same time	14.1	20.0	7.8

Note: "Based on Percentage of NELS:88 8th to 10th grade dropouts who reported various reasons for dropping out of school applied to them" 1990 by U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988, First Follow up Study (On Line). Available:<http://www.dropoutprevention.org/dropreas.htm>

DESCRIPTION OF THE STUDY SETTING

The City of Suffolk is the largest city in Virginia, in land area. Within the city's borders are four distinct residential environments-- rural, suburban, town, and urban. The original colonial town of Suffolk was established in the 1700's. The current city of 430

square miles was formed in 1974 with the consolidation of the "old" City of Suffolk, the rural City of Nansemond, and the incorporated towns of Holland and Whaleyville (Suffolk Office of Community Planning and Development, [SOCP], 1995). Suffolk is located between urban Portsmouth and suburban Chesapeake to the east, rural Isle of Wight to the west, and rural North Carolina to the south; it is connected to urban Newport News and Hampton to the north by the Monitor-Merrimack Bridge Tunnel. Suffolk has begun to grow at an approximate rate of 700 new homes per year (Franklin, 1997). School enrollment has increased to 11,000 students causing overcrowded schools, mobile classrooms housing 20% of the students, and the postponement of the plan to establish a daytime alternative school in a school now needed to house excess students (Bowers & Franklin, 1997).

The northern sector of the city has experienced the greatest growth in population and suburban residential development. While experiencing some growth, the southern and western portions of the city have remained extensively rural, and the towns of Holland and Whaleyville maintain their unique small town character and sense of independence. The central core city encompasses approximately 2.5 square miles and is highly urbanized (Suffolk Office Department of Community Development, 1989).

Map 2 gives a clearer and more specific pattern of growth and location. The central core city is composed of census tracts 651, 652, 653, 654, and 655. This urbanized environment is composed of high, medium, and low density residential tracts, and multifamily housing. High and medium intensity industrial land use, medium and high

commercial use, and office and institutional use generally follow the main thoroughfares. Three of the five census tracts have experienced a decline in population, and the other two tracts, 652 and 654, have experienced only a slight increase (U.S. Department of Commerce [USDC], 1990; Suffolk Department of Community Development [SDCD], 1989). The northern portion of the city has experienced the greatest growth, with an increase in population in tract 751 in the northeast corner of the city at 33 %. Census tracts 752, 753, 754, and 755 have less significant, but positive growth. This area is zoned primarily for low, medium and high density residential, planned community development, medium, and high intensity commercial, and high intensity industrial parks (USDC, 1990; SDCD, 1989). Pockets of rural residential lands are diminishing with the extension of sewage and city water lines, which make development possible.

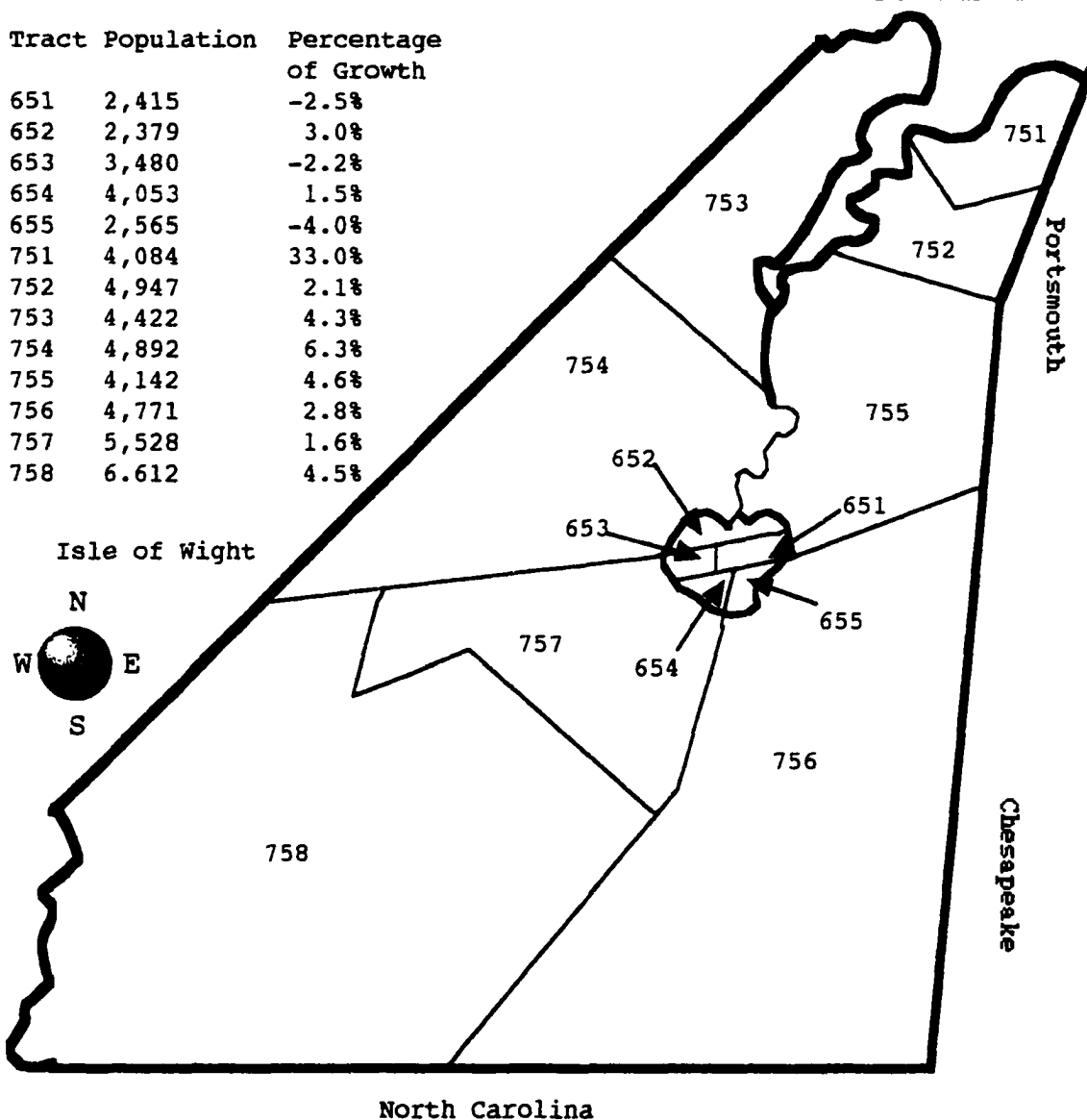
The towns of Holland and Whaleyville are in the south and southwestern areas of Suffolk and are composed of low density and rural residential areas with small pockets of high density residential located in the "center" of town (USDC, 1990; SDCD, 1989).

The remaining tracts of 758, 756, 757 are agricultural, forested, or rural residential with minor population growth (USDC, 1990; SDCD, 1989) Demographics by existing census tracts show marked differences in ethnic composition, median household income, percentages of residents on public assistance, and educational levels. It is important to point out that with the exception of tract 652, the urban core of the city has the lowest median household incomes, four of the five highest rates of residents on public assistance, three of the

Map 2

Suffolk 1980 Census Tracts and Projections of Growth From 1990-1995

Tract	Population	Percentage of Growth
651	2,415	-2.5%
652	2,379	3.0%
653	3,480	-2.2%
654	4,053	1.5%
655	2,565	-4.0%
751	4,084	33.0%
752	4,947	2.1%
753	4,422	4.3%
754	4,892	6.3%
755	4,142	4.6%
756	4,771	2.8%
757	5,528	1.6%
758	6,612	4.5%



Note: Map based on: City of Suffolk 1980 Census Tracts (1975) by The Department of Community Development prepared by Kidd and Associates, Inc., Hampton, VA.; and Population 1980-1995: Census and Housing, 1990, and CACI Projections (1990) U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Washington, DC.

Table 12

Demographic Information By Census Tracts

Tract Number	Total popula- tion	White	Black	Other	Median House- hold Income	On Public Assist- ance	High School Gradu- ates	College Gradu- ates
Central Core City								
651	2,478	15%	84%	1%	\$14,323	24.85%	40.7%	6.65%
652	2,310	71%	28%	1%	\$30,306	6.62%	70.49%	23.79%
653	3,557	55%	44%	1%	\$17,345	10.82%	68.95%	14.15%
654	3,995	16%	83%	1%	\$15,117	22.76%	50.06%	6.57%
655	2,672	2%	97%	1%	\$14,063	22.92%	40.38%	5.96%
Northern Growth Areas								
751	3,070	68%	29%	3%	\$30,313	3.83%	76.91%	14.29%
752	4,846	72%	27%	1%	\$35,532	4.89%	74.23%	13.20%
753	4,241	71%	27%	2%	\$36,708	6.34%	76.50%	20.82%
754	4,600	84%	15%	1%	\$37,424	4.94%	69.97%	16.38%
755	3,961	53%	46%	1%	\$24,708	10.77%	63.65%	13.69%
Southern Rural Area								
756	4,640	25%	74%	1%	\$24,875	13.48%	55.09%	7.12%
757	5,443	76%	23%	1%	\$31,187	6.88%	66.54%	9.66%
758	6,328	63%	36%	1%	\$27,371	8.61%	60.18%	8.32%

Note: From "Hampton Roads Neighborhood Demographics" by The Virginian-Pilot, (1997a). (On-line) Available: <http://data.pilotonline.com/Census/census.cfm>; City of Suffolk, Virginia, 1980 Census Tracts, (1975) Suffolk Department of Community Development, Suffolk, VA. Prepared by Kidd And Associates, Inc. Hampton, VA.

lowest rates of high school graduates and college graduates, and four of the five highest rates of minority populations.

As a group the northern suburban growth areas lead the city in the highest median household incomes, highest percentage of high school and college graduates, and the lowest percentage of residents on public assistance. Only tract 755 with a large extension of the Dismal Swamp, rural and low density residential acreage, a large regional land fill, industrial park areas, and undeveloped farm land, lagged behind the more affluent northern areas. The southern rural areas' median income generally falls between the urban core city and the suburbanized north. Educational levels are slightly above the less affluent sections of the core city, yet fall below the percentage of college and high school graduates in the northern suburbs. Southern rural income levels exceed the inner city household incomes by as much as \$10,000. (The Virginian-Pilot, 1997a; SDCD, 1975).

The information contained in Table 12: Demographic Information by Census Tracts clearly shows significant socioeconomic differences among rural, urban, and suburban residential environments. Differences in the demographics of students from the two small towns are not available by tract and will be drawn from school records and interviews.

APPLICATION OF THE RESEARCH

The research is to serve as a basis for an identification process to be used by a school site-based early identification team. The role of the Site-based Early Intervention team is to identify potential dropouts and to develop a plan of the appropriate type to be

implemented for the potential dropout's alternative education program. The team is projected to include a member of the school's administrative team, a representative from the system's pupil personnel services, a representative from the system's alternative education programs, the referring source, the guidance counselor, a teacher or teachers familiar with the student's academic performance and background, the parent(s) or guardian(s), and if appropriate, the school nurse, the student's social worker or parole officer, the student, and others who have knowledge which will assist the committee in making its determination and recommendations (Suffolk Public Schools, 1997).

A great deal of research has identified characteristics and factors associated with students who drop out of school. Knowledge of these individual, school-related or family related factors can not guarantee effective use or 100% accuracy in predicting which students will eventually drop out of school. Students with many of the same characteristics do well in school and graduate. Personal knowledge, along with a researched based identification process, is imperative in achieving a high accuracy prediction rate and assignment to the appropriate alternative education program. The Early Intervention Team, after reviewing the screening and identification information, would recommend which program or services along a continuum of alternative education services which would best serve the individual student. The services recommended would be included in the student's individual alternative educational plan.

The student's individual alternative educational plan should be

based on areas of needs and include by not be limited to:

1. Long-range goals (one to two years),
2. Short-range goals (six weeks increments),
3. Academic, behavioral, vocational, attendance, and /or health goals,
4. Counseling and Life Skills goals (conflict resolution, money or time management, parenting, etc.
5. Exit goals. (Suffolk Public Schools, 1997).

Once the general areas of concern have been identified and goals are established, school and community service providers can be identified and contacted to provide academic and other intervention services. The early intervention team may look for additional interventions beyond services or programs which are normally provided within the school system. Service options may be mandatory or voluntary depending on student and family needs. Services may be provided through charitable agencies, governmental agencies, or contracted out to private organizations. Table 12 presents a representative list of areas of general concern or needs, services, and potential service providers that may be available within the school system and community.

The key person on the Early Intervention Team is the case manager. The case manager assists the committee by collecting student data, evaluating the referral, serving on the team, communicating the team's recommendations to the appropriate division coordinator and service providers, following the referral from initiation to the point of service delivery, and serving on an Exit Committee which determines

if the student has achieved the goals as established in the student's individual alternative educational plan. The case manager may be a guidance counselor, teacher, or administrator (Suffolk Public Schools, 1997). The case manager would serve as the school systems contact person with the various community and charitable agencies providing services to the students.

Table 13

Needs, Services, And Potential Service Providers

<u>Areas of General Concerns</u>	<u>Potential Service Providers</u>
Academic difficulty	School Pupil Personnel Services
Low Achievement	Volunteer Tutoring
Pre-Occupational/ Vocational Placement	Title I Services Class/School/Program Transfers Child Study Team/Special Education Industry and Technology Programs
Health Issues	Homebound Instruction
Pregnancy	Night School/ GED/ Alt. Education Prenatal and Child Care Classes
Emotional Problems	School Guidance Counselor
Physical Problems	Mental Health Services/ Medicaid
Ill Health	Community Health Department
Criminal Activity	
Weapons Violations	Criminal Justice/ Court Services
Fight or violence	Community Recreation Services

Table 13 Continued

<u>Areas of General Concerns</u>	<u>Potential Service Providers</u>
Drugs or alcohol	Mental Health/Support Groups
	Off Campus Day School/ "Boot" Camp
	Substance Abuse Services
Behavior Problems	
Chronic misbehavior	School Guidance
Antisocial behavior	Social Services
Low Self-Esteem	Volunteer Mentors
Lack of Positive	Big Brothers/Big Sisters
Role Model	After-care services
Sexual Issues	Sexual Abuse Counseling
Attendance Problems	
Excessive Absences	Attendance Officer
Truancy	Crisis Intervention Home
Runaways/Emancipated Minors	Foster Care/ Group Home
Family Stressors	
Housing Problems	Public Housing Authority
Family mobility	Child Protective Services
Social/Economic Problems	Family Assistance and Planning Team
Employment Problems	Business Community/ Charities
Child Abuse	Temporary Aid to Needy Families Food Stamps/ Food Banks
Family Problems	Homeless/ Abuse Shelters
Displaced Children	Child and Family Services

Table 13 Continued

<u>Areas of General Concerns</u>	<u>Potential Service Providers</u>
Family Literacy	Child Protective Services Adult Literacy Programs

Note: From: Baylor & Snowden, (1992); United Way/Combined Charities, (1997); Center for School-Community Collaboration, (1997). Table 12 presents only a partial list of agencies and services available within the community.

The Exit Committee is proposed to consist of a representative from the system's pupil personnel services, a representative from the system's alternative education programs, the student's alternative education teachers, the guidance counselor, school nurse, the sending school's case manager and/or the receiving school's case manager, the parent and student, if appropriate, and others who have knowledge which will assist the committee in making exit determinations and recommendations. The Exit Committee determines if the student has achieved the goals as established in the individual alternative educational plan, and institutes an exit plan which is monitored by the receiving school's case manager. This exit plan is to help the student adjust to the regular school and classroom (Suffolk Public Schools, 1997).

SUMMARY

Based on a review of the literature and essential studies, the following generalizations can be made:

1. Early identification is essential for successful dropout

prevention;

2. Prediction of potential dropouts is possible with a limited number of established quantifiable predictor variables, and the competency testing variable may have an additional significant impact on a student's decision to drop out of school;
3. Potential dropouts may be successfully identified as early as the elementary grades;
4. School and personal success or failure are the critical elements with the majority of predictor variables;
5. An initial screening instrument and school-based professionals should be used to place students in dropout prevention programs;
6. Students do not just drop out. An accumulation of factors contribute to the decision to drop out and a course towards dropping out can be charted over a period of time;
7. With a limited number of predictor factors an instrument can be developed to record, numerically rank, and accurately predict potential dropouts;
8. Many dropouts are not correctly identified or meet the traditional criteria for at-risk students;

School dropouts are a diverse population. No one program could serve all equally well, nor should such dissimilar students be intermingled. A dropout prevention education continuum of services designed to meet individual potential dropouts' behavioral, academic, medical, counseling, or social services needs. Services beyond those

provided by the school system must be considered to meet the unique needs of individual students. The school system can direct students and their families to a wide range of community public, private, and charitable service providers.

CHAPTER III

METHODOLOGY

The purpose of this chapter is to provide the reader with information on the intended methodology, including the research design, data collection methods, the criterion variable, the data collection, the predictor variables, recording methods, and data analysis.

PURPOSE

The purpose of this study is to determine if there are consistent early warning signs or predictors which are common among dropout students, regardless of their grade or residential environment, which will allow school personnel to identify potential school dropouts and provide intervention programs at the earliest possible time to prevent dropping out. This study proposes to develop a site-based early identification system which can reasonably identify potential dropout students with a high degree of practicality and accuracy. The early identification system is to be based on specific predictor variables, clear operational definitions, specific cutoff points, and decision rules based on aggregate information for use by a school intervention team. This research-supported and practical procedure is to be developed to confirm which significant events should trigger the identification process, establish whether intervention is needed, and provide knowledge to the intervention team for the development of a plan of the appropriate type to be implemented for the potential dropout's alternative education program. In collecting and analyzing data along a continuum, beginning with the students' elementary years, it is believed to be possible to provide educators with the capability

to identify potential dropouts for intervention before this course become irreversible.

Research Design

The type of study is multifaceted. One component is causal-comparative and the statistical procedure to be used is discriminant analysis. A number of variables are used to classify subjects into one of two distinct groups-- dropouts and non-dropouts. The criterion variable is membership in one group or the other. The predictor variables are established factors associated with dropping out of school, a new variable, competency testing results, and variables generated through case studies. Discriminate function equations are to be produced allowing the subjects to be placed in one group or the other (Ary, Jacobs, & Razavieh. 1990).

In this causal-comparative study the predictor variables already exist (ex post facto) and can not be manipulated. The criterion variable is group membership. The researcher is examining the sequence of events which precede dropping out of school. Discriminate function analysis allows the researcher to use a variety of variables that may be nominal, ordinal, interval or ratio.

Multiple discriminate function analysis will be conducted to determine if a common predictor equation or different equations are applicable to students at different grades during their school years or if students coming from different residential environments require different prediction equations.

The initial task is to determine which dropout predictor variables are related to the criterion variable of dropping out of

school or not. Using stepwise multiple regression, the researcher will attempt to determine the predictor variables' relative strength of contribution to the criterion variable. The data will come from information gathered from individual students' cumulative records beginning with the students' first entry into elementary school and continuing as students progress through their school careers. Additional information will be obtained from the student's discipline files and special education testing and placement files. Interviews with school personnel, students, and/or adult family members are expected to provide up-to-date information, and in-depth less tangible data.

An additional component of the study is descriptive. The researcher will collect, analyze, and prepare results to help shape policy. The researcher will examine what factors or circumstances preceded the students' decision to drop out, establishing a group of triggering events which would start the identification and prescription procedure. These data would also be used to describe the dropouts through tallies and measurements of central tendencies.

A structure survey will be used to collect data from quota sampled dropout students and/or adult family members. Of interest are questions directly related to competency testing, what significant events preceded the decision to drop out, current educational status, reasons for dropping out, and what dropouts would like to have changed about schools. This data will be used to support and develop a site-based dropout identification and prescription process and policy for alternative dropout education programs.

Subjects

For the purpose of this study, dropouts shall be identified by using the Virginia Department of Education's definition as a "pupil withdrawn for other reasons and not entering another school" (Virginia Department of Education, 1991, p. 1). Using this definition, approximately 200 9th-12th grade students in the Suffolk Public Schools were identified by their schools as school dropouts for Virginia state reports for the 1996-97 school year. For report purposes these students were coded as W8's. To determine if additional unreported students had dropped out or were W8's in grades 6th-8th, the researcher will request the Suffolk middle schools to supply the names of dropouts in 6th through 8th grade. The initial research will be conducted to identify 100 dropouts and eliminate misidentified students. The school system's and schools' data bases will be examined to eliminate students who were misidentified as dropouts, had entered other schools or institutions, or who had returned to another Suffolk school. Student records will be investigated and school personnel will be interviewed to further identify actual school dropouts.

Sampling Procedures

Subjects will be quota sampled. After eliminating students who are not dropouts, 100 accessible dropout subjects will be selected on a quota basis to include students in proportion to the overall number of dropout students from the four residential environments and genders. Also, 25 of the subjects will be selected on a quota basis to be surveyed. Quota sampling will be used to insure that typical

cases from the diverse residential environments will be represented (Ary, Jacobs, & Razavieh, 1990). Quota sampling is selected to insure that students are examined in proportions equal to the overall number of dropout students from each residential environment and gender.

Data Collection

Much of the data will be obtained by reviewing individual students' school records. An initial list of dropouts will be supplied by the system's administration. After incorrectly identified dropouts have been eliminated, the initial subjects' school records will be reviewed, school personnel will be interviewed, and a quota sample of student subjects or an adult member of their household will be surveyed. If personal interviews of students or adult family members are not possible, surveys must then be conducted through the mail.

Criterion Variable

The criterion or dependent variable is the status of the student at the end of the 1996-97 school year. For the purpose of this study, dropouts shall be identified by using the Virginia Department of Education's definition as a "pupil withdrawn for other reasons and not entering another school" (Virginia Department of Education, 1991, p.1). Graduates or student still enrolled in school (stay-ins) will be classified as non-dropouts.

Instrumentation

A uniform data collection form will be developed by the researcher, drawing from other school systems' alternative education identification forms, reviewing the literature, obtaining sample forms from the National Dropout Center, and using the input of administrators

and teachers involved in the Suffolk Public School System's at-risk programs. The data collection instrument will be designed to allow the researcher to record data at each grade level, kindergarten through twelve. Provisions are made to report data from repeated grades as they occur. A structured interview/survey form will be developed to record and report dropout students' or adult family members' responses. Five questions will be developed with emphasis on competency testing, current educational status, and significant events which preceded the decision to drop out.

Predictor Variables

The work of Morris et al. (1991) and Vaughan (1991) allows the researcher to reduce the predictor variables to attendance, school transfers, grades, standardized test results, state-mandated competency testing, retentions, and suspensions. Additional predictor variables will be determined by an in depth review of student records. Multiple discriminate function analysis will be conducted to determine if different predictor variables are more or less significant at different grade levels or residential environments.

Triggering Events

Events which may result in the identification process being started or triggered may include, but not be limited to, results from special education testing and special education placement, parent, home and family problems, discipline problems, involvement with the court or law enforcement, and medical information including chronic medical problems, pregnancies, or medication, and other factors which must be obtained from school staff, the dropout, or adult family members.

Data Recording Methods

The researcher will record yearly data in chronological grade order, beginning with kindergarten and ending with the highest grade attended before dropping out, staying in, or graduating. Gaps or missing information will be noted. When appropriate, data such as retentions and school transfers will be recorded cumulatively. Event data such as LPT testing, pregnancy, marriage, special education testing or placement, suspension, expulsions, or involvement with the courts or law, or dropping out shall be recorded in the grade they occur. Intrinsic data such as sex and ethnicity shall be drawn from the school entry forms completed by the adults initially registering the students. The family data such as parent(s) or guardian(s) and residential environment, which has the potential for change over a period of time, will be noted as of the last update or time of the student dropping out. Table 14 gives the factors and variables the researcher attempted to record.

Table 14

Factors And Variables Recorded

<u>Variables</u>	<u>Description</u>
Literacy Passport Test	Passed or failed all three sections Test Results The Literacy Passport Tests (LPT) are in the areas of reading, mathematics, and writing
Gender	Male or female
Ethnicity	American Indian, Black, Asian American, Spanish Surname American, White
Residential Environment	Residential environment recorded at the time of dropping out of school- rural, town, suburban , urban

Table 14 Continued

<u>Variables</u>	<u>Description</u>
Dropout Age	Date of birth minus date of withdrawal
Resides with	Mother and Father, Mother or Father Only Both Grandparents, Grandmother/Grandfather Only, Legal Guardian, Sibling, Foster Home
Dropped Out Grade	Recorded at grade student withdrew or was dropped and did not enter another school or state institution.
Absent	Number of days absent from school recorded yearly.
Failed	The accumulated number of grade retentions recorded by grade level.
School Transfers	The accumulated number of schools attended not counting the normal school progression through promotion or school rezoning, and recorded by grade.
Ds, Fs, Us, Ns	The number of less than C or satisfactory grades recorded on either year-end or last current report cards as reported by grade. Kindergarten students' grades are not generally letter grades and will not be recorded.
Reading	Reading comprehension grade equivalent on norm referenced, standardized tests such as The Metropolitan Achievement Tests, The Iowa Test of Basic Skills, and the Stanford 9 test.
Math	Total math grade equivalent on norm referenced, standardized tests such as the MAT, ITBS, and Stanford 9 tests.
Special Education	Placement in a Special Education Program
Free or Reduced Meals	Will be reported as a group and not by individual status
Alt. Ed.	Placed in an alternative education program recorded by grade
Pregnancy	Recorded at grade student dropped out
Marriage	Recorded at grade student dropped out

Table 14 Continued

<u>Variables</u>	<u>Description</u>
Other Health with Problems	Health problems recorded at grade when interferes school progress or attendance
Involvement with Law /Court	Recorded at grade(s) of involvement.
Drug/Alcohol Abuse	Recorded at grade when interferes with attendance, school progress, or involvement with the law or court through records, and surveys.
Suspensions	Number of suspensions recorded by grade.
Administrative Hearings	Number of administrative hearings recorded by grade.
Expulsions	Recorded at grade student expelled.

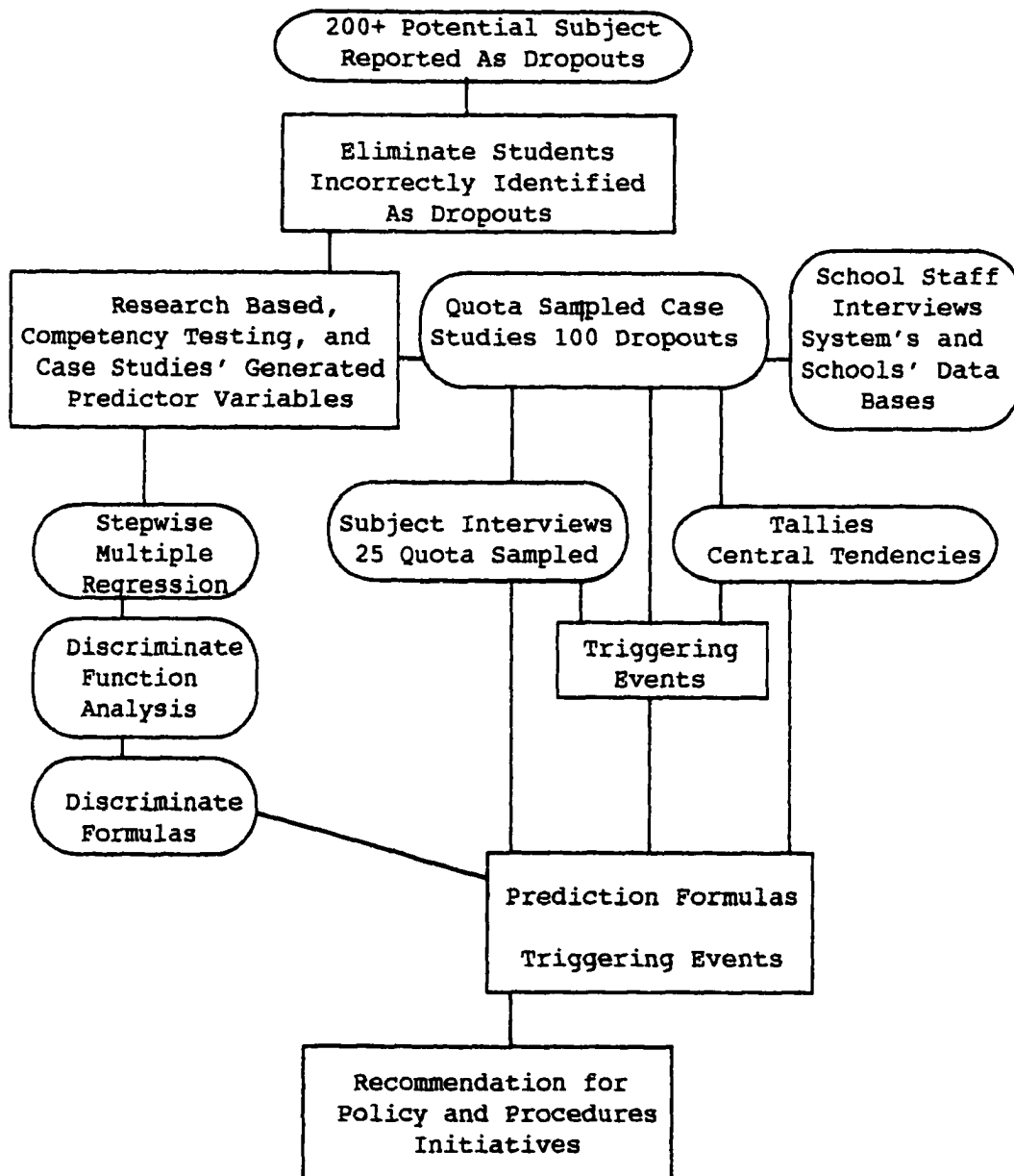
Dummy Variables

In order to use qualitative predictor variables such as gender or residential environment, dummy variables will be created. Keeping the collinearity problems in mind, one includes only one dummy variable for dichotomous variables or one less dummy variable for multiple levels of qualitative predictor variables. For example, for gender one would use male vs. non-male. With multiple variables such as residential environments, a dummy coding would be developed such as town vs. non-town, urban core vs. non-urban core, suburban vs. non-suburban, and then rural, being none of these would then be known.

Data Analysis

After the data has been tallied, and frequencies, central tendencies and variation established, stepwise multiple regression will

be used to determine each variable's relative contribution, and discriminate analysis will be used to determine predictor equations



Methodology

Figure 2. Variables were research, competency testing and case study generated.

that can be used to classify students as potential dropouts or not. Building on the previous research by Morris, Ehren, & Lenz (1991), Romanik & Blazer (1990), Vaughan (1991), Weber (1988), Wilkinson & Frazier (1990), discriminate function analysis will be conducted using the identified significant predictor variables. Discriminate function is suited for the dichotomous prediction of dropping out of school or not and allows the researcher to statistically examine the different variables' weight or contribution to the prediction. The derived cutoff score is then used to assign subjects to one of two groups-- dropouts or non-dropouts.

Discriminate function analysis on data from each grade level will determine each variable's standardized coefficient or weights in relation to the criterion variable. Using the SPSS software package individual and sets of variables can be removed or added to determine the most accurate or best discriminating prediction model for that grade level and residential environment. The results will determine cutoff scores. The researcher will attempt to determine if unique discriminate function models exist at each grade level or residential environment. An outcome would be to generate a formula applicable to all residential environments. It must be noted that certain variables occur only at specific grade levels. The Literacy Passport Tests are not administered until the sixth grade. Yearly, standardized tests were administered in Suffolk only to students in the elementary grades 1-5 and selected secondary grades.

The one anticipated outcome is a formula based on the results for each grade level or residential environment, allowing the researcher

to predict potential dropouts at the earliest possible grade with a significant degree of accuracy. The end goal of the researcher is to raise consciousness and provide essential information and recommendations for a change in policy, procedures, and programs. The researcher expects to participate in shaping school board policy in the system's initiative to provide effective alternative dropout prevention programs.

The researcher has been asked to serve on two committees considering program and policy recommendations for the City of Suffolk Public Schools. The researcher was a member of the 1997-1998 Alternative Education Sub-Committee, whose members were asked to develop a report on the current status of alternative education programs that was subsequently presented to the School Board in a public meeting. During the 1999-2000 school year the researcher served on the Turlington Woods School Committee. This alternative education school is designed to help at-risk students meet the SOL competency tests requirements. This committee considered entrance criteria, student information forms, curriculum, scheduling, programs, staffing, and future student population expansion. This committee's recommendations will be presented to the Suffolk City Public School Board for policy considerations and development.

CHAPTER IV
PRESENTATION AND ANALYSIS OF DATA
SUBJECTS

Dropouts

Lists of potential school dropouts were obtained from the Suffolk Public School's Pupil Personnel Department and cross checked with lists provided by the middle and high schools. Initially, 220 students were identified as dropouts. These lists were used in the school system's reports to the Virginia Department of Education (VDOE) and were then used by the VDOE in state reports. In reports the dropout students were coded as W8 (school dropouts) or W9 (students who were withdrawn after 15 consecutive days absent). At the end of the school year, W9 students who did not return were to be recorded as W8 or dropouts. In consulting school personnel, reviewing the students' cumulative files, and the schools' data bases students misidentified as dropouts were eliminated from the researcher's list of potential subjects. A significant number of students who had transferred to other public and private schools or programs were not coded correctly and were misidentified as dropouts. The original compiled list of 220 dropout students was reduced to 107 students. To reduce the list to 100 dropout subjects, students with limited information were deleted.

Non-dropouts

Discriminate function analysis requires a comparison group of students. The comparison group was selected by determining the number of dropout students in each grade and high school. Seventy-one 9th grade dropouts were identified in the high schools. Thirty 10th

graders were identified. Eight 11th graders and one 12th grader were identified as dropouts. To select a random sample of students from each grade during the 1996-97 school year, students in each grade were to be organized by student numbers. Student numbers are assigned as students enter each Suffolk Public school, elementary, middle or high school. The deprived of this information the researcher then selected position numbers from a random sample table. From the 1996-97 high schools' year books, which lists students by grade and in alphabetical order, the random comparison sample subjects were selected. Students from the dropout subject group and students from the original lists of potential school dropouts were eliminated from the sample.

Students who had withdrawn or dropped out from their respective high schools between 1997 and 1999 were eliminated as well. The researcher then used the grade level ratio and random sample numbers to select the non-dropout subjects for the comparison group. The researcher did not use addition selection variables so as not to reduce the number of potential predictor variables.

Survey Sample

Twenty-five of the dropout subjects were selected on gender and residential environment quota basis to be surveyed. Quota sampling was selected by the researcher to insure that subjects were surveyed in proportions equal to the overall number of dropout students from each residential environment and gender. Based on the overall percentage of dropout subjects, dropouts survey subjects were selected based on the following numbers: rural- one females and four males, town- one female and one male, suburban- one female and four males, and urban- four

females and nine males. All dropout subjects were ordered within residential and gender subgroups based on student identification numbers and survey subjects were selected based on numbers from random tables. The survey sample dropout students were mailed introduction letters asking for corrections in addresses and/or phone numbers.

Multiple Years' Data

All subjects who were retained in a grade for one or more years had several sets of data. Data from multiple years in grades was initially recorded by years and grade levels. To accommodate statistical analysis by grade level, data from several years was recorded by grade as the most extreme year, the first year in a grade, or total for a grade level.

1. Suspensions were recorded for the most extreme grade level year.
2. School transfers were recorded as totals for grade levels.
3. Absences were recorded for the first year in a grade.
4. Administrative hearings were recorded for the most extreme years in a grade level.
5. Expulsions were recorded for the most extreme grade level year.
6. Poor grades were recorded for the first year a students was in a grade. Cumulative totals and yearly averages were computed.
7. Standardized test scores in reading comprehension and total math were recorded for a student's first year in a grade.
8. Absences were recorded for the first year a student was in a grade. For an additional variable cumulative total of

absences was calculated and this total was divided by the number of years data was available for that student to determine a yearly average for absences.

Subject Demographics

Subjects' demographics were collected in part from Suffolk City Schools' reports, printouts, and personal communications from Suffolk Public Schools' Personnel Department, Special Education Department, School Food Service, and Lakeland High School and Nansemond River High School. Additional demographic information was collected from individual students' cumulative records. Gender, parent home, ethnicity, and dropout grade and age data were based on the schools' student data bases and school registration forms found in the students' cumulative files. Free and reduced meal status information was provided by the Suffolk Food Service, but only by the dropout and non-dropout group totals. By Federal regulations, individual meal status could not be released. Special education placement was provided by the Suffolk Public Schools' Special Education Department and individual student's special education Category II files found in the cumulative records. Alternative education placement data was provided by the Suffolk Public Schools' Pupil Personnel Department. Alternative education programs' rolls and database printouts were available only for the years 1992 through 1996. Competency testing results, grades, attendance, school transfers, and retention data was gathered from individual students' cumulative records. Residential environment were determined by the students' latest addresses as recorded in the schools' data bases.

Table 15

1996-97 Percentage Distribution of Subject Demographics

Demographic Characteristics				
<u>Variable</u>	<u>Groupings</u>			
Gender	Male	Female		
	73%	27%		
Parent Home	Single	Two		
	73%	27%		
Ethnicity	White	Other	Black	
	35%	2%	63%	
Ethnicity: All High Schools	White	Other	Black	
	42%	2%	56%	
Ethnicity: Division Totals	White	Other	Black	
	40%	1%	59%	
Free or Reduced Meals	Yes	No	All High Schools	
	50%	50%	37%	
Special Education Placement	No	Yes		
	69%	31%		
Alternative Education Placement	None	Once or More		
	57%	43%		
Competency Test	Yes	No		
	16%	84%		
Passed On Time	0	1	2	3
	21%	25%	29%	25%

Table 15 Continued

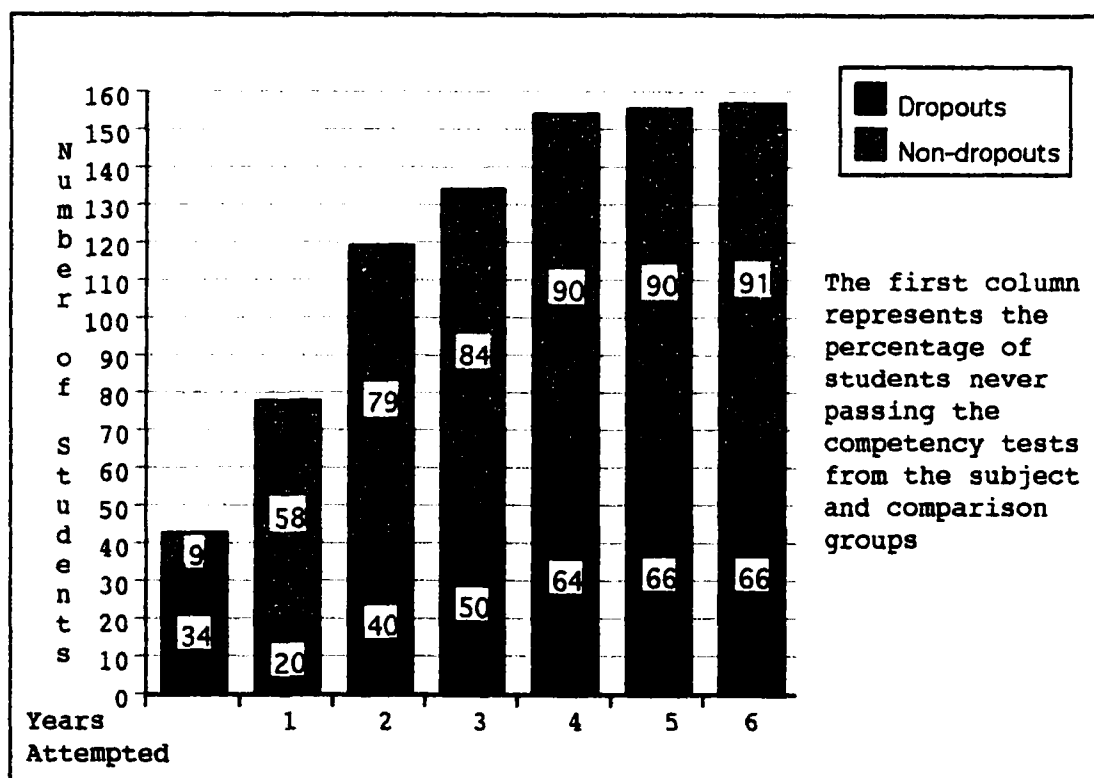
<u>Variable</u>	<u>Groupings</u>				
	0	1	2	3	4+
School Transfers	8%	32%	33%	14%	13
Dropout Grade	7-8	9	10	11	12
	4%	66%	20%	9%	1%
Dropout Age	14-15	16	17	18	19-20
	8%	24%	37%	19%	12%
Residential Environment	Rural	Town	Suburban	Urban	
	18%	4%	21%	57%	

COMPETENCY TESTS

Of major interest to the researcher is the pass/fail rate on the Virginia state mandated literacy passport or competency tests. Passing the state competency tests in reading, mathematics, and writing was required for graduation. The state competency tests called the Literacy Passport Tests (LPT) are first required to be taken in the sixth grade and retaken until passed. The LPT tests are given in the fall, spring and summer.

For the purposes of this study, the Literacy Passport Tests' (LPT) or passes were recorded by grade level. If a student passed the tests in the sixth grade year, or the first time they were given the tests in sixth or later grades, the subjects' results were recorded as passing on time and in what grade. Data was recorded as to what yearly attempts students passed the LPT tests- 2nd, 3rd, 4th, 5th or 6th year.

Figure 1 illustrates that dropouts passed the LPT tests during their first year's attempts, regardless of grade, at a rate nearly three times less than the comparison group of non-dropouts. By the sixth year's attempt 91% of the non-dropouts and 66% of the dropouts passed.

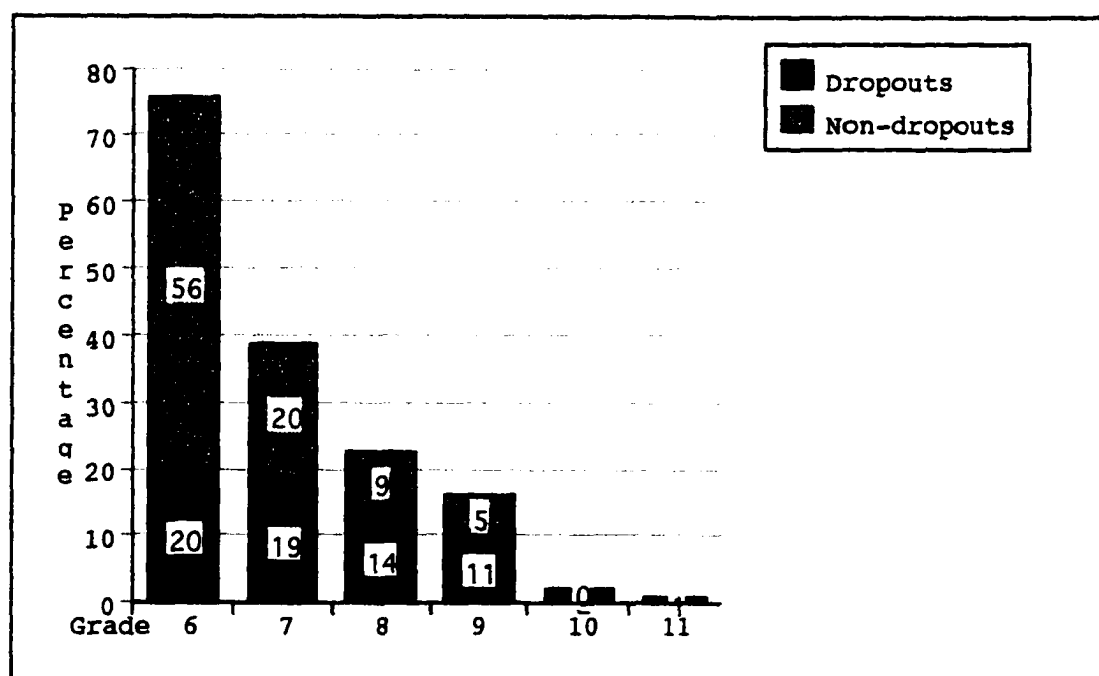


Competency Tests Passing Rates By Attempts

Figure 3. Show students passing the LPT tests on a cumulative basis. In both groups not all students passed the tests, with three times the percentage of dropouts, 34%, not passing, and 9% of the non-dropouts unable to pass all three LPT tests.

Figure 4 further illustrates that the non-dropouts outperformed dropouts on the competency tests and that by the ninth grade only 64%

of the dropouts had passed the LPT tests while 90% of the comparison group had passed. As an additional incentive to pass, eligibility for participation in Suffolk high schools' extracurricular activities beginning in the ninth grade, was dependent upon students passing the LPT tests. There is a significant time and grade level gap between the time of the first attempt to pass in grade 6 in the middle school, and the application of participation sanctions in grade 9 in high school.



Grade Subjects Passed LPT Tests

Figure 4. Grades dropout and non-dropout subjects passed the LPT tests.

RESIDENTIAL ENVIRONMENTS

The city of Suffolk presents the researcher with an unique opportunity to compare subjects from four distinct residential environments- rural, town, suburban, and urban. While in the same

school system, students from different residential environments were exposed to the same curriculum, policies, practices, and procedures including promotion, discipline, attendance, grading, and data recording.

The researcher's determination of residential environments was established by using the following criteria:

- 1) Urban- the central core city composed of the original city of Suffolk and the surrounding high and medium density populated areas.
- 2) Town- within the geographical and political boundaries of the towns of Holland and Whaleyville existing prior to their consolidation with Nansemond County and the old City of Suffolk in 1972.
- 3) Suburban- rapidly expanding suburban growth area located in the northern end of the city and on the fringe of the urban core city.
- 4) Rural- the remaining land area of the city which is zoned rural residential, including homes and farms, the Dismal Swamp, sparsely populated areas, woodlands, and wetlands.

The researcher used students' addresses from the high schools' data bases' printout records and the following resources to determine individual subjects' residential environments:

- 1) City of Suffolk, Virginia 2005 General Plan, (1998) which includes land use designations including rural residential, low, medium, and high intensity residential development supplied by Suffolk's Department of Community Planning.

- 2) Tidewater Virginia Street Map Book, 19h Edition, (1997)
published by ADC The Map People, Alexandria, Virginia.
- 3) Detailed Street Map of Suffolk, Virginia, 1997, published by
Alexandria Drafting Company, Alexandria, Virginia.
- 4) Street Name, Subdivision, Plate Map and Status printout
supplied by Suffolk's Department of Community Planning.
- 5) Index To Old City Of Suffolk, Property Identification Maps
(post 1974) prepared by The Virginia Department of Taxation,
Division of Real Estate Appraisal and Mapping supplied by
Suffolk's Department of Community Planning.
- 6) On site visits by the researcher to determine population
density, lot size, rural residential designation, and
location. When the rural residential environment was in
question the city's code of R1 or a residence and lot size of

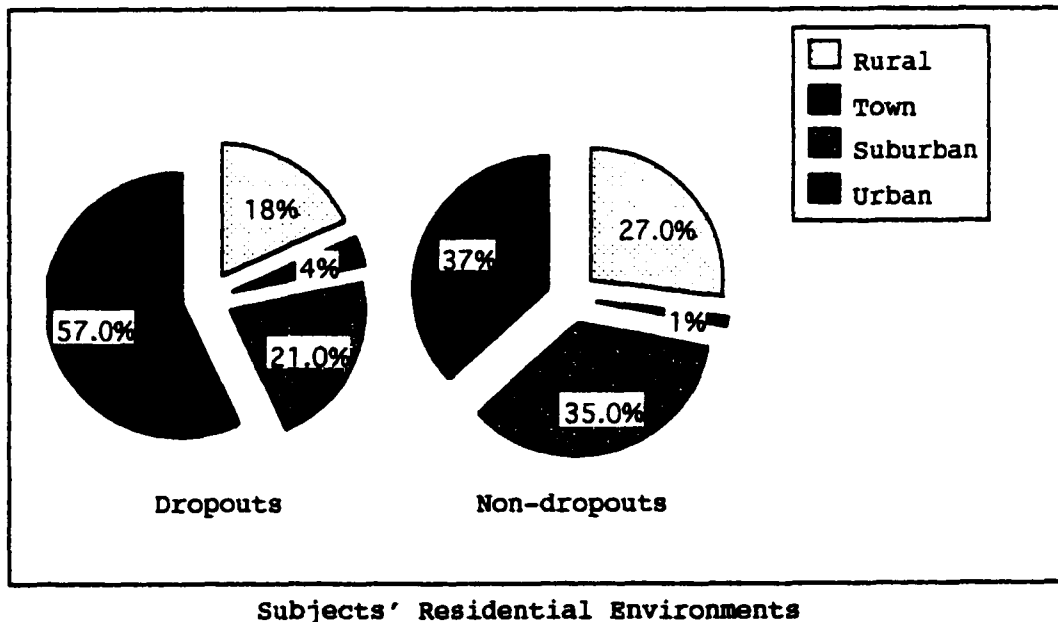


Figure 5. Subjects' residential environments as of dropout year.

an acre plus and proximity of additional residences was used.

Subject students from the urban core city represented over half of the dropouts exceeding the percentage of comparison group urban student by over 20 percent. The difference is made up by the higher percentages of rural, town, and suburban students remaining in school.

Special And Alternative Education Placement

Special Education students were recorded as having been qualified and placed in a Special Education program regardless of grade. Students are placed in Special Education only after a referral to a school's Child Study Team, and extensive testing to determine eligibility and disability. Transfer students with the appropriate special education Individual Educational Plans (IEP's) are placed in special education classes as well. All students must have parent's permission for testing and placement. Alternative education placements were derived from Pupil Personnel Department's data bases printouts and included the years 1992-1997. Alternative education programs include the Education for Success (ESP), The Night Alternative Education Program (NAS or ACE), and the Southeastern Cooperative Education Program (SECEP) for students placed in special education, but needing a more intensive program due to severity of handicap or behavior problems. Several students were placed in the Camp Pendleton program which is a regional residential program for students with severe behavior problems. Students, who had been assigned to the NAS, ACE, ESP or SECEP programs were recorded as having been assigned to one of Suffolk's alternative education programs. Students could be placed in

an alternative education program for six weeks or more. Based on records available in the cumulative files, students who had been incarcerated were recorded as well. Students could be placed in the Education For Success Program upon consideration of a number of factors including:

- 1) years and grades retained and attendance record,
- 2) special education testing and results,
- 3) current placement in alternative education program,
- 4) current beginning and ending functional reading and math levels,
- 5) standardized test scores in reading, math, and language,
- 6) and Literacy Passport and/or Standards of Learning scores. (Suffolk Public Schools, 1998, ESP 1 and ESP 2).

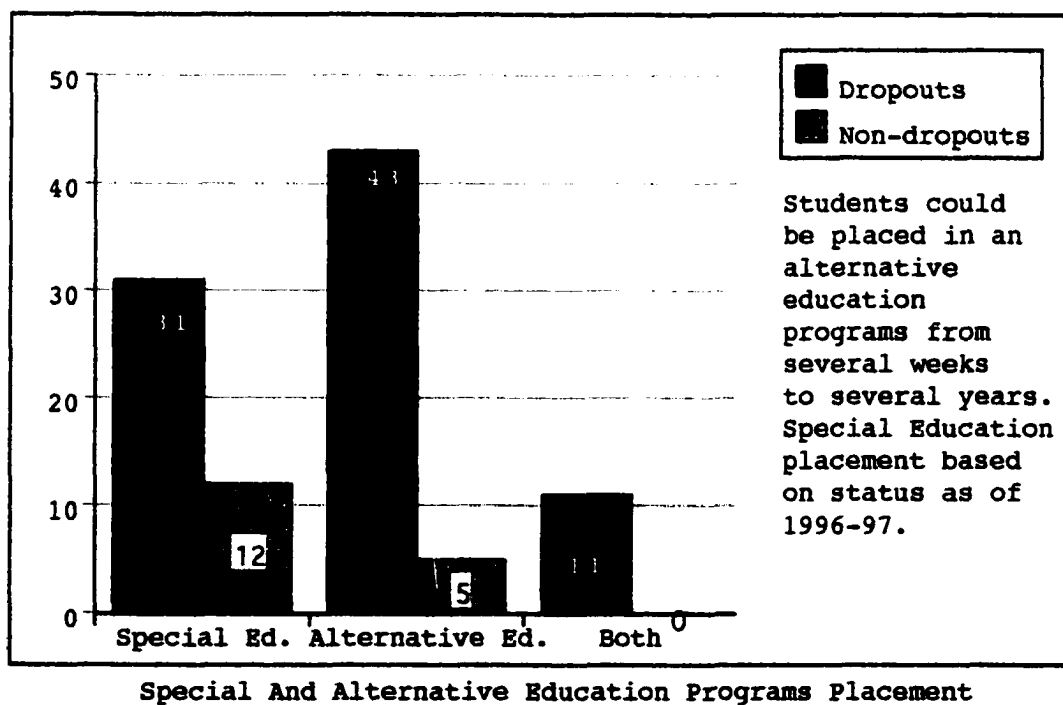
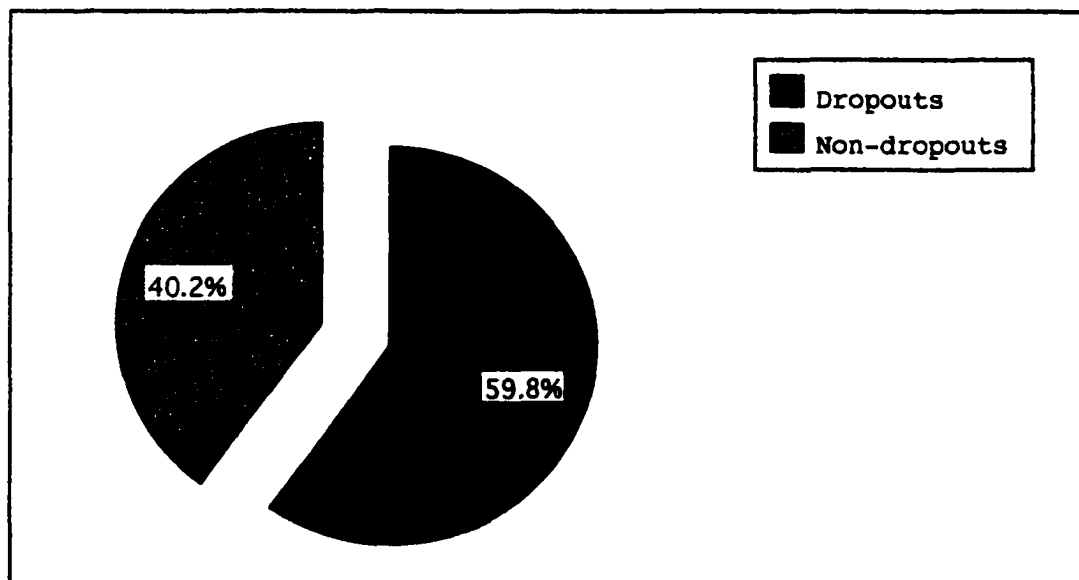


Figure 6. Special Education and Alternative Education Programs Placement

Students could be placed in the NAS or ACE program generally based on severe discipline problems. Decisions as to placement in the NAS or ACE programs are made by the Pupil Personnel Department. Students could be transferred out of the alternative education programs based on academic success, meeting the conditions of placement, or completion of the predetermined length of placement.

Single Parent Homes

Students were recorded as from single parent homes based on school records and regardless of having the home headed by the mother, father, grandparent, relative or guardian. Students from two parent homes were recorded as being from a two parent home regardless of whether the student lived with a mother and father, two grandparents, guardians, or if step-parents were involved.



Subjects From Single Or Two Parent Homes

Figure 7. Subjects coming from single or two parent homes were

determined by registration and school data bases. Dropouts came from single parent homes at close to 20 percent greater rate than students from two parent homes and are expressed by the percentages in Figure 7.

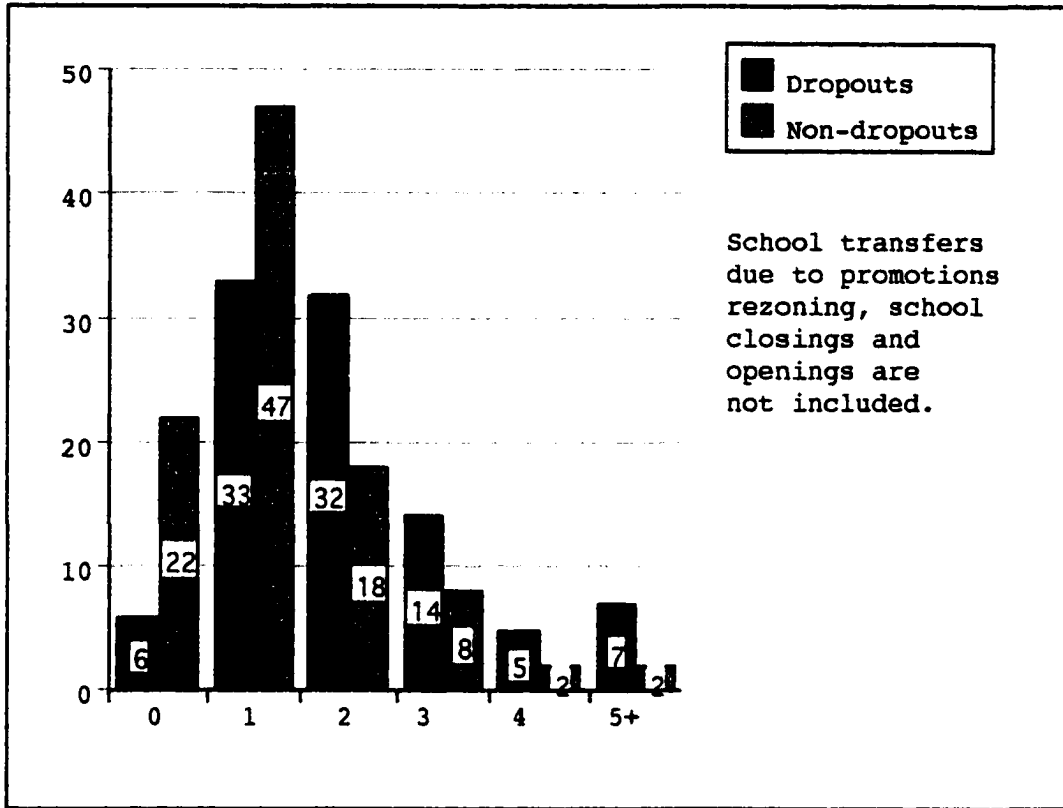
School Transfers

Efforts were made to identify family generated school transfers only. Schools transfers included transfers from one Suffolk school to another or to another school system, returns, transfers into Suffolk, and, when identifiable, transfers occurring outside Suffolk Public Schools. Transfers from elementary to middle school and middle school to high school were excluded as well as program transfers, if identifiable. Transfers were not recorded if the transfer involved a school closing and transfer of students through redistricting to another Suffolk School.

Transfers are reported as to the year a student was in a specific grade and further recorded as a cumulative total.

The researcher had to determine transfers from several record sources including report cards, grade printouts, records requests, registration forms, attendance printout, and transfers recorded on cumulative file folders. To reduce errors transfers were double checked against grade and years of transfer. If impossible to determine for specific years, the transfer data was not recorded. Transfers were recorded by grade of transfer and cumulative totals. Figure 8 showed a marked difference in the number of non-dropouts and dropouts transferring schools once, but when considering students who transferred two or more times, thirty of non-dropout transferred schools two or more times while fifty-eight of the dropouts transferred

school, two or more times.



School Transfers

Figure 8. Cumulative family generated school transfers are represented. Promotions, rezoning, school openings, and closings not counted.

ABSENCES

Absences were recorded for the first year a student was in a grade. For an additional variable cumulative total of absences was calculated and this total was divided by the number of years data was available for that student to determine a yearly average for absences. When compiled and compared to the non-dropouts as in Figure 7, 68 dropouts averaged 10-20+ days absent. Only 23 of the non-dropouts

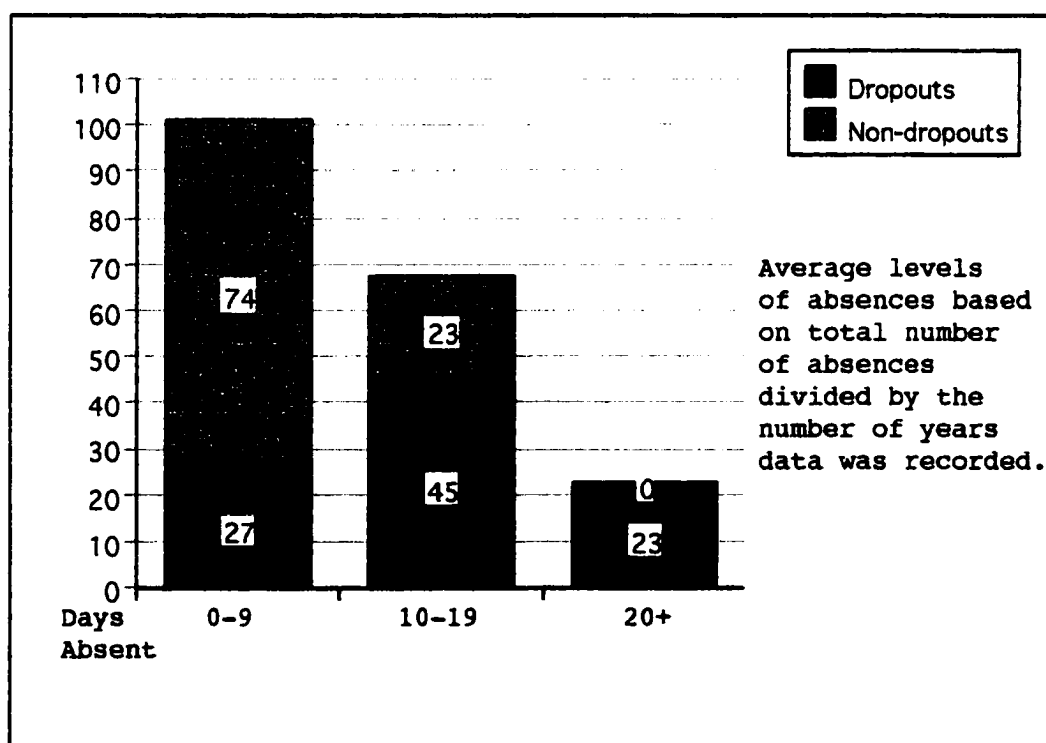
averaged 10-19 days absent with 74 non-dropouts averaging 9 or less days over the years data was available. When comparing days absent, averages of dropout and non-dropouts by grades natural grouping became evident and supported the state and local cutoff points for reporting and retention requirements of 10 and 20 day thresholds.

Table 16

Dropout Students' Absences By Grades

Days Absent	Ranges of Days Absent And Percentage of Students						Total Subjects
	0-9	%	10-19	%	20+	%	
Grade							
Kg	30	47%	17	27%	16	25%	63
1	39	54%	25	35%	8	11%	72
2	40	52%	22	29%	15	19%	77
3	33	47%	26	37%	11	16%	70
4	40	53%	24	32%	11	15%	75
5	42	53%	22	28%	15	19%	79
6	23	29%	32	41%	23	29%	78
7	13	18%	32	43%	29	39%	74
8	12	20%	19	32%	27	47%	58
9	1	8%	5	42%	6	50%	12
10	4	33%	2	17%	6	50%	12
11	1	100%					1

On average, dropouts tended to be above 10 days absent while the non-dropouts' averages remained below the 10 day cutoff. The most significant difference in means appeared at the ninth grade when students move on to a larger high school, and larger numbers of students. This grade coincides with the grade that has the highest percentage of students dropping out of school. Figure 9 shows the data generated absences' groupings which follow state reporting and local retention attendance policies and thresholds. The researcher grouped data under 0-9 absences, 10-19 absences, and 20 or more days absent to determine how to analyze the data.

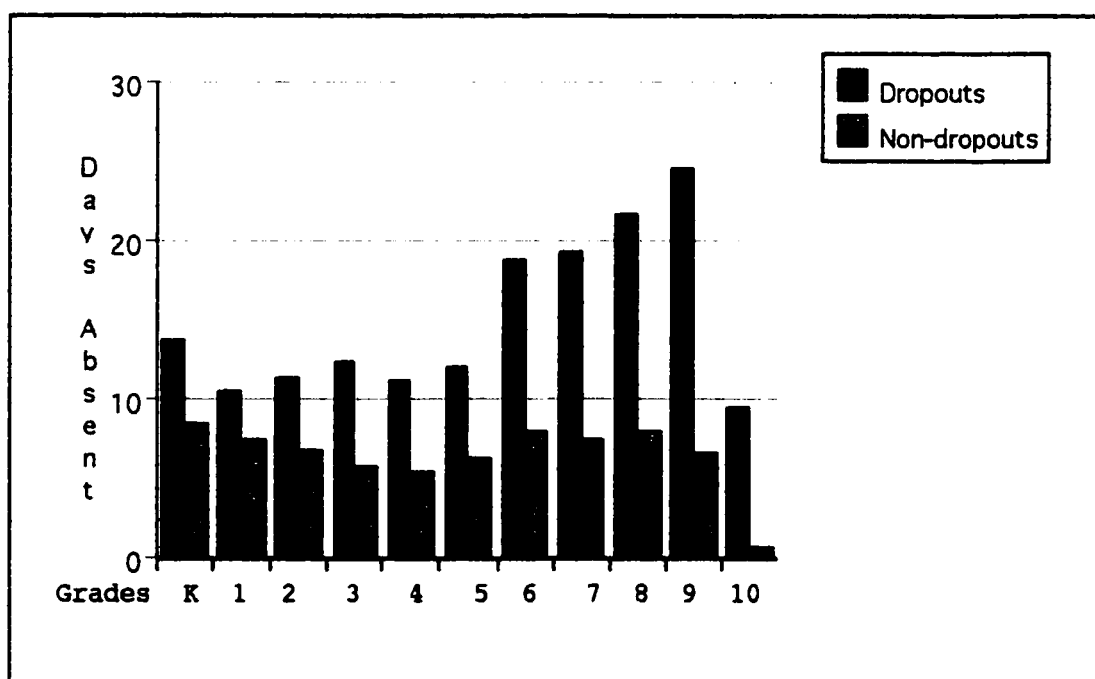


Absences By Groupings

Figure 9. Figure 9 demonstrates that 45 of the dropouts missed on average 10 days or more while only 23 comparison group non-dropouts

missed 10 days or more. No non-dropouts missed on average 20 or more days per year.

In grades kindergarten through fifth, generally between thirty and forty percent of the dropouts missed less than ten days of school. At sixth grade, and with the move to middle school, less than twenty-five percent of dropouts missed ten days or less. In moving to ninth grade, and high school, less than five percent missed ten days or less. While attendance data by grade level was interesting, the final determination on how to effectively use attendance data was to calculate the average yearly absences producing a single variable.



Groups' Absences By Grade Levels

Figure 10. Absences are grouped by grade level and average days absent. At grades Kindergarten through 9th, dropouts averaged more than 10 days absent per school year.

GRADE RETENTIONS

A significant number of students were retained presenting the researcher with a subject's data from several years at the same grade. To eliminate the potential of excessive overlays of data, the research used data from the first year a student was in a grade. To account for retentions, students with grade retentions were recorded as potential predictor variables by grade levels and cumulative totals.

Retention criteria had modified over the years of the study adjusting to changes in the curriculum and grade level minimum requirements. From 1979 to 1991 school year, with minor revisions, students in grades 1-8 had to master minimum reading book levels and standardized test score above cutoff minimum scores to be promoted.

It was entirely possible for a student to have passing grades on their report card and still be retained, based on the student performing below grade level in reading and having poor standardized test results.

After 1991, students were promoted when they met three of the following criteria with numbers 1 and 2 being mandatory:

- 1) Successfully completed the appropriate grade reading book level,
- 2) Achievement as judged by the teacher(s) in all subject areas,
- 3) Standardized reading comprehension test scores,
- 4) Standardized math total test scores.

Promotion for high school students was based on the number of high school subject units passed. With the advent of the Literacy Passport tests, promotion to the 10 grade and graduation was predicated

on successfully competing the required units and passing the LPT. Kindergarten promotion was based on kindergarten assessment tests, overall satisfactory academic achievement, and growth in social development as evidenced by report cards (Suffolk Public Schools, 1991). In 1997 the promotion policy was tightened with requirements based on the state Standards of Learning [SOL] objectives and grade level Language Arts and Mathematics assessment tests. The kindergarten promotion requirements remained basically the same with assessment tests being based on SOL objectives, with students in grades 1-5 required to meet all of the following four items for promotion:

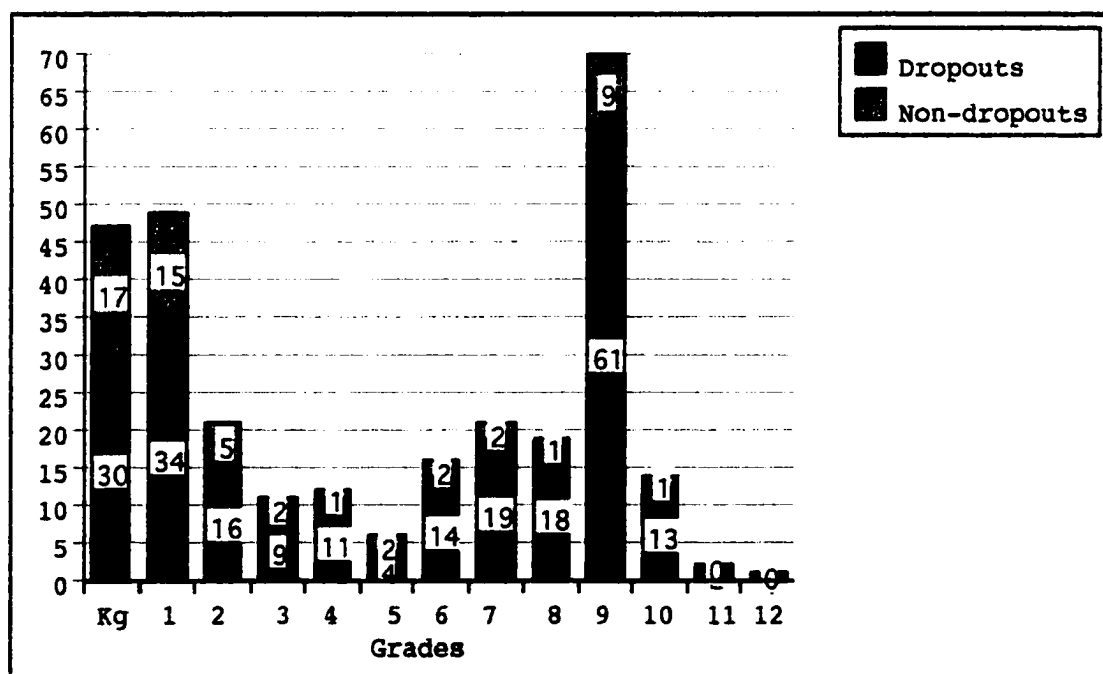
- 1) Mastery of grade level SOL objectives as measured by Language Arts assessment tests,
- 2) Overall satisfactory achievements as evidenced by teacher recommendation and/or report card grades,
- 3) Mastery of grade level SOL objectives as measured by Mathematics Assessment tests,
- 4) Standardized reading and/or mathematics tests scores meeting minimum grade level requirements.

In grades 6-8 students must meet 3 of the following criteria:

- 1) Successfully complete minimum book levels,
- 2) Achievement (passing grades) in all major subject areas as judged by the teacher,
- 3) Meeting minimum standardized test score in reading,
- 4) Meeting minimum standardized test score in mathematics.

Students who did not pass any of the three LPT subtests- writing, reading or math were to remain in 8th grade. Eighth grade students

passing one or two of the LPT tests could be moved to high school and would be considered "ungraded" until all three parts of the LPT are passed. Students in grades 9-12 were mandated pass required number of units and pass the LPT tests to graduate (Suffolk Public Schools, 1997). Special education students' promotion was based on achievement as determined by their Individualized Educational Plans (IEP). Students in grades 9-12 were promoted on the number of graduation credits earned the previous year. Students who did not pass the Literacy Passport Tests would be considered 9th grade students. In 1997, the policy was amended to include provision for the Standards of Learning (SOL) objectives. Students had to score above a minimum score on standardized test in reading or math and the retention be supported by poor report card grades.

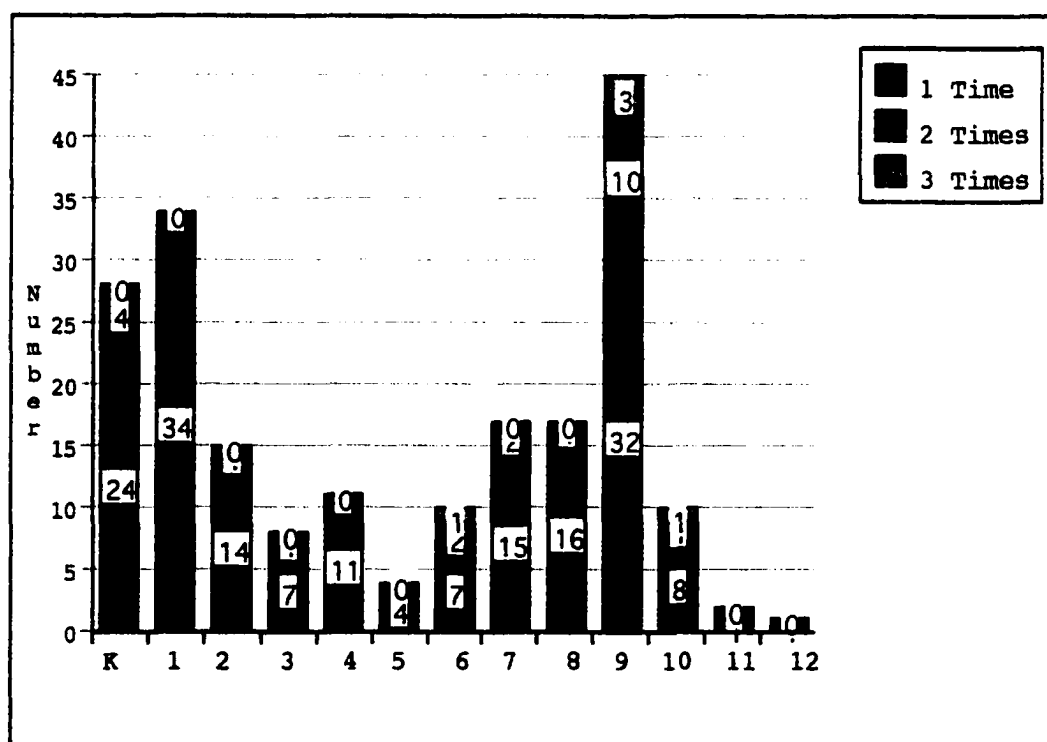


Groups' Retentions By Grades

Figure 11. Subject groups' retentions are organized by grades levels.

Excessive unexcused absences, above 20 days, were an additional factor in both retention policies.

Figure 11 demonstrates an uneven distribution of retentions with kindergarten, first, and ninth grades as having the highest number of retentions for both dropouts and non-dropouts. Ninth grade retentions account for the highest level dropouts' retentions. This number is compounded by the fact that students who had not passed the LPT were considered ninth graders even while taking higher grade level classes. As an incentive to pass the LPT tests ungraded and ninth grade high school students who had passed all three sections of the LPT tests were not permitted to participate in extracurricular activities.



Dropouts Retentions By Times And By Grades

Figure 12. Groups are recorded by times retained and grades. Figure 12 illustrates that students could and would be retained a second year in

a grade, especially in kindergarten and ninth grade. Only 21 of the dropout subjects were never retained, while 79 of the subjects were retained one or more times. Fifty-four dropouts were retained two or more times and twenty-five dropouts were retained three or more times. Non-dropouts were not retained in a grade more than once. In total, 132 dropouts and non-dropouts were retained at least once.

The number of retentions would have been higher except for the fact that retentions in one school were not always discovered or honored when students transferred to another school. Additionally, at times retentions were overruled by administrative decisions and documented in the cumulative student records. In Suffolk Public Schools retentions up to the year 1991 were based on mastery of minimum reading levels and meeting minimum standardized tests' scores. These scores were not indicated on report cards. Report card grades could appear not to merit a number of retentions without a further review of the student's records. In grade level comparisons, dropouts were slightly less than 2 years older than non-dropouts at the same grade level.

POOR GRADES

Poor grades were recorded as to the first year a student was in a grade. Kindergarten grades were reported as X's and V's and well over 40 areas could be graded. Kindergarten grades were not recorded due to the high number of possible grades and the possibility of skewing results. The recorded grades were for reading, spelling, writing, math, science, social studies, health, and middle and high school courses. Grades from music, physical education, art, semester courses,

and exploratory middle school classes were included as well.

Table 17

Dropout Students' Poor Grades By Grade Level

Poor Grades Grade	Poor Grade Ranges And Numbers								Total Subjects
	0	%	1-2	%	3-4	%	5+	%	
1	51	65%	20	25%	7	9%	1	1%	79
2	50	63%	16	20%	11	14%	2	3%	79
3	47	58%	21	26%	6	8%	6	8%	80
4	27	38%	24	33%	11	15%	10	14%	72
5	34	44%	18	23%	14	18%	12	15%	78
6	19	23%	23	28%	16	20%	24	29%	82
7	19	24%	23	28%	17	21%	22	27%	81
8	18	24%	14	18%	24	31%	21	27%	77
9	8	10%	5	6%	13	15%	57	67%	83
10	1	4%	2	8%	11	45%	10	42%	24
11	0	0%	0	0%	3	75%	1	25%	4
12	-	-	-	-	-	-	-	-	-

The later subjects' grades are often based on participation, products, and conduct and may reflect students' attitudes towards not only the courses, but towards school in general. For an additional variable cumulative total of poor grades was calculated and this total

was divided by the number of years data was available for that student to determine yearly averages for poor grades.

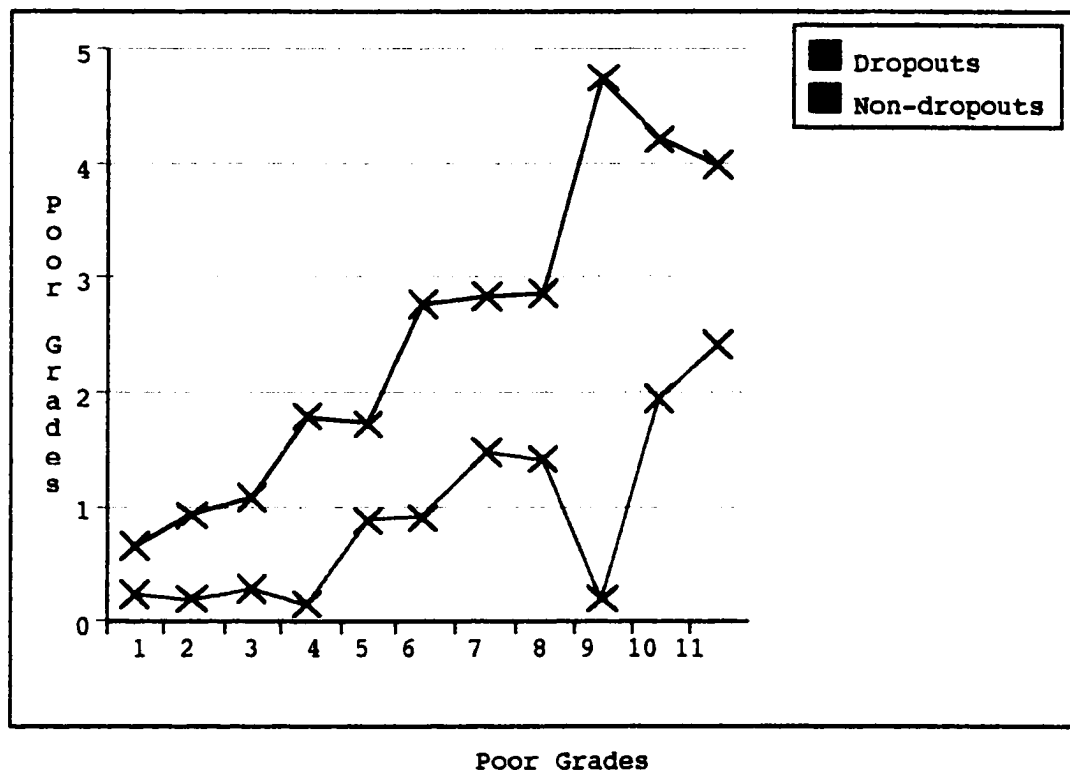


Figure 13. Poor grades include D's, F's, U's, N's, and I's.

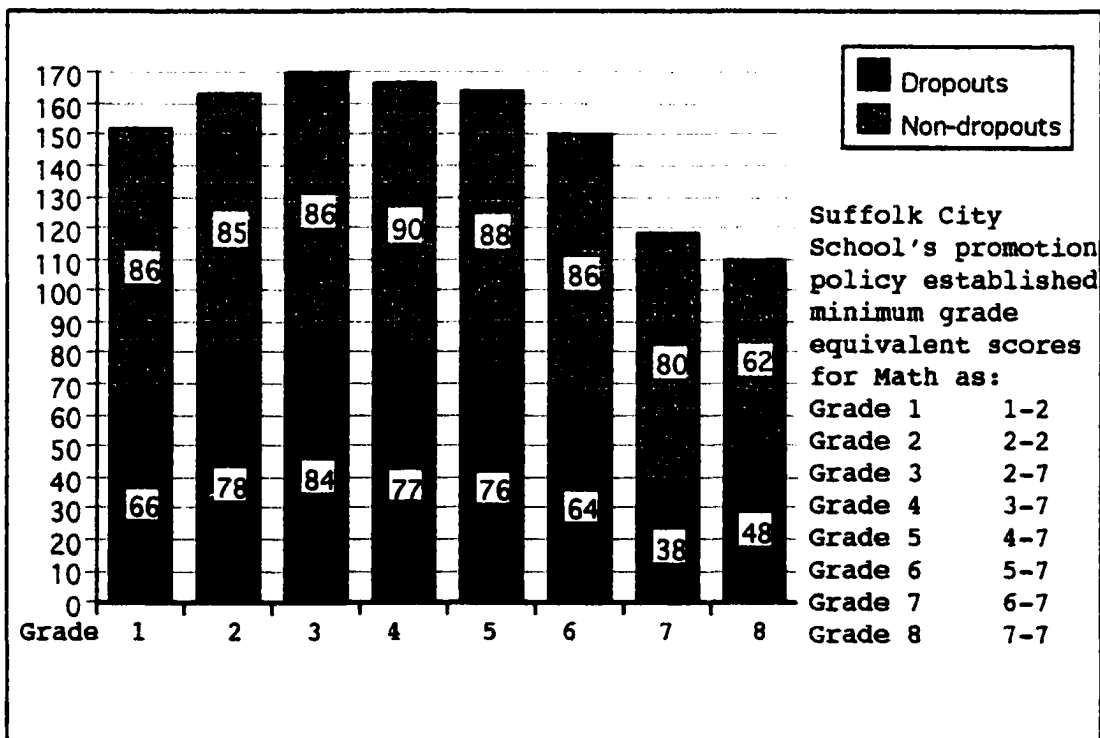
An average of 4.6 poor grades for dropouts in the year prior to dropping out was calculated. Some subjects did not have recorded grades for all school years or grades. Record transfers from one school to another were at times incomplete, academic progress formatted in a different fashion, or simply missing.

Dropout students averaged poor grades at a much higher rate than non-dropouts, with 55 dropouts averaging 2-5+ poor grades a year, to 18 non-dropouts yearly averaging 2-5+ poor grades.

STANDARDIZED TEST RESULTS

Until 1997, Suffolk Public Schools required students to take standardized tests in grades 1-8 and minimum scores were included as part of the promotion policy. Reading comprehension and Math total scores were selected by the researcher for recording. These scores were routinely reported in the variety of the tests given to students. The Metropolitan Achievement Tests (MAT) were given up to the spring of 1988 in grades 1-8. Scores were reported in raw, grade equivalent, and percentile scores. The researcher recorded the grade equivalent (GE) scores from the cumulative files. In 1987-95, students in grades 1-8 were administered the Iowa Tests of Basic Skills (ITBS) and these scores were recorded as grade equivalents. The Stanford 9 tests was given during the 1996-1997 school year. Grade equivalent scores were used for data analysis. Grade equivalent scores were used in view that Suffolk's promotion policy was tied to minimum grade equivalent scores, three different standardized tests with different norms and standardized scores were used, and grade equivalent scores were available for most students. Grade equivalent scores while having limitations are close to standard scores as opposed to percentile scores which are ordinal and present data analysis problems (Jack E. Robinson, personal communication, April 15, 1999). Individual Education Plans (IEP's) for special education students often require standardized tests to be given under non-standard testing conditions or given below students' grade levels. Test scores for special education students when given off level or below their grade level designation. these were not recorded so as not to skew results.

Promotion cut-off grade equivalent (GE) cut scores were originally based on the Metropolitan Achievement Test scores with grade equivalent scores for grades 1-5. The reading GE cutoff scores shown in Figure 12 fell between the 14th nationally normed percentiles and 38th and for math between the 20th and 26th percentiles (Prescott, Balow, Hogan, and Farr, Rodger, 1978a, 1978b). With the replacement of the Metropolitan Achievement Tests by the Iowa Tests Of Basic Skills the GE cut-off scores in grades 1-8 roughly corresponded to the range of scores falling just above or below the 25th percentile for the Iowa Tests of Basic Skills (Riverside Publishing Company, 1986a, and Riverside Publishing Company, 1986b).

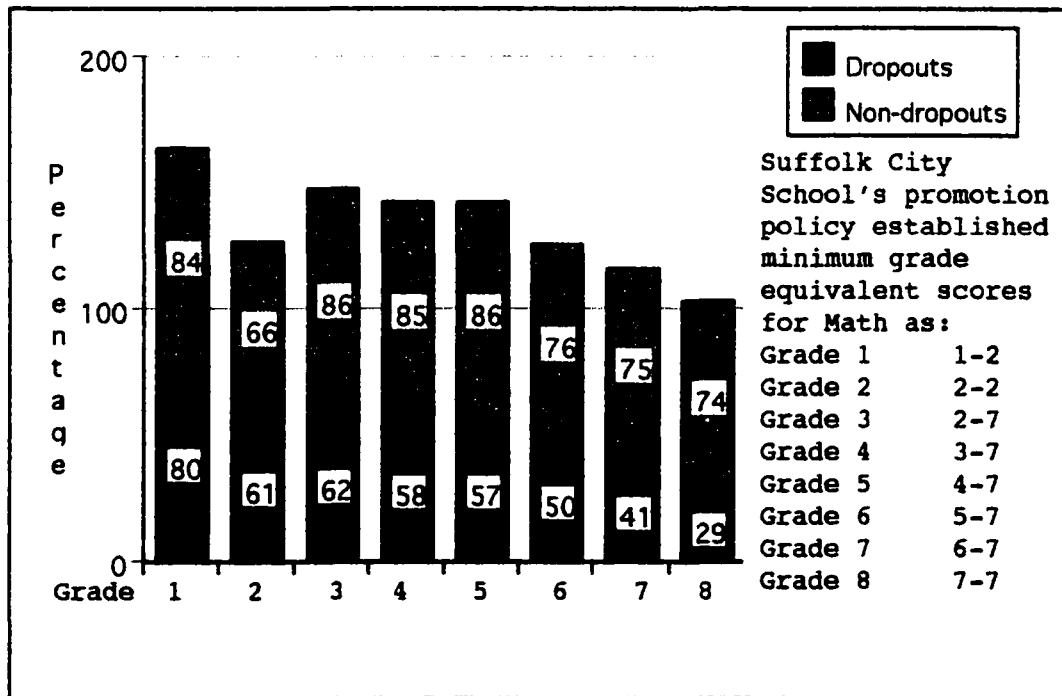


Students Meeting Math Requirements

Figure 14. Figure 14 gives the percentage of students meeting the

minimum math GE and the GE for each grade's promotion requirements as established by School Board policy.

The difference in the reading grade equivalent means of the dropouts and non-dropouts generally widen as the students move through the grades. Only in second grade did the gap favor the dropouts with a GE average of 2-8 for dropout and 2-7 for non-dropouts. From third grade on, the gap widens from six months to over a year with GE scores for grades four through eight averaging from one year to a year and four months. Seventh grade presents the largest GE difference of a year and four months. The average difference between dropouts and non-dropout GE means over the eight years was eight months.



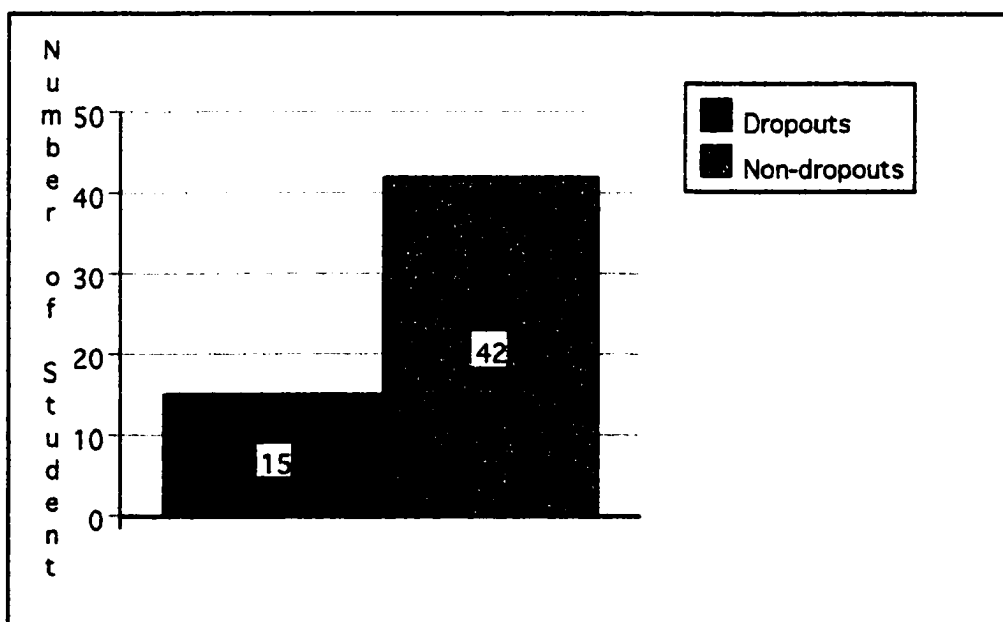
Students Meeting Reading Requirements

Figure 15. Gives the percentage of students meeting the minimum reading comprehension scores on standardized tests as established by School

Board policy.

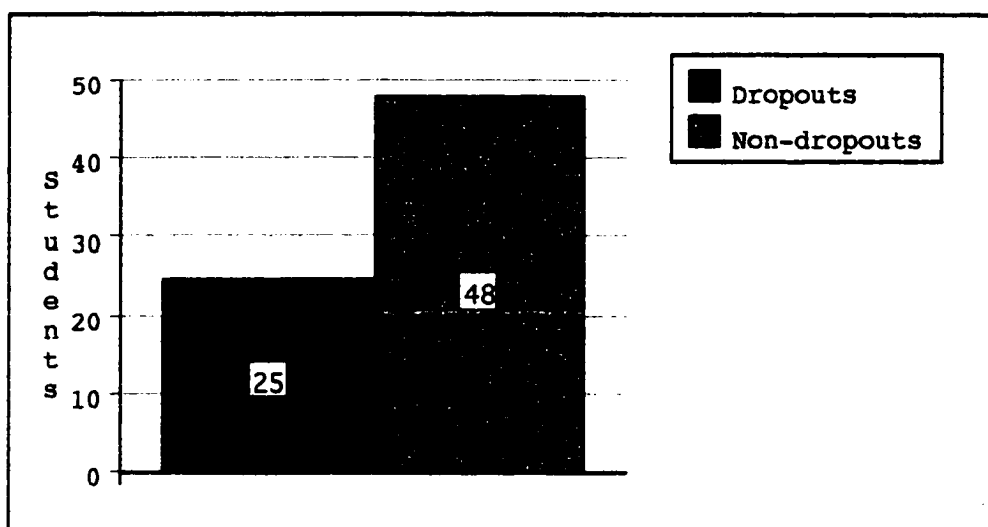
The difference in means for math are the widest in fourth grade with a year and seven months closely followed by third grade at a year and five months. The average difference for math means between dropout and non-dropouts was eight months.

Figures 16 and 17 illustrate the times students consistently met the grade level grade equivalent minimum reading and math minimum requirements. Over their school years 15 dropouts consistently meet the minimum reading requirements, while 42 non-dropouts met or exceeded minimum scores on each attempt. Dropouts were more than two times likely not to meet the minimum reading requirements.



Subjects Meeting Minimum Reading Scores

Figure 16. Shows subjects who consistently met the minimum reading scores over the course of their school career.



Subjects Meeting Minimum Math Scores

Figure 17. Shows subjects who consistently met the minimum math score over the course of their school career.

Dropouts did slightly better on math tests with 28 percent meeting the minimum requirements as compared to 51 percent of non-dropouts meeting math minimum requirements over their school years. Dropouts were slightly less than twice as likely not to meet math requirements as were the non-dropouts.

The presentation of reading and math requirements data in this manner may prove more practical and flexible with the evolution of local and state promotion requirements and less reliant on commercial standardized tests.

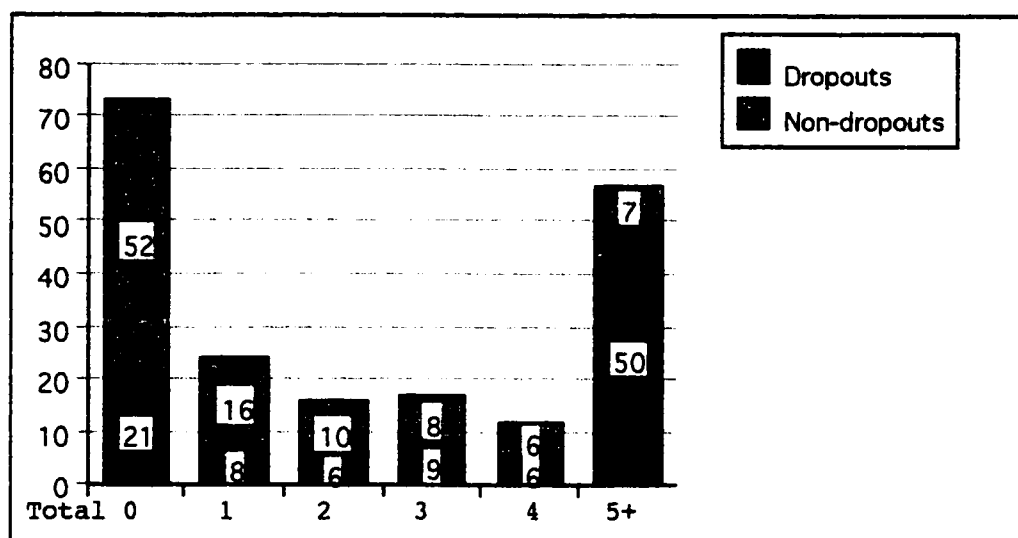
DISCIPLINE

Up until 1996-1997 discipline records were considered Category II records and housed separately from the cumulative records. Over time with transfers and promotions to the next school level, files were

frequently separated and misplaced. Few discipline records including suspensions, administrative hearings, and expulsions were found in the high school students' cumulative records. To gather this information the researcher consulted the central office's yearly system printouts of discipline actions including suspensions, administrative hearing, and expulsions. Discipline records were recorded in data bases beginning in 1992.

Suspensions

Students are suspended by each school's administration and a copy of the suspension notices are forwarded to the Pupil Personnel Department. This is recorded by student's name and nature of the offense. Students may be suspended for severe violations, or repeated violations of school board policy. Under the current procedures copies of suspension notices are to be kept in the cumulative files and forwarded to the next school in a specially marked file folder. This practice has been required for only the last three years. Transfer students seldom had discipline records sent by other school systems. The subjects studied for the most part did not have suspension notices for the years prior to 1995, and the researcher had to rely on printouts from Pupil Personnel for the only years available, 1992 through 1997. The researcher noted that fifty percent of the dropouts were suspended five or more times, while 52 percent of the non-dropouts were never suspended. In total, 137 of the 200 students were suspended at least once during the five years records were kept on the central computer. Knowing some of the subjects, the researcher was aware of unrecorded additional suspensions prior to the years 1992-1997.



Out-Of-School Suspensions

Figure 18. The number of out-of-school-suspensions is based on the years 1992-1996 and are cumulative totals.

Administrative Hearings

Administrative hearings are held for students who have committed severe violations of school board policy or repeated offenses. Administrative hearings were recorded by the student's grade level and could include data for two or more years of hearings if the student has been retained or held in a particular grade. To eliminate this problems of over-reporting administrative hearings, the number of hearing per year was listed, and the most extreme year was recorded for analysis. Lists of all students having administrative hearings were supplied by the school system's Pupil Personnel Department for the school years 1992-93 to 1996-97. This information is displayed in Figure 19. Of the dropouts studied, 45 students had one or more administrative hearings while only 12 non-dropouts had administrative

hearings recorded.

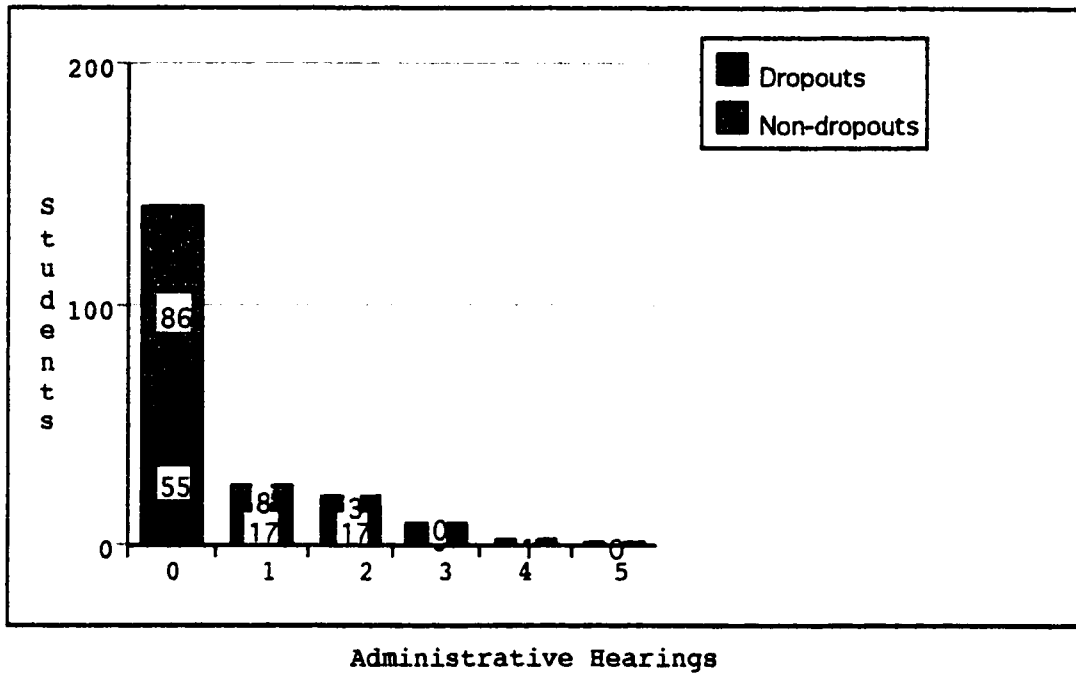


Figure 19. Cumulative administrative hearings data was corrected from the school system's central office file for 1992-1997.

It must be noted that hearings prior to 1992 were not recorded on data bases and the researcher found that students' transferring from other school systems seldom had administrative hearings recorded in their files.

Administrative hearings must precede, and recommend expulsions. Fifteen of the dropouts were expelled at least once in the recorded school years, while no non-dropouts were expelled. Expulsions were for one year at a time and could be carried over from one school year to the next based on the date of expulsion. It was not uncommon for expelled students to return to school once their expulsion had expired.

Dropouts' Documented Noteworthy Factors

Several factors or circumstances were noted as the researcher went through the dropouts' cumulative files, or during revealing discussions with the high schools' staff members. These factors could not be used in the data analysis because they were not routinely recorded for all students. These additional factors significance lies in their potential as warning signs that the student may need to be referred for consideration by the on-site alternative education committee.

Court and transfer records from penal institutions found in the cumulative files indicated that eight students had been incarcerated. Fourteen students had been declared delinquent by the courts, and an additional seven students had court involvement. This information was not used for analysis due to the fact that such information was not routinely recorded. Additional non-routine factors were anticipated to be discovered in interviews.

DATA ANALYSIS

Organization of Data

Each subject had the potential of having 160 variables or grouping of variables. Some data could be recorded a nominative, or interval, or ratio scales. It became necessary to group some data by ranges, cumulative, and totals. This became a particular concern when dealing with standardized test scores. The research decided to use whether students met minimum GE requirements rather than attempting to use or compare scores from at least two different standardized tests. With the evolving nature of promotion policies, testing methods,

Table 18

Groupings of Selected Variables

Variables	Groupings					
a) Absences	0-9	10-19	20+			
b) Poor Grades	0	1-2	3-4	5+		
c) Retentions	0	1	2	3	4	5+
d) School Transfers	0	1	2	3	4	5+
e) Suspensions	0	1	2	3	4	5+
f) Administrative Hearings	0	1	2	3	4	5+
g) Times Taken Competency Tests	1	2	3	4	5	6
h) Times Not Meeting Reading Minimum	0	1	2	3	4	5+
i) Times not Meeting Math Minimum	0	1	2	3	4	5+

and curriculum changes based on the accountability movement, the researcher looked for ways to keep any prediction model flexible and current. The variables tended to group themselves as well, as demonstrated in Table 18. These groupings helped the research decide which variable to consider, determine how to organize data for analysis, and determine trends or differences between dropouts and non-dropouts.

Discriminate Function Analysis

The research originally considered using multiple regression as an initial data analysis step. Multiple regression was not conducted after the subjects' variables were collected and organized. The variables considered were not exclusively interval or ratio as required for multiple regression. Further, there was little need to work through the interval or ratio predictor variables using multiple regression when the central measures of the available predictors clearly pointed to the variables of interest. Discriminate function analysis alone would provide the critical weights or discriminate function coefficient which would enable the researcher to develop a set of variables and criteria to classify subjects into the two groups of potential dropouts and non-dropouts. With discriminate function the researcher examined a number of variables at one time. The ultimate goal was to develop a formula that enables educators to predict group membership in the future using a combination of variables which could be nominal, ordinal, interval, or ratio. Finally, the formula was expected to provide the researcher with an individual's prediction score to help determine if a subject should be considered a potential dropout and eligible for alternative education and placement.

The major concern was to develop an equation that is relatively accurate and minimize incorrect predictions. This had to be done within the limits of the information available, be politically defensible, and if possible, culturally, economically, socially, and ethnically neutral. The researcher concentrated on measurable, performance based academic and behavioral variables as demonstrated in

Table 19. The researcher wanted to consider variables which had the capacity to identify potential dropouts fairly early in a student's school career. The researcher did not want to rely on all variables being present. For example, the grade level and type of competency tests may change over time, so a numerical score from one specific test may be of no value in a future prediction formula. It is important whether a student passed a required competency test and that information would be of value.

A student may not have reached the grade level the competency test is given, so there must be a sufficient number of other variables that may be applicable to the students to allow the formula to work.

Finally, no one variable should be used to determine if a child should be considered for alternative education, such as minimum times retained.

Table 19 lists the potential variables which could cover the areas of attendance, grades, standardized test scores, competency tests, discipline and behavior, retentions, and school transfers. The task is to find the best combination of predictive factors.

Variables were selected using several criteria. Variables had to be available in students' records or systems' data bases. Variables are to have standard definitions and are recorded in a regular manner. Students' absences and retentions are required to be recorded. School transfers can be accounted for through records that have been transferred. Suspension and administrative hearing records are required to be kept in central office files or data bases. In Virginia competency test scores are required to be kept for

accreditation of individual schools, as part of promotion requirements, and as a requirement for high school graduation.

Table 19

Variables Selected And Abbreviations

Abbreviation	Variable Description
TEXP	cumulative total expulsions
TADH	cumulative total administrative hearings
STT	total school transfers
TOSS	cumulative total out of school suspensions
LPTOT	Passed LPT tests on time or first time in 6th grade
ABAVG	average yearly absences
TBRM	times below required reading minimum score
TBMM	times below required math minimum score
PYGA	poor grade yearly average
TRET	total times retained
RETK1	total times retained in kindergarten and first grade

Pearson Correlation

The researcher conducted a Pearson Correlation to determine the relative strength and direction of the variables relationship to each other. The researcher conducted 2-tailed test for significance to determine if the scores are more or less likely to be a function of

chance. Level .05 was selected as the minimum level of significance (Ary, Jacobs, and Razavieh, 1990). Based on additional calculation, seven variables were selected and included in the top section of the Table 20. The variables TBMM, TBRM, and RETK1 were eliminated due to

Table 20

Pearson Correlation

Selected Variables							
	TEXP	TADH	STT	TOSS	ABAVG	PYGA	TRET
TEXP	1.000	-	-	-	-	-	-
TADH	.444***	1.000	-	-	-	-	-
STT	.053***	.031*	1.000	-	-	-	-
TOSS	.315***	.662***	.062*	1.000	-	-	-
ABAVG	.166*	.232***	.320***	.253***	1.000	-	-
PYGA	.111*	.281***	.189**	.295***	.221***	1.000	-
TRET	.168**	.444***	.222**	.471***	.391***	.427***	1.000

Note: *** Correlation is significant at the .01 level (2-tailed).

** Correlation is significant at the .05 level (2-tailed).

* Correlation is significant at less than the .05 level (2-tailed).

low correlations, low levels of significance, redundancy, and replacement by the state and local generated SOL tests. Further work with discriminate function analysis supports the elimination of the three potential variables.

Using .400 or better only five variable combinations had a moderate level of correlation with a high level of significance of 0.01 or better. TADH or total administrative hearings correlated at a .662 level with TOSS, total out of school suspensions; .503 with TEXP or total expulsions; and .444 with TRET, total times retained. Total retentions or TRET correlated at a moderated level with TRTK1, total retentions in grades kindergarten and first or .513; poor yearly grade average, PYGA, at .427; total expulsions, TEXP at .444; total out of school suspension, TOSS at .471; and average absences, ABAVG, at .391. All scores were at the two-tailed level of significance of .000. Low grades, poor behavior, low test scores, retentions, and excessive absences all appear to have moderate levels of correlation.

Wilks' Lambda

The SPSS program and discriminate function analysis provided the researcher with a variety of statistical tools including Wilks' Lambda. With eleven predictor variables Wilks' Lambda score was .379 with a significance of .000. Using the seven variables 88.1% of the total subjects were correctly identified and 80% of the cases were valid missing no discriminating variables. The canonical correlation, which measures the percentage of variance accounted for by the variable between the groups, was .788. When the variables were ordered by relative importance the discriminate function coefficient values are analogous to beta weights such as you would have with multiple regression. These discriminate function coefficients give the researcher a clearer picture of the variables' weight in any calculations.

The researcher then attempted to determine if a reduced number of variables could produce as high a level of significance and percentage of variance accountability. Times below math minimum (TBMM) and times below reading minimum (TBRM) were deleted now that

Table 21

Standardized Canonical Discriminate Function Coefficients

Variable	Function	Shorten Variable Description
TRET	.703	Total times retained
TOSS	.445	Total out of school suspensions
ABAVG	.374	Average yearly absences
STT	.283	School transfers total
LPTOT	-.259	Passed Literacy Passport on time
TADH	-.255	Total administrative hearings
RETK1	-.247	Total Kg and first grade retentions
TBMM	-.205	Times below math minimum
TBRM	.197	Times below reading minimum
PYGA	.105	Poor grades yearly average
TEXP	.131	Total expulsions

SOL state and local testing has replaced nationally standardized reading and math tests. Total kindergarten and first grade retentions (RETK1) was deleted due to the high correlation and redundancy with total times retained (TRET). Total times expelled (TEXP) was deleted

due to its low function value and low incidents in the sample. Poor yearly grade average (PYGA) was retained to fill the need to account for academic achievement as indicated on report cards. In Table 21 standardized canonical discriminate function coefficients indicate each variables relative contribution towards discrimination between groups of dropout and non-dropouts. The most significant discriminate function coefficients appear to be those for retentions, absences, and out of school suspension.

Table 22

Reduced Variables Standardized Canonical Discriminate Function Coefficients

Variable	Function	Shorten Variable Description
TRET	.588	Total times retained
ABAVG	.441	Average yearly absences
TOSS	.394	Total out of school suspensions
LPTOT	-.221	Passed Literacy Passport on time
STT	.216	Total school transfers
TADH	-.097	Total administrative hearings
PYGA	.048	Poor grades yearly average

The researcher intended to determine if there were significant differences between the predictor variables when the variable of residential environments was introduced. Discriminated function analysis was calculated for each of the residential environments

and a table was developed to demonstrate each environment's standardized canonical discriminate function coefficients. Table 23 gives these values.

Based on the discriminate function coefficients generated for subjects from each residential environment correctly classified subjects in each environment in varying percentages. The rural subjects were correctly classified as dropouts or non-dropouts at a percentage of 97.7%. Town subjects, while having only five subjects, were correctly classified at 100% percentage. Suburban subjects were correctly classified at 94.2% percent and urban subjects were classified at a 85.7% correct percentage.

Table 23

Discriminate Function Coefficients By Residential Environments

	Rural	Town	Suburban	Urban
TRET	.674	TRET .468	ABAVG .555	TRET .727
STT	.512	ABAVG 1.073	TOSS .601	ABAVG .450
LPTOT	-.211	PYGA NU	TRET .115	TOSS .418
ABAVG	.559	TOSS -.362	TADH .210	TADH -.151
PYGA	-.071	STT NU	STT .468	PYGA .008
TOSS	.789	LPTOT NU	PYGA -.160	STT .080
TADH	-.651	TADH NU	LPTOT-.038	LPTOT-.229

Note: NU- not used

Once student results were broken down by residential environments the researcher was able to determine the dropouts' and non-dropouts' means by residential environments. The researcher noted that the students from the town residential environment lacked the necessary number of subjects and data. Town calculations were discontinued.

Results in Table 24 show that when the averages for the town subjects are removed the dropout and non-dropout averages are consistent in the total formula's top three variables- retentions, absences, and suspensions. The total, rural, suburban, and urban

Table 24

Dropouts' Means By Residential Environments

Variable	Total	Rural	Town	Suburban	Urban
TRET	2.4468	2.1765	1.5000	2.0588	2.7143
ABAVG	15.2498	13.2329	11.3275	16.7865	15.6757
TOSS	6.0957	4.0588	2.0000	7.2941	6.6429
LPTOT	.2021	.1765	.0000	.3529	.1786
PYGA	2.2954	2.3365	2.2700	1.2562	2.2861
TADH	.9043	.3529	.0000	1.3529	1.0000
STT	2.1064	1.3201	2.7500	1.1472	1.9464

dropout subjects averaged two or more retentions and ten or more days absent per year. The dropouts averaged four to seven total suspensions.

As indicated in Table 24 the non-dropout subjects averaged less than ten absences per year and, on average, were retained less than once. Non-dropouts were suspended on average from less than one, to slightly more than two times, with the urban subjects having the highest average number of out of school suspensions. As a group, dropouts had more poor grades per year and transferred schools more often.

The researcher considered the values with the standardized canonical discriminate function coefficients to determine the relative significance for each variable for the total group and the three remaining residential environments. Table 25 displays the relative position or rank of variables' significance for the total subjects and each remaining residential environment. The discriminate function

Table 25

Non-Dropouts' Means By Residential Environments

Variable	Total	Rural	Town	Suburban	Urban
TRET	.5474	.3463	1.0000	.4545	.7714
ABAVG	7.2633	6.8038	16.0000	5.5706	8.9509
TOSS	1.4842	1.0769	No data	.9394	2.3429
LPTOT	.6105	.6923	1.0000	.6970	.4571
PYGA	1.1767	1.0465	.8300	1.0845	1.3703
TADH	.1895	.007	No data	.1515	.3143
STT	1.2316	.9231	4.0000	1.2121	1.4000

coefficient are analogous to multiple regressions' beta weights. Retentions maintain the first, second, or third position for the total and three residential environments. Average absences and total out-of-school suspensions generally fell in the second and third position. Poor yearly grade averages generally maintained the position as least significant.

Figure 18 takes the information from Table 26 and graphically displays the relative importance of variables' coefficients' weights for each residential environment. Retentions maintain the first position for all but suburban students where it is ranked third.

Table 26

Standardized Discriminate Function Coefficients

Variable	Function Coefficients			
	Total	Rural	Suburban	Urban
TRET	.588 (1)	.674 (2)	.115 (6)	.727 (1)
ABAVG	.441 (2)	.559 (4)	.555 (2)	.450 (2)
TOSS	.394 (3)	.789 (1)	.601 (1)	.418 (3)
LPTOT	-.221 (4)	-.211 (6)	-.038 (7)	-.229 (4)
STT	.216 (5)	.512 (5)	.468 (3)	.080 (6)
TADH	-.097 (6)	-.651 (3)	.210 (4)	-.151 (5)
PYGA	.048 (7)	-.071 (7)	-.160 (5)	.008 (7)

Note: Standardized coefficient give the relative contribution of the variable to the overall discrimination. The number in parenthesis () indicates rank within residential environment.

Excessive absences and total out of school suspensions generally fell in the third position.

Significant differences in means between the groups were calculated by using Tukey HSD. Results suggest that there are significant differences in the variable means at the .05 level. Further calculation using discriminate function analysis led the researcher to develop separate formulas for the total, rural, suburban, and urban residential environments. Significant differences in observed means were not found with STT and PYGA using Tukey HSD. Table 27 suggests that there are significant differences in means that must be considered in developing formulas and individual student's scores. The formula for the urban students may need adjustment in terms of the formulas for rural and suburban students.

Table 27

Significant Urban Mean Differences

Variable	Rural	Suburban
TADH	.5563*	-
TOSS	2.6927*	-
ABAVG	3.8047*	3.8088*
TRET	.9246*	.9825*

Note: *Significant at the .05 level

Further, the urban values are less accurate and produce a lower

percentage of correct predictions as indicated in Table 28. Only by studying the residential environments' formulas' correlations with the total formula can we determine with a high degree of confidence if separate formulas need to be used for students from each residential environment.

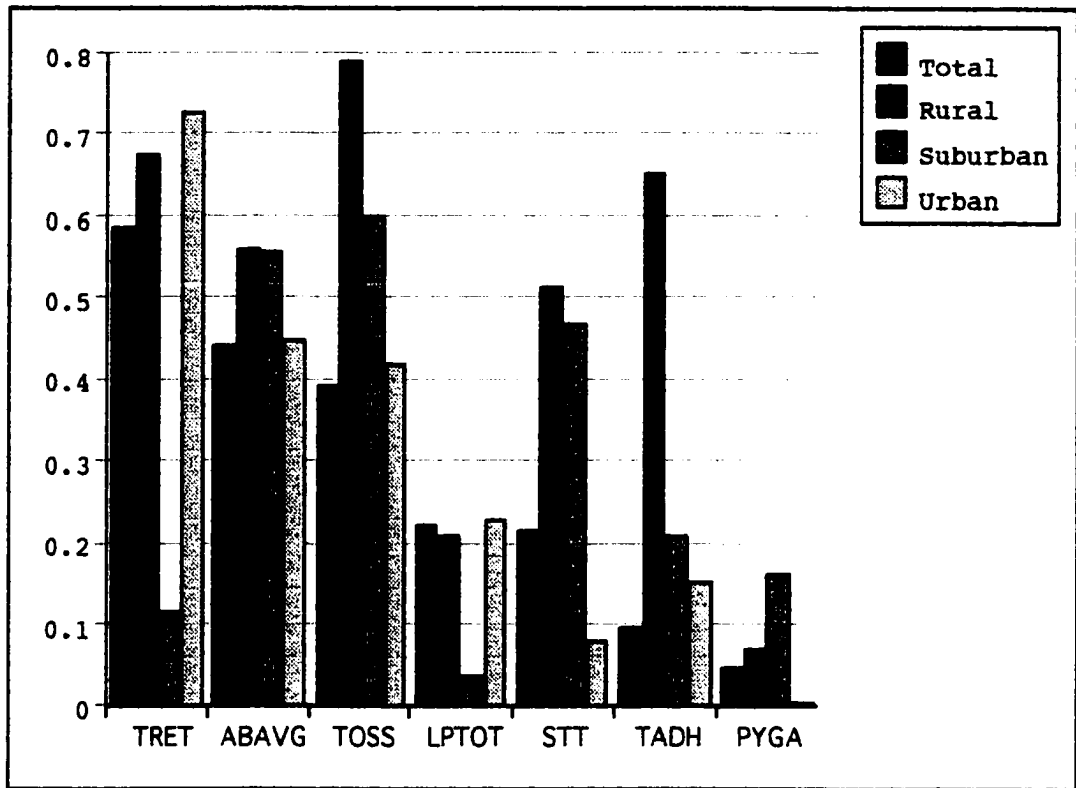
Table 28

Values By Residential Environment Groups

Group	% of Variance	Canonical Correlation	Wilks' Lambda	Sig.	Correctly Classified
Rural	100.00	.851	.276	.000	97.7%
Suburban	100.00	.813	.339	.000	94.2%
Urban	100.00	.694	.518	.000	85.7%
Total	100.00	.788	.379	.000	88.1%

The use of separate formulas may be supported by the data in Table 28. Prediction accuracy between the rural and urban formulas differ 12%. The Wilks' Lamba values between rural and urban students deviate .242. The canonical correlation between urban and rural differ .157.

Figure 20 visually demonstrates the relative values of each variable within each residential environment's formula. Comparing the relative values urban students' formula places the highest values on retentions and absences. Rural students' formula ranks out of school



Discriminate Function Coefficients Relative Importance

Figure 20. Discriminate function coefficients indicate the relative importance of each variable in each environment's prediction formula.

suspension and retentions. Suburban students' formula ranks highest out-of-school suspensions and absences. Table 26 show the full order of significance found in each residential environments' and total subjects' discriminate function formulas. Figure 20 and Table 29 each represent the relative values of the selected variables. While retentions, excessive absences, out-of-school suspensions, poor grades, and school transfers were noted as unfavorable factors in the discriminate function formulas, administrative hearings and

passing the competency test on time were favorable factors indicating a lesser risk of dropping out of school.

Table 29

Variable Relative Importance

Rank	Total	Rural	Suburban	Urban
1st	TRET	TOSS	TOSS	TRET
2nd	ABAVG	TRET	ABAVG	ABAVG
3rd	TOSS	TADH	STT	TOSS
4th	LPTOT	ABAVG	TADH	LPTOT
5th	STT	STT	PYGA	TADH
6th	TADH	LPTOT	TRET	STT
7th	PYGA	PYGA	LPTOT	PYGA

Note: The town formula has been eliminated due to the low number of subject and variables not available.

Inaccurate Predictions

Twenty-two of the 200 subjects were misidentified giving the overall prediction formula of an 88.1% accurate rate. To identify where the formula did not hold true the inaccurately predicted and accurately predicted subjects were separated and means developed. The results are displayed in Table 30. While the inaccurately identified dropouts' average fell below the threshold level of five suspension and less than ten days absent, the greatest difference

between the two groups lies in the number of times retained with the average of less than .5 for inaccurate dropouts.

Table 30

Accurate Versus Inaccurate Prediction Subjects' Means

	Accurate		Inaccurate	
	Dropouts	Non-dropouts	Dropouts	Non-dropouts
Number	87	91	13	9
TOSS	6.3	1.26	3.08	3.33
ABAVG	15.94	6.8	9.92	12.15
TADH	0.94	0.17	0.46	0.33
STT	2.1	1.13	1.69	2.55
LPTOT	0.18	0.61	0.3	0.33
PYGA	2.54	1.15	1.14	1.92
TRET	2.62	1.58	0.46	1.89

PREDICTION FORMULAS

To develop individual case scores, unstandardized canonical discriminant function coefficients and constants were used. In the case of the overall subjects their prediction formula follows.

$$\text{score} = .531 \times \text{TRET} + .068 \times \text{ABAVG} + .092 \times \text{toss} - .492 \times \text{LPTOT} \\ - .035 \times \text{PYGA} - .103 \times \text{TADH} + .165 \times \text{STT} - 1.977 \text{ (constant)}$$

As Table 31 shows, the total and each residential environment have different discriminate function coefficients that must be used to

multiply the individual student's values to obtain the student's score. The value that separates members of each group is 0 and the larger the positive number score the greater the predictive value towards dropping out, and the larger the negative number score the greater chance a subject would remain in school.

Table 31

Unstandardized Canonical Discriminate Function Coefficients and Constants And Rank With Formulas ().

Subjects' Residential Environments				
	Total	Rural	Suburban	Urban
TRET	.531 (1)	.736 (2)	.128 (4)	.589 (1)
ABAVG	.068 (6)	.093 (6)	.092 (5)	.065 (5)
TOSS	.092 (5)	.252 (5)	.171 (3)	.083 (4)
LPTOT	-.492 (2)	-.477 (3)	-.080 (7)	-.525 (2)
PYGA	.035 (7)	-.059 (7)	-.089 (6)	.006 (7)
TADH	-.103 (4)	-1.124 (1)	.249 (2)	-.140 (3)
STT	.165 (3)	.474 (4)	.424 (1)	.056 (6)
Constant	-1.977	-2.398	-2.141	-2.281

With zero being the critical point, the more positive scores indicated a greater chance of a student being a potential dropout and the stronger negative scores indicated a greater potential of a student being a non-dropout. The use of these predictive values may be

helpful in determining the most critical cases or to allocate limited alternative education resources or placement openings. The individual variables strength may be useful in determining the program type or programs elements to be included in the student's individual plan and goals.

Table 32

Prediction Formulas

Total Score =	Rural Score =	Suburban Score=	Urban Score=
.531 x TRET	.736 x TRET	.128 x TRET	+ .589 x TRET
+ .068 x ABAVG	+ .093 x ABAVG	.092 x ABAVG	+ .065 x ABAVG
+ .092 x TOSS	+ .252 x TOSS	.171 x TOSS	+ .083 x TOSS
- .492 x LPTOT	- .477 x LPTOT	- .080 x LPTOT	- .525 x LPTOT
+ .035 x PYGA	- .059 x PYGA	- .089 x PYGA	+ .006 x PYGA
- .103 x TADH	-1.124 x TADH	+ .249 x TADH	- .140 x TADH
+ .165 x STT	+ .474 x STT	+ .424 x STT	+ .056 x STT
-1.977 (Constant)	-2.398 (Constant)	-2.141 (Constant)	-2.281 (Constant)

Note: Formulas set up vertically to compare coefficient values.

Discriminate function scores were calculated for individual students using the total formula and the formula for the subjects' residential environments. The individual's scores were comparable and in the same direction, positive or negative, indicating dropouts or non-dropouts. After removing the results of 23 student incorrectly

identified by the formulas as dropouts or non-dropouts, and an additional twelve students with insufficient data, the formulas' predictions were accurate and similar in 93% of the cases. Of the rural students 38 of 40 students were correctly identified by both the total and rural formulas. Suburban students were correctly identified by both formulas in 42 out of 44 cases. Urban students were identified correctly by the total and urban formulas 71 times out of 78 cases. The range of scores under each formula were consistent with the total students' formula's scores ranging from -2.364 to +4.259. The rural students' scores ranged from -2.679 to +4.634. The suburban students' scores were spread from -2.078 to +4.088. The urban students' scores extended from -2.505 to +3.295. Table 33 shows that functions at group centroids, or within group variables' means, follow the same trend of positive values for potential dropouts and negative trend values for potential non-dropouts.

Table 33

Functions At Group Centroids

	Total	Rural	Suburban	Urban
Dropouts	1.147	1.956	1.963	.779
Non-dropouts	-1.135	-1.279	-1.011	-1.247

Note: Unstandardized canonical discriminate functions evaluated at group means.

Final Correlations

Table 34 show the final calculations to determine if the formulas' correlations are sufficient to recommend using the total discriminate function formula or the formulas for each residential environment. The correlations with the total and each of the three remaining residential environment are greater than .934 and are significant to 0.01 level. At this point, correlations between the different residential environments' values could not be conducted because at least one of the values in each formula is a constant.

Table 34

Total And Residential Environments' Formulas Correlations

	Results			
	Total	Rural	Suburban	Urban
Pearson r	-	.969**	.934**	.965**
Sign. (2-tailed)	-	.000	.000	.000
N	184	43	50	91
Means	-.00562	-.00006	.00004	-.03
Std. Deviation	1.5316	1.8807	1.7338	1.4036
Low Score	-2.364	-2.679	-2.078	-2.380
High Score	4.259	4.634	4.088	3.295

Note: Correlation is significant to the 0.01 level (2-tailed).

SURVEY RESULTS

Dropout students do not fall off the edge of the earth but must take a place in society. The researcher questioned 25 students whose selection was based on the total dropout subjects' gender and residential environment ratio. The dropout students' responses to the question "What is your current education status?" are listed in Table 35. Fifteen of the students were employed. Five were in college or an apprenticeship program and only five were unemployed. Three of the subjects graduated from GED programs and entered college. One subject re-enrolled in school, graduated and then went on to college.

Table 35

Dropouts Current Educational Status

Re-enrolled in school	1	Home schooled	1
GED enrolled	2	Apprenticeship Program	1
GEG graduate	6	Enrolled in College	4
Employed	15	Unemployed	5

When asked why the students dropped out of school the subjects responded with answers very similar to national dropout survey responses. Measurable variables such as discipline problems, excessive absences, retention, and poor grades were high responses. Less measurable, but as significant to students were responses such as difficulty with staff and other students, family and home problems,

financial needs, and lack of interest and motivation. The responses are in Table 36.

Table 36

Reason For Dropping Out Of School

Friends' influence	4	Lack of interest/ motivation	7
Discipline Problems	8	Financial needs/ had a job	5
Excessive Absences	8	Difficulty with school staff	6
Retained/ overage	6	Pregnant/fatherhood	3
Poor grades	5	Family/home problems	5
Expelled	1	Lack home/school rapport	1
Family crisis	1	Difficulty with other students	5
Drugs abuse	1	Loss of credits when transferred	1
Health problems	2	Didn't pass LPT	1

The students were asked if they were referred to a guidance counselor, by whom, and why the responses are listed in Table 37.

Table 37

Guidance Referrals

Referred to guidance department	Yes	18	No	7
Referred by whom				
Self	9	Parent/Family	3	
Teacher	6	Administrator	0	

Table 37 Continued

Reason(s) for referral			
Discipline	2	Home/ family Problems	2
Difficulty With Students	6	Academics/Schedule	6
Difficulty With Staff	1	Absences	5
Health problems	1	School Adjustment	3
Reentered School	1	Problem with credits	1
GED Information	1		

When asked "What important events lead to your decision to dropout?" many students could put a name to a specific event such as a family death, policy dispute with the school, incarceration, pregnancy or fatherhood, an unkind word from a school staff member, discipline

Table 38

What Students Wanted To Change

No family Crisis	2	Changed friends	2
Better home situation	1	Safer school	1
Getting credit earned	1	More self-control	1
More persistence	10	Not having to work	1
Better home/school communication	1	Acceptance of self	1
Better home/school cooperation	1	Not involved in Drugs	1
Not getting pregnant	1	Getting too far behind	1

problems or school punishment, job pressure, too many absences, or too old. A significant number of students said they got tired of going to school and were bored, or lacked motivation.

When asked, "If you could have changed one thing that might have stopped you from leaving school early, what would it be?" The students responded with more self indictment than one would expect. Almost one-half of the students stated that they should have tried harder and stuck it out. The summary of survey students' responses is in Table 38.

Comparison Survey Results

Interviews were conducted with two administrators and a guidance counselor from each high school. The researcher could not expect full knowledge of each student, and all six school personnel were provided with the summary sheets for each student interviewed and the students' responses. During the subjects' interviews identical questions were asked and the results are compared in Table 39. When students and staff members were asked, "Are you aware of any significant events that preceded (your) or (the student) dropping out?" the responses follow.

While the interviewer was pleased with the openness of the students and their willingness to respond freely, he also considered that time may have dulled their memory. When taken as a whole the students' responses mirrored that of the administrators and guidance counselors, but only to a lesser extent as shown in Table 39.

Excessive absences, retentions, poor grades, discipline problems, difficulty with school staff and other students, and lack of motivation were the most typical answers.

Table 39

Student And Staff Responses

	Students	Staff		
		Adm.	Adm.	Counselor
Poor grades	6	18	19	19
Retained	7	15	15	19
Health issues	2	3	1	1
Excessive absences	8	17	17	17
Weapons violation	0	0	1	0
Drugs/alcohol violation	1	1	3	2
Fights or violence	0	3	3	3
Chronic illness	1	0	0	0
Family problems	5	5	8	6
Law/court involvement	0	0	0	0
Failure on the LPT	1	0	0	0
Chronic misbehavior	7	6	9	5
Frequent school transfers	1	1	1	1
Parenthood	3	2	2	1
Lack of interest/motivation	8	13	15	9
Difficulty with school staff	8	1	9	2
Family member/friends dropped out	1	0	3	0
Problems with other students	5	4	7	2
Financial needs	6	1	1	1
Lost credits in transfer	1	1	0	1

When asked "What type of Alternative placement programs or combination of programs would you recommend for this student?" the students' and staff members' responses were recorded in Table 40.

Table 40

Programs Requested For Dropout Prevention Programs

	Students	Staff		
		Adm.	Adm.	Counselor
Academics	24	21	22	22
Behavioral	24	15	17	18
Vocational	24	14	17	19
Attendance	23	13	18	18
Medical	10	2	2	2
Counseling	23	19	21	24
Life Skills	21	6	14	17
Use of Family services and community agencies	19	12	11	12
GED preparation	24	22	21	22

Note: Life Skills including conflict resolution money or time management, parenting, etc. Adm. stand for administrator.

Students and school staff members saw a GED track, without having to drop out, as a need and an alternative within the regular high school. It was expressed by students and staff that there just are

some students who can not follow the traditional high school track. GED must be an option that schools provide. Students who have dropped out opted for instruction in life skills and how to access help through community services.

The question pertaining directly to the LPT tests produced limited results. Seventy percent of the students dropping out at or before 9th grade. When failing to pass all three parts the LPT tests, high school students were to remain 9th graders or ungraded students. When they passed all the tests, they were then eligible for promotion and graduation. Students not passing the LPT tests by high school, 9th grade, were prevented from participating in extracurricular activities. After repeated attempts sixty-four percent of the dropouts passed the LPT tests by the 9th grade. The time lag between taking the LPT for the first time in 6th grade, and the full consequences of not passing all the tests not being enforced until the 9th grade, seemed to present little concern to the subjects interviewed. The students were asked, "If you failed all or part of the Literacy Passport Tests, what impact did being denied participation in activities have on your decision?" Most answered "None."

The researcher expects the impact of state-wide competency testing to be of greater concern to students as the LPT tests are phased out and the full impact of the Standard of Learning testing for students and schools becomes a reality with immediate consequences and urgency.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this chapter is to provide a summary of the study, conclusions drawn from the study, the limitations of the study, and recommendations for further study.

SUMMARY OF THE STUDY

The uniqueness of this study lies in the possibility of being able to determine the characteristics of potential school dropouts within a single school system with four distinct and identifiable residential environments-- urban, town, suburban, and rural. The subject students were exposed to the same curriculum, regulations, policies, and procedures. Students were under the same policies regarding attendance, promotion, grading, information gathering, testing, and discipline. Further, the researcher determined to examine a growing educational trend and influence in the lives of students-- state-wide competency testing in Virginia. Finally, while the city selected for study is currently in a period of growth and urbanization, the central core city has long displayed the characteristics of an urbanized area. In the urbanized central core city of the "old Suffolk," the population density, an integrated labor market, high and medium density residential areas, concentration of minorities and low income households, high unemployment, lower educational levels, high crime rates, and substantial public housing clearly meet the criteria to be considered a modern urban environment.

The researcher was allowed full access to data bases, files, school personnel, and past students, gaining information from a variety

of sources. Finally, the results, recommendations, and participation in developing an alternative educational program gave the researcher an avenue to directly affect policy decisions.

The three research questions considered were the basis of the study and serve as a framework for addressing the problems of developing a site-based dropout identification and prescription process to prevent students from dropping out of school. The conclusions and recommendations drawn from this study have significant policy implications.

1. **The research has identified consistent early warning signs which are common among dropout students, despite their residential environments or grade levels.** The major concern was to develop a prediction formula through discriminate function analysis that was relatively accurate and minimized incorrect predictions. The variables selected were based on previous research while including the new variable of competency testing. The researcher considered variables within the limits of the information available through standard school record keeping. There was little value in including variables which are not normally recorded in records, not verifiable, and subject to erroneous information. The researcher's recommendations to an elected School Board must be politically defensible, and if possible, culturally, economically, socially, and ethnically neutral. The researcher concentrated on measurable, performance-based academic and behavioral variables which in some cases could be triggering

factors to begin the identification process. The variables selected included total times retained, average yearly absences, total out-of-school suspensions, passing the LPT or competency test on time, yearly absences average, poor grades yearly average, total administrative hearings, and total school transfers. Passing the LPT or competency tests on time was set up as a variable to allow the results to be useful as Virginia's Standards of Learning tests or new competency tests replace the LPT tests. The variables selected were either nominal or averages allowing educators to use data from one or more years.

2. **The research identified a site-based early identification procedure and developed policy recommendations to help shape policy decisions that can reasonably identify potential dropout students for intervention programs.**

By looking at the four residential environments the researcher found that while each environment's discriminate function analysis formula showed differing relative strengths or importance of each variable, the total formula was sufficiently effective and accurate in predicting potential dropouts. The urban students' prediction formula ranked total retentions first, average absences second, and total out-of-school suspensions third. The suburban students' prediction formula ranked total out-of-school suspensions first, average absences second, and total school transfers third. The rural students' prediction formula ranked total out-of-school suspensions first, total

retentions second, and total administrative hearings third. Passing the LPT on time was ranked from 7th to 4th in the separate formulas and fourth in the total formula and a positive factor. The overall formula correlated well with each separate environment's formula with a Pearson r ranging from .934 to .969 and significant to .01 in a two-tailed test. Each residential environment's group centroids, means, standard deviations, and low and high scores, were within comparable spans. The prediction accuracy rates ranged from a high of 97.7% to 85.7% with the total formula's accuracy prediction rate at 88.1%. This compared well to previous studies' prediction success rates. Due to the high correlation between the individual residential environments' formulas and the high degree of agreement of predictions, the researcher recommends that the total formula below be used in systems with mixed residential environments:

$$\text{score} = .531 \times \text{TRET} + .068 \times \text{ABAVG} + .092 \times \text{toss} - .492 \times \text{LPTOT} \\ + .035 \times \text{PYGA} - .103 \times \text{TADH} + .165 \times \text{STT} - 1.977 \text{ (constant)}.$$

3. **A site-based early intervention team can use these results to identify and evaluate the severity of dropout risk, as well as prescribe the appropriate type of dropout alternative education program. The value that discriminates between dropouts and non-dropouts was 0. The more positive the score, the greater the predictive value towards dropping out, and the more negative the score, the greater chance the subject would remain in school. This becomes a critical element when considering providing services first to**

the most at-risk students, and which students should be assigned to limited program openings. By looking at the individual student's specific variable's score, an early intervention site-based committee can use this information to develop a program to meet the student's individual needs. Such elements could be behavioral, academic, vocational, attendance, medical, counseling, life skills, GED preparation or use of community services. What became evident through the review of files and personal interviews was that any alternative education program must offer a continuum of services ranging from very limited assistance such as a referral to a community agency, to a full time program including behavioral, academic, medical, counseling, and additional services which may include provisions for foster care and opportunities for employment. Programs would help students get back on the traditional academic track, modify behaviors, provide for vocational training or counseling, or obtaining a GED diploma. One program can not serve all. Most important of all, any alternative education program must not be merely warehousing to keep students off the street and out of trouble.

When considering the effectiveness of current programs, 43 percent of the dropout students in this study had been placed in an alternative education program at one or more times in their careers. This is no criticism of the school system because the School Board has long requested additional money for more alternative education programs, and each year the funding has been cut by the funding body.

In reviewing the students' records, triggering events became evident at an early age. By setting up the variables as totals, passing on time, and yearly averages the researcher believes that students may be identified early in their academic career-- even prior to middle school in the middle elementary grades. Early intervention, remediation, and assignment to alternative programs may prevent students from dropping out of school.

Special education alone can not solve this problem. Far too many students fall through the screening and eligibility cracks. In this study 31 of the subjects had been in special education programs and still dropped out of school.

The research, staff members and the subjects themselves stated that intervention should start earlier in the school years. The typical criteria of waiting until the third retention, or serious behavioral incidents, was just too late.

The summary of the statical analysis, and interviews with students and staff suggest the factors that could trigger the identification process. The research of this group of students found that dropouts failed the competency test on their first try almost three times more often than non-dropouts. Dropouts transferred schools more often than non-dropouts. Dropouts tended to average ten days or more absences per year, while non-dropouts averaged less than ten days per year. Seventy-nine dropouts were retained one or more times and averaged two years older than their grade peers. Dropouts averaged two or more poor grades per year, were less likely to pass minimum requirements on standardized tests, and averaged eight months

behind their peers in math and reading comprehension grade equivalents. Dropouts were twice as likely to be suspended from school and 50% of the dropouts were suspended from school five or more times. Based on the information gathered, and subjects' interviews, the suggested triggering events included those that were academic, behavioral, and personal.

Made clear through dropout subjects' interviews, the reasons students dropped out were not dissimilar to national survey results. Lack of interest, family and personal problems, poor grades, and difficulty with school staff were major reasons cited for dropping out. This study's subjects identified further reasons for dropping out as discipline problems, excessive absences, retentions, and difficulty with other students. The majority of students expressed remorse for dropping out and stated that they wished they had been more persistent. When comparing student and staff responses there were more similarities than expected. Students and staff identified events which preceded dropping out as lack of interest, misbehavior, difficulty with school staff, poor grades, retentions, excessive absences, family, and financial problems.

RECOMMENDATIONS AND POLICY IMPLICATIONS FOR URBAN EDUCATORS

Through the process of answering the three research questions and reviewing the literature, the researcher sought to provide policy makers with recommendations that could help predict potential school dropouts, examine significant events that preceded students dropping out, and develop a school site-based identification and prescription procedure for dropout prevention programs.

Study's Urban Dropouts

The urban environment's students who dropped out in the school year 1996-97 on average dropped out in the 9th grade and were 17 years old. Twenty-five percent of the students were or had been enrolled in special education classes and 51% had at one time or another been enrolled in existing alternative education programs for students with behavioral or academic difficulties. Males made up 81% of the students and 84% of the dropout students were black. Eighty-one percent of the students came from single parent homes. In their school years, the urban dropouts averaged 1.9 family generated school transfers, an average of 6.65 out-of-school suspensions, an average of 15.9 absences per year, and an average of 4 poor grades per year. Thirteen of the urban dropouts had been expelled during their school careers. Urban dropouts averaged one administrative hearing and were retained on average 2.7 times. Only ten urban students passed the competency test on time. Utilizing the review of the literature and the information obtained in answering the research questions, the researcher makes the following policy recommendations:

1. Predicting potential dropouts can be accomplished at a much earlier time in a student's career using the variables selected. Virginia state-wide competency testing now begins with the third grade and school systems may purchase SOL competency tests for the lower grades and grades not currently tested. This could allow for earlier detection of potential dropouts in conjunction with the research established variables.
2. While the establishment of alternative education programs to

prevent students from dropping out is of major concern, the triggering of the identification process is paramount. Far too many students are overlooked. Early warning signs are ignored and intervention may come too late to reverse the slide towards dropping out. The research suggests the following trigger events which were shown to precede students dropping out of school:

- A. Retained for the second time,
- B. Average school absences of 15 days or more a year,
- C. Failing two or more subjects,
- D. Family or personal crisis,
- E. Five or more out-of-school suspensions,
- F. Administrative hearing,
- G. Failing competency tests,
- H. Averaging two or more family generated school transfers.

3. Establishment of an dropout prevention identification process must be based on the student population within a school system. In this study and setting of multiple residential environments, the following formula and variables were found to be reasonably effective in discriminating between dropouts and non-dropouts. The variables selected were available and accurate.

$$\text{score} = .531 \times \text{TRET} + .068 \times \text{ABAVG} + .092 \times \text{toss} - .492 \times \text{LPTOT} + .035 \times \text{PYGA} - .103 \times \text{TADH} + .165 \times \text{STT} - 1.977 \text{ (constant)}.$$

4. Effective record keeping and the potential to identify triggering events is now within the grasp of the school system with the acceptance of computer programs that can keep attendance, grades, promotions, test results, school transfers, school suspensions,

- and administrative hearings. Interconnected and properly programmed computer systems can help eliminate the hit and miss recognition of students who are potential school dropouts.
5. Retained students need a way to catch up. Mastery of grade level SOL objectives and grade level competency tests may provide the avenue and rationale for students in alternative education programs to be promoted to their age peers' grade level.
 6. Development of an alternative individualized educational plan can be based on information collected during the identification process. Alternative dropout prevention program must be on a continuum of services rather than a one size fits all warehouse program. Program elements should include behavioral, academic, vocational, attendance, medical, counseling, life skills, GED preparation or use of community services.
 7. Underlying the comments of some students was a dissatisfaction with the schools' teachers, administrators, policies, and curriculum. If a school system wishes to provide effective dropout prevention programs, there must be careful consideration given to the staff members hired, the individualization of programs, and the flexibility of services provided. The whole student must be considered and allowances made to accommodate family and personal situations. Students may need flexible hours to accommodate family or work needs, health problems, or emotional stresses. GED programs must be available within the school system for students who can not follow the traditional educational path. Child Labor Laws must be revisited to

determine if apprenticeship or training programs can be made available to younger students who are talented in nonacademic areas. Services from the entire spectrum of community agencies and charitable organizations must be made available through the school system.

8. Determining the importance and value of variables in a prediction formula determines the eventual accuracy. In this study, the research indicates the order of statistical importance as shown in Table 41. The two most significant variables were retentions, and passing the competency test on time. School systems must not underestimate the effect of competency testing on students, and the potential to predict and influence students dropping out. The functions listed are for the overall predictive formula.

Table 41

Relative Statistical Importance Of Selected Variables

Variable	Function	Shorten Variable Description
TRET	.531	Total times retained
LPTOT	-.492	Passed Literacy Passport on time
STT	.165	Total school transfers
TADH	-.103	Total administrative hearings
TOSS	.092	Total out of school suspensions
ABAVG	.068	Average yearly absences
PYGA	+.035	Poor grades yearly average

9. Selection of students to attend dropout prevention programs should be by committee and at the individual school. Regardless of the complexity and inclusiveness of any selection process, only individuals who know the student and family can fully appreciate motivational factors such as interest, parental influences and involvement, and persistence. The researcher suspects that inaccurate predictions were generated by such non-measurable characteristics of the students and their family situations. While guidance counselors and administrators may have knowledge of certain aspects of many students' behavior, not all students seek counselor's help and some students have learned to become invisible non-entities within the school environment. The more staff involved and the more systematically data is collected, the more likely potential dropouts will be identified.
10. The potential dropout identification and prescription process should be site-based. The site's early intervention team must have personal and up-to-date knowledge of the individual student to evaluate the urgency of the situation, make specific recommendations for alternative education placement, and develop the student's alternative education plan.
11. In an urban residential environment the following formula was found to be 85.7% effective in discriminating between dropouts and non-dropouts. The formula could serve as the basis for the school system's prediction process.
- $$\text{score} = .589 \times \text{TRET} + .065 \times \text{ABAVG} + .083 \times \text{TOSS} - .525 \times \text{LPTOT} + .006 \times \text{PYGA} - .140 \times \text{TADH} + .056 \times \text{STT} - 2.281 \text{ (constant)}.$$

12. The student's individual alternative education plan should be developed by the site's early intervention team and be based on individual student's needs. The individual alternative education plan should include long-range goals (one to two years), short-range goals (six weeks increments), academic, behavioral, vocational, attendance, health goals, and counseling and life skills goals. There must be clear and measurable exit goals.
13. The position of a dropout prevention alternative education case manager should be established. This person would serve on the early intervention and exit teams. The case manager would follow the referral from initiation to the point of service, work with the program's staff, serve as a contact person with community agencies, and assist, when appropriate, with the transition of the student into the traditional school program.

CONCLUSIONS

Alternative education dropout prevention programs must not be seen as a warehouse for "problem" students. Dropouts influence a school system's potential for loss of revenue and problems with discipline, attendance, and academics. Poor student performance threatens a school's accreditation by the state. Alternative education programs must be funded and allowed to be non-traditional to help those students who can not succeed in the traditional school setting. Adequate funding for non-traditional programs must become a priority.

The school must not act in isolation to prevent school dropouts. The identification and prescription process should be activated by school personnel, law enforcement and court officials, community

service workers, family members, and the students themselves. Services of the entire community should be available to help the students and their families. Open communication and service lines must exist between the educational, law enforcement, and community and charitable agencies. There must be an exchange of information and services to keep the student in school and in an acceptable home environment.

In Virginia, school accreditation and job performance has become tied to students' test performance. The researcher suspects that more students will be referred to alternative education programs and more alternative program will become available. School systems will use alternative education programs for students with behavioral and academic problems as a means to help meet the state's mandate that 70% of each school's students must pass the competency tests. School not meeting this 70% pass rate face public embarrassment and loss of accreditation.

Of the 1996-97 subject dropouts 43% were exposed to alternative education programs and 31% were involved in special education programs. The researcher questioned these programs' effectiveness in preventing students from dropping out of school. The administration and staff of Suffolk Public Schools are reviewing existing alternative education and dropout prevention policies, and proposing an additional daytime alternative school to help students master the state competency tests, become more successful in school, and as a by product, discouraging students from dropping out of school.

RECOMMENDATIONS FOR FURTHER STUDY

1. Additional research is necessary to determine if students

identified and reported by schools and the Virginia State Department of Education are in fact dropouts. The researcher found a significant number of students reported as dropouts attending other schools. Could dropout research be based on potentially flawed state data bases?

2. The researcher found 132 dropout and non-dropout students retained one or more times. From both subject groups 137 students were suspended at least once during the years 1992-1997. The researcher is concerned with the effect of retentions and out-of-school suspensions on academic performance and suggests further study. Do repeated retentions and suspension have an overall effect on the system's academic performance on standardized tests?
3. Interviews were conducted with students based on gender and residential environments. As it became apparent that some of the originally selected subjects were unavailable, they were replaced with students from the same gender and residential environment. After four years since dropping out, the replacement subjects interviewed were possibly more settled and less likely to be purely representative of the total dropout subjects. Many of the original survey subjects had moved or were no longer residing in their family residence. Research needs continue to insure that "found" dropouts' survey responses were typical.
4. While the study approached a longitudinal study looking at subjects' data from kindergarten through the dropout grades a number of students had gaps in information where they attended

other school systems and incomplete or different information was forwarded. The researcher questions if subjects with complete data for the entire years of study would produce different results. Of specific interest are the years missing discipline records.

5. There is the need to determine how accurate the formula predicts dropouts over an extended period of years.

6. The researcher has provided the school system with a formula based on passing the state mandated LPT competency test by the 9th grade, and how statistically important it is to pass these tests on time. With the new state mandated Standards of Learning tests does the significance of passing on time remain the same?

Given that early prediction formulas are available, there now must be the political and financial will on the part of governing bodies to fund and provide a greater variety of alternative education programs for students with behavioral and academic problems. Each school division must develop intervention programs to help prevent students from dropping out and programs must be continually evaluated to determine their effectiveness.

Reference List

- ADC of Alexandria. (1997). Tidewater Virginia, Street Map Book. (19th ed.). Alexandria, VA: ADC of Alexandria, Inc.
- Alexandria Publishing Company. (1997). Detailed Street Map Of Suffolk. Alexandria, VA: Alexandria Publishing Company.
- Alpert, Geoffrey, & Dunham, Rodger. (1986). Keeping Academically Marginal Youth In School. Youth & Society, 17(4), 346-361.
- Arney, June. (1997, October 26). Single mothers, by choice or by chance [Review of the book On Our Own by Melissa Ludtke]. The Virginian-Pilot, p. J2.
- Ary, D., Jacobs, L. C., Razacvieh, A. (1990). Introduction to Research in Education (4th ed.). Fort Worth, TX: Harcourt Brace College Publications.
- Bachman, J., Green, S., & Wirtnen, I. (1997). Dropping out is a symptom. Educational Digest, 37, 1-5.
- Barrington, Byron L. and Hendricks, Bryan. (1989). Differentiating Characteristics of High School Graduates, Dropouts, and Non-graduates. The Journal of Educational Research, 82(6), 309-319.
- Baylor, Ellen C. and Snowden, Petra E. (1992). Expanding the School's Role as Care Provider. Principal, 71(3), 8-9.
- Bekuis, Tanja. (1995, April). Unsafe Public Schools and the Risk of Dropping Out: A Longitudinal Study of Adolescents. A paper presented at the Annual Meeting of the Eastern Psychological Association, Boston, MA. (ERIC Document Reproduction Service No. ED 388 907).

- Bempechat, Janine, and others. (1989) Teenage Pregnancy and Drug Abuse: Sources of Problem Behaviors. (On-line). Available:
<http://ericps.ed.uiuc.edu/npin/respar/texts/teens/prbehav.html>.
- Berube, Maurice. (1991). American Presidents and Education. New York: Greenwood Press.
- Bowers, Matthew. (1998, January 8). Focus: The Plight Of Urban Schools. The Virginian-Pilot, p. A4.
- Bowers, Matthew, & Franklin, Katrice. (1997, November 16). Limited resources lead to hard choices. The Virginian-Pilot, p. A6.
- Butler, Owen B. (1989, January). Early Help for Kids at Risk: Our Nations Best Investment. National Education Association. 50-53.
- Callison, William L. (1994). Dropout Prevention Handbook, Apprenticeships And Other Solutions. Lancaster, PA: Publisher Technomic Publishing Company, Inc.
- Center For School-Community Collaboration. (1997). Directory Of Resources For Schools And Communities In Virginia, 1997. Richmond, VA: The Virginia Commonwealth University Center for School-Community Collaboration.
- Corcoran, Thomas B. (1985). Competency Testing and At-Risk Youth. Washington, DC: Department of Education. (ERIC Document Reproduction Service No. ED 312 313).
- Creswell, John W. (1994). Research Design, Qualitative & Quantitative Approaches. Thousand Oaks, CA: Sage Publications.
- Cullen, Loanda. (1997). Confronting The Myths of Single Parenting. Parenting Resource Center on the Web (On-line), Available:
<http://www.parentsplace.com/readroom/spn/spnconfr.html>

- Cusick, Philip A. (1993). Perspectives On Dropping Out. Reaching the Goals. Goal 2: High School Completion, (ED/OERI PIP 93-1018). Washington, DC: Office of Educational Research and Improvement, pp. 41-50. (ERIC Document Reproduction Service No. ED 365 471)
- D'Amico, Ronald, J. (1984). Does working in high school impair academic progress? Sociology of Education, 57, 157-164.
- Deschamps, Ann Barnes. (1992). An Integrative Review Of Research On Characteristics Of Dropouts. Doctoral dissertation, George Washington University, Washington, D.C.
- Dougherty, Van. (1989). Youth At Risk: The Need For Information. In Lakerbrink, Joan M. (Ed.), Children At Risk, (pp. 3-17). Springfield, IL: Charles C. Thomas.
- Dorn, Sherman. (1993). Origins of the Dropout Problem. History of Education Quarterly 33(3), 354-373.
- Dweck, C., and Leggett, E. (1988). A social cognitive approach to motivation and personality. Psychology Review, 95, 256-273.
- Evans, William N., Oates, Wallace E., & Schwab, Robert M. (1992). Measuring peer group effects: A study of teenage behavior. Journal of Political Economy, 100, (5), 966-991.
- Fernandez, Ricardo, and Shu, Gangjian. (1988). School Dropouts: New Approaches to an Enduring Problem. Education and Urban Society, 20(4), 363-386.
- Fine, Michelle, and Zane, Nancie. (1991). Bein' Wrapped Too Tight: When Low-Income Women Drop Out of High School. Women's Studies Quarterly, 19, (1-2), 77-99.

- Finn, J. D., (1989). Withdrawing from School. Review of Educational Research, 19, 135-170.
- Franklin, Cynthia. (1992). Family and Individual Patterns in a Group of Middle-Class Dropout Youths. Social Work, 37(4), 338-344.
- Franklin, Katrice. (1997, November 26). Suffolk's road to growth could be a costly one. The Virginian-Pilot, p. B3.
- Frase, Mary J. (1989). Dropout Rates in the United States: 1988. Washington, D.C.: Center for Educational Statistics. (ERIC Educational Reproduction Service No. ED 313 947)
- Frazer, Linda. (1991, April). At-Risk Students Three Years Later: We Know Which Ones Will Drop Out. A paper presented at the Annual Meeting of The American Educational Research Association, Chicago, Il. (ERIC Document Reproduction Service No. ED 337 569)
- Gaustad, Joan. (1991) Identifying Potential Dropouts. Washington, DC: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED 339 092)
- Glass, Jon. (1996, March 9). Held-Back Pupils Show Challenges Facing Schools in 3 Local Cities. The Virginian-Pilot, p.A1.
- Greater Hampton Roads. (1997). About Suffolk. (On-line). Available: <http://greaterhamptonroads.com/suffolk.htm>.
- Hall, Michael. (1998, April 7). Violent crime climbs slightly. The Virginian-Pilot, p. B3.
- Jessor, R., & Jessor, S.L., (1978). Theory testing in longitudinal research on marijuana use. In D. Kandel (Ed.), Longitudinal Research On Drug Use. Washington, D.C.: Hemisphere Publishing Corporation.

- Kachigan, S. K., (1986), Statistical Analysis. An Interdisciplinary Introduction to Univariate & Multivariate Methods. New York, NY: Radius Press.
- Kelley, Deirdre, & Gaskell, Jane.(Eds.) (1991). Debating Dropouts, Critical Policy and Research Perspectives on School Leaving. New York: The Teachers College Press.
- Kortering, Larry, Haring, Norris, & Klockars, Alan. (1992). The Identification of High-School Dropouts Identified as Learning Disabled: Evaluating the Utility of Discriminate Analysis Function. Exceptional Children. 58(5), 422-435.
- Lachance, Laurie L. (1985). Teenage Pregnancy. Highlights: An ERIC/CAPS Fact Sheet. (On-line), Available: <http://ericps.ed.uiuc.edu/npin/respar/text/teens/teenpreg.html>
- Landmark Communications, Inc. (1997a). Suffolk At A Glance. (On-line). Available: <http://www.pilotonline.com/community/suffolk/sfglance.html>
- Landmark Communications, Inc. (1997b). Suffolk. History. (On-line). Available: <http://www.pilotonline.com/community/suffolk/sfhit.html>
- McLaughlin, Michael. (1992, May). Dropping Out Of High School, A Greatly Exaggerated "Crisis", U.S.A. Today. (120), 44-47.
- McMillen, Marilyn. (1997). Dropout Rates in the United States: 1995. (Report No. NCES 97-473). Washington DC: U.S. Department of Education, National Center for Education Statistics.

- McMillian, Marilyn, Kaufman, Phillip, Husken, Elvie, & Bradby, Denise. (1992). Dropout Rates in the United States: 1992. U.S. Department Of Education, Office Of Educational Research And Improvement, U.S. Government Printing Office: Washington, DC.
- Moore, Kristin, A., Miller, Brent C., Sugland, Barbara W., Morrison, Donna Ruane, Gleib, Dana A., & Blumenthal, Connie. (1997). Beginning Too Soon: Adolescent Sexual Behavior, Pregnancy and Parenthood (On Line). Available: <http://aspe.os.dhhs.gov/hsp/cyp/xsteesex.htm>
- Morris, John D., Ehren, Barbara J., & Lenz, B. Keith. (1991). Building a Model to Predict Which Fourth Through Eight Graders Will Drop Out In High School. Journal of Experimental Education, 59(3), 286-293.
- National Dropout Prevention Center. (1996). The Reality of Dropping Out. (Available from National Dropout Prevention Center, Clemson University, Clemson, SC).
- Olson, Lynn and Gerald, Craig. (1998a). Go the Extra Mile. Education Week on the Web (On-line), Available:<http://www.edweek.org/sreports/qc98/solutions/so-s7.htm>.
- Olson, Lynn and Gerald, Craig. (1998b). Make Performance Count. Education Week on the Web (On-line), Available: <http://www.edweek.org/sreports/qc98/solutions/so-s2.htm>.
- Payne, Aleta (1997, September) Local student dropout rate is higher than state average. The Virginian-Pilot, p. B3.
- Peng, Samuel S. & Lee, Ralph M. (1992). Measuring Student At-Riskness by Demographic Characteristics. Washington, DC: National Center for Education Statistics, U.S. Department of Education. (ERIC Document Reproduction Service No. ED 347 679)

- Phillips, E. Barbara & LeGates, Richard. (1981). In City Lights. An Introduction to Urban Studies (pp. 141-144). New York: Oxford University Press.
- Prescott, George A., Balow, Irving H., Hogan. Thomas P. and Farr, Rodger C. (1978a). Primary 1 Metropolitan Achievement Tests Teacher's Manual for Administering and Interpreting. New York, NY: Harcourt, Brace and Jovanovich, 88-91.
- Prescott, George A., Balow, Irving H., Hogan. Thomas P. and Farr, Rodger C. (1978b). Elementary Metropolitan Achievement Tests Teacher's Manual for Administering and Interpreting. New York, NY: Harcourt, Brace and Jovanovich, 74-77.
- Riverside Publishing Company. (1986a) Teacher's Guide, Primary Battery Levels 7-8 Chicago, IL: The Riverside Publishing Company, 110-112
- Riverside Publishing Company. (1986b) Teacher's Guide, Primary Battery Levels 9-14 Chicago, IL: The Riverside Publishing Company, 114-120
- Robinson, Jack E. (personal communication, April 15, 1999)
- Romanik, Dale & Blazer, Christine A. (1990). Reasons for Dropping Out of School and Assessment of Risk Factors: A Comparison of Dropouts, "At-Risk", and "Regular" Students. Miami, FL: Dade County Public Schools, Office of Educational Accountability (ERIC Document Reproduction Service No. ED 337 512)
- Rumberg, R. W. (1983). Dropping out of high school: The influence of race, sex, and family background. American Education Research Journal, 20,(2), 199-220.
- Spivack, G., Marcus, J., & Swift, M. (1986). Early Classroom behaviors and later misconduct, Developmental Psychology, 22, 124-131.

SPSS. (1998). SPSS Base 8.0 Applications Guide, Chicago, IL: SPSS Inc., 252-255.

Steinberg, Laurence, Brown, B. Bradford, & Dornbusch, Sanford, M. (1996). Beyond The Classroom, New York, NY: Touchstone, 171.

Suffolk Department of Community Development. (1975). City of Suffolk Census Tracts, Suffolk, VA. Prepared by Kidd and Associates, Inc. Hampton, VA.

Suffolk Department of Community Development. (1990). 2005 General Plan. (Available from City Manager, City of Suffolk, , P.O. Box 1858, Suffolk, VA 23434)

Suffolk Office of Community Planning and Development. (1995). Suffolk, VA: Consolidated Plan for 1995, Suffolk, VA. (On-line), Available: <http://www.hudd.gov/cpes/va/suffova.html>

Suffolk Public Schools. (1997). Alternative Education Sub-Committee Report. Suffolk, VA.

Suffolk Public Schools (1998). Suffolk Public Schools Education For Success Program Placement Review Form. ESP1 and ESP2, Suffolk, VA.: Suffolk Public Schools.

Suffolk Public Schools (1991), Policies Of The Suffolk City School Board. Suffolk, VA.: Suffolk City School Board. (pp.166-168, Section 6-04.8/P)

Suffolk Public Schools (1997), Policies Of The Suffolk City School Board. Suffolk, VA.: Suffolk City School Board. (pp.63-67, Section, IKG)

- Suffolk Public Schools (1998). Suffolk Public Schools Education For Success Program Placement Review Form. ESP1 and ESP2, Suffolk, VA.: Suffolk Public Schools.
- Suffolk School Food Service (personal communication, August 26, 1998 and July 29, 1999)
- Sween, Joyce A. (1989). The Timing Of Dropping Out, The Possibility of Early Identification, and the Need For Intervention Before High School. In Lakerbrink, Joan M. (Ed.), Children At Risk, pp. 32-44). Springfield, IL: Charles C. Thomas.
- The Virginian-Pilot. (1997a). Hampton Roads Neighborhood Demographics. (On-line) Available: <http://data.pilotonline.com/Census/census.cfm>.
- The Virginian-Pilot, (1997b). Web database project: Public School Performance (On-line). <http://data.pilotonline.com/School/reption.cfm>.
- Tomlinson, Tommy, Frase, Mary, Fork, Donald, and Gonzalez, Rene. (1993). Raising Graduation Rates: What Do We Know and What Do We Need To Know?, Reaching the Goals, Goal 2: High School Completion, (ED/OERI PIP 93-1018). Washington, DC: Office of Educational Research and Improvement, pp. 7-37. (ERIC Document Reproduction Service No. ED 365-471)
- U.S. Census Bureau. (1995). Urban And Rural Definitions (On-line). Available:<http://www.census.gov/population/censusdata/urdef.txt>
- U.S. Department of Commerce. (1990). Population 1980-1995: Census and Housing, 1990, and CACI Projections. Washington, DC: Bureau of the Census, Economics and Statistics Administration

- U.S. Department of Education (1990). "Based on Percentage of NELS:88 8th to 10th grade dropouts who reported various reasons for dropping out of school applied to them" National Education Longitudinal Study of 1988, First Follow up Study. Washington, DC: National Center for Education Statistics, (On Line). Available: <http://www.dropoutprevention.org/dropreas.htm>
- United Way Combined Charities. (1997). Welcome To Your 1997 United Way Combined Charities Campaign. Norfolk, VA: United Way/Combined Charities Campaign.
- Vaughan, Alan L. (1991). Identification Of The Potential High School Dropout. Doctoral dissertation, Old Dominion University, Norfolk, VA.
- Virginia Department of Education. (1991). Virginia Teacher's Register. Richmond, VA: Virginia Department of Education. Authority-- Code of Virginia §22.1-20, §22.1-259.
- Virginia Department of Education (1997). 1996-97 Fall Membership School Summary By Grade and Ethnicity. Richmond, VA: (On-line), Available: http://www.pen.k12va.us/VDOE/dbpubs/Fall_Membership/1996/mis127.htm/
- Virginia Department of Education. (1997). 1997 Virginia Summary Report. Richmond, VA: Virginia Department of Education.
- Virginia Department of Education. (1996a). 1996 Virginia Summary Report. Richmond, VA: Virginia Department of Education.
- Virginia Department of Education. (1996b). Virginia State Assessment Program: Results for the 1995-1996 School Year. Richmond, VA: Virginia Department of Education.

- Virginia Department of Education. (1991). Virginia Teacher's Register. Richmond, VA: Virginia Department of Education.
Authority-- Code of Virginia §22.1-20, §22.1-259.
- Virginia Department of Education (1998). 1996-97 Fall Membership Division Summary By Ethnic Group. Richmond, VA: (On-line),
Available: http://www.pen.k12va.us/VDOE/dbpubs/Fall_Membership/1996/fm018.html.
- Virginia State Department of Taxation, Division of Real Estate Appraisal And Mapping, Index To Old City of Suffolk, Property Identification Maps. Richmond, VA.
- Weber, James M. (1988). An Evaluation of Selected Procedures for Identifying Potential High School Dropouts. Columbus, OH: National Center for Research in Vocational Education. (ERIC Document Reproduction Service No. ED 311 348)
- Wells, Shirley, Bechard, Sue, & Hamby, John. (1989, July). A Series of Solution and Strategies. (Available from National Dropout Prevention Center, Clemson University, Clemson, SC.)
- Wilczynski, M.M. (1986). A study to determine the feasibility of identifying potential high school dropouts in elementary school. Doctoral Dissertation, The University of Iowa, 1986) Dissertation Abstracts International. 47. 07-A.
- Wilkinson, L. David, and Frazer, Linda H. (1990, April). Fine-Tuning Dropout Prediction through Discriminant Analysis: The Ethnic Factor. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, MA. (ERIC Document Reproduction Service No. ED 323 616).

Wittenberg, S. K. (1988). Youth-at-risk: Who are they, why are the leaving, and what can we do? (ERIC Document Reproduction Service No. ED 301 317)

Young, Timothy W. (1991). Public Alternative Education. New York: Teachers College, Columbia University.

Data Collection Instrument: Part I

Name: _____ ID # _____ School: _____

Address: _____ Phone: _____

Parent/ Guardian: _____ DOB: ___/___/___ WD Date: ___/___/___

Gender: _____ Race: _____

Relationship: _____

Residential Environment: _____ Dropout Age: _____

Resides with: Mother & Father Mother Only Father Only

Both Grandparents: Grandmother Grandfather

Legal Guardian Foster Home Sibling

Other: _____

School:

Year: Fall 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96-97

Grades:

Dropped out:

Absent:

Failed:

School

Trans.

Ds, Fs, Us, Ns

Standardized Tests: Standard Scores/Grade Equivalent

Year: Fall 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96-97

Grades:

Read: SS

GE

Math: SS

GE

Guidance

Referrals

Literacy Passport Tests: Failed One or More Tests

83 84 85 86 87 88 89 90 91 92 93 94 95 96-97

Grade:

LPT (P-Passed)

Special Education Information

Sp. Ed.: LD EMR TMR ED OHI _____ IQ

Parent Refused Testing Grade

Placement Eligibility Date(s): ___/___/___ Grade

Tested Out/No Longer Eligible: ___/___/___ Grade

Comments: _____

Data Collection Instrument: Part II

Chapter I ESL LEP
 Alternative Ed. Program Type: _____ Date: __/__/__ Grade: _____
 Type: _____ Date: __/__/__ Grade: _____

School: _____
 Fall 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96-97

Grades: _____

Pregnant

Marriage

Drug/

Alcohol Abuse

Health

Problems

Court/

Law Involvement

Medi-

cation: _____
 Health Problems Type: _____

Extracurriculars Type: _____ Years: _____

Sibling Dropouts Number: _____

Parent Dropout Whom: _____

Non-school Work # Hours: _____
 Discipline Record

School: _____
 Fall 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96-97

Grades: _____

Suspensions

Adm.

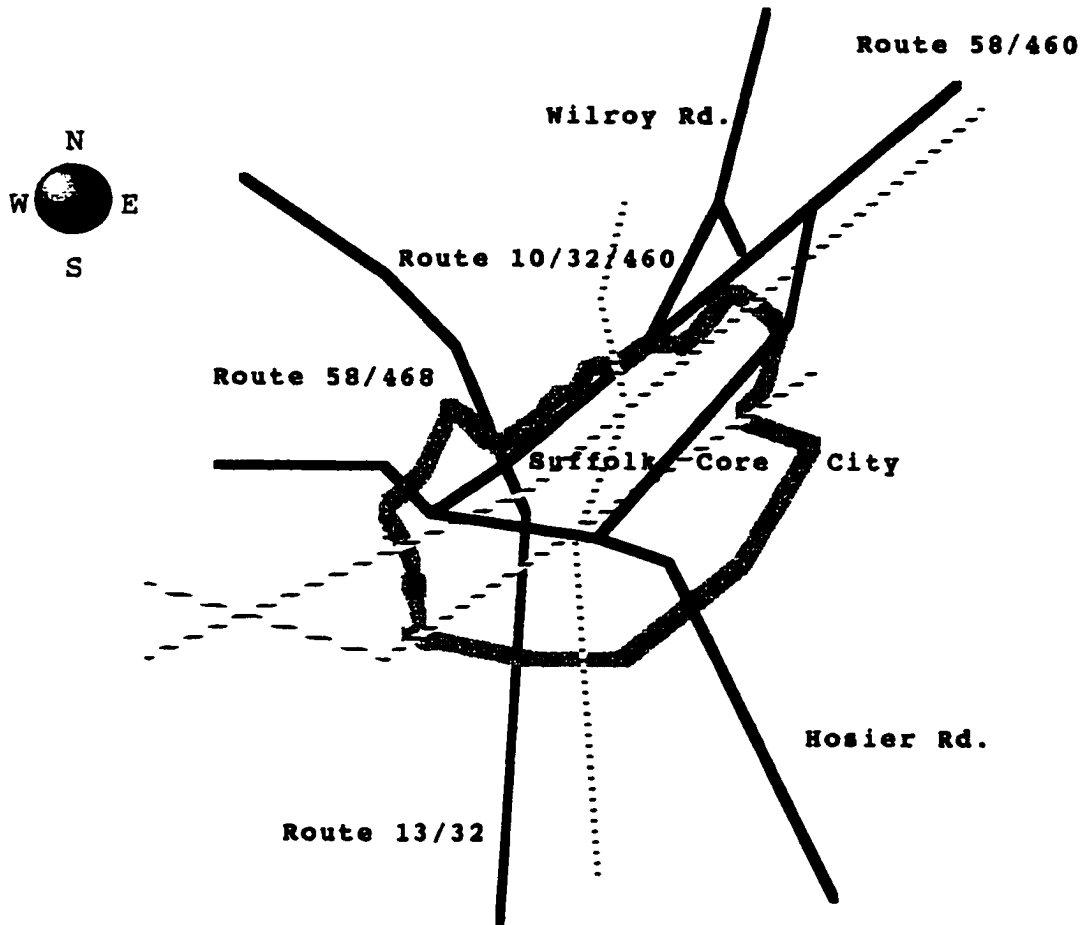
Hearing

Expulsion

Comments: _____

Map 3

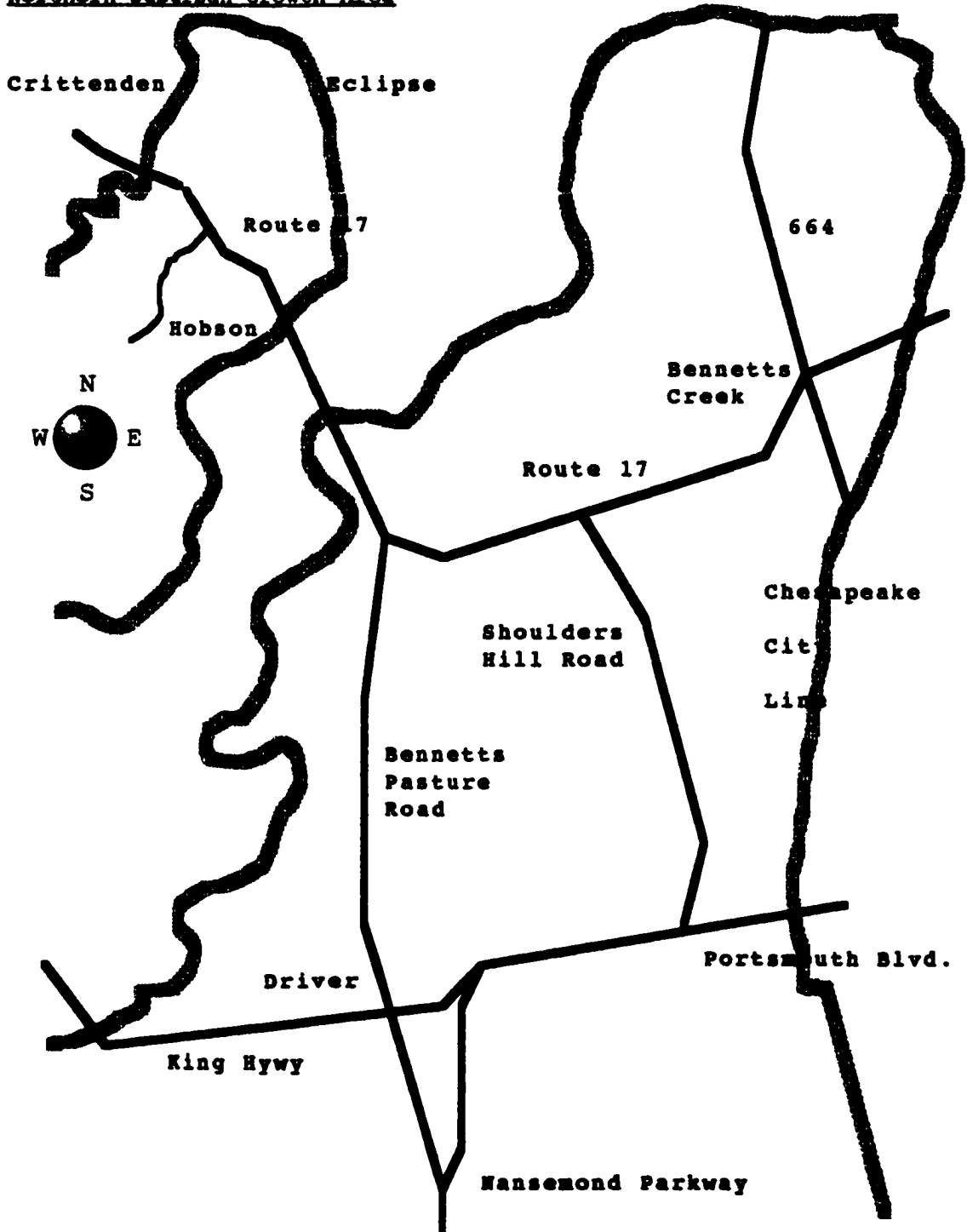
Suffolk Core City and Surrounding Area



Note: Based on Map 2005 General Plan (1989) by the Department of Community Development, City of Suffolk, VA.

Map 4

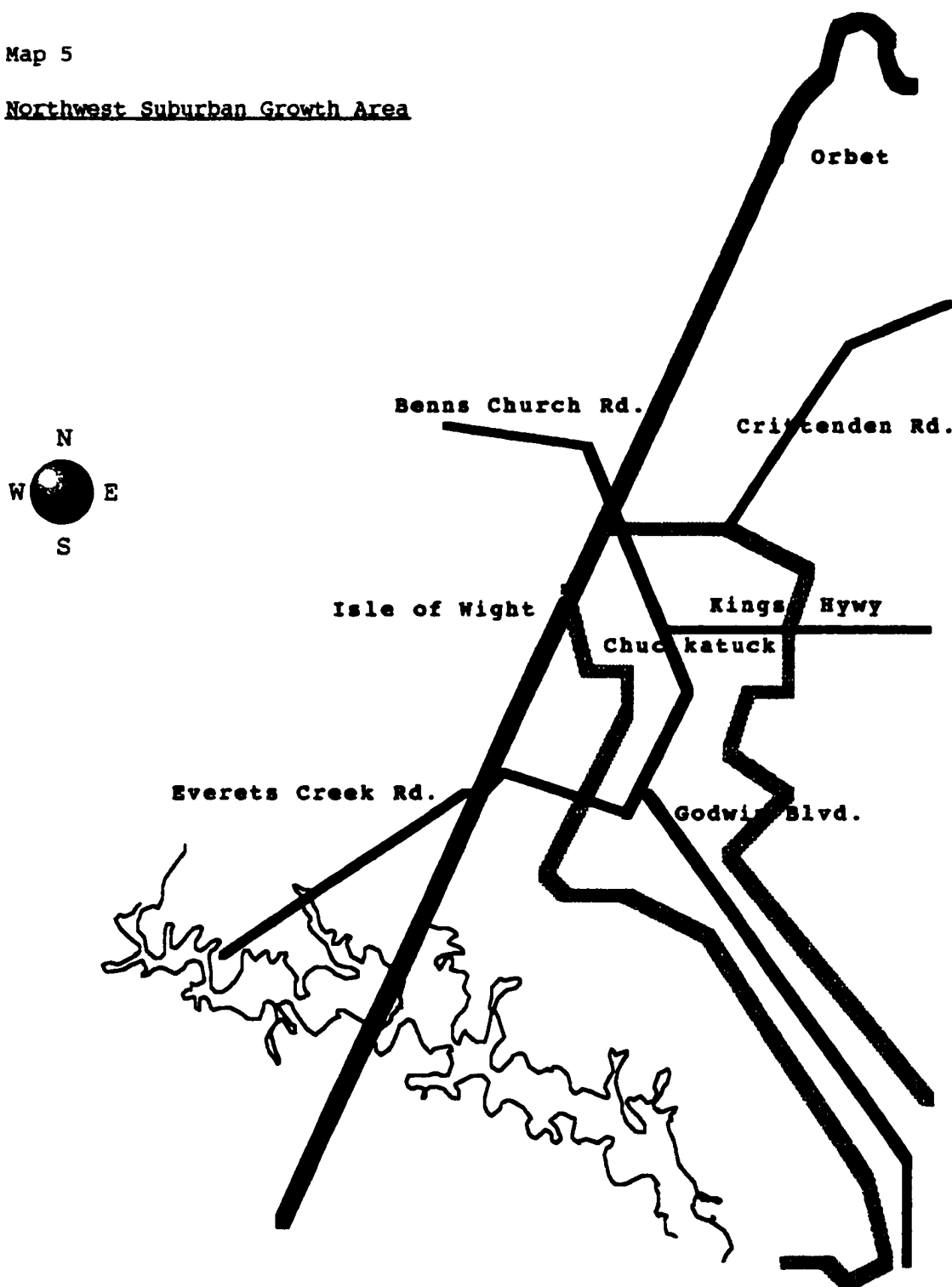
Northern Suburban Growth Area



Note: Based on Map 2005 General Plan (1989) by the Department of Community Development, City of Suffolk, VA.

Map 5

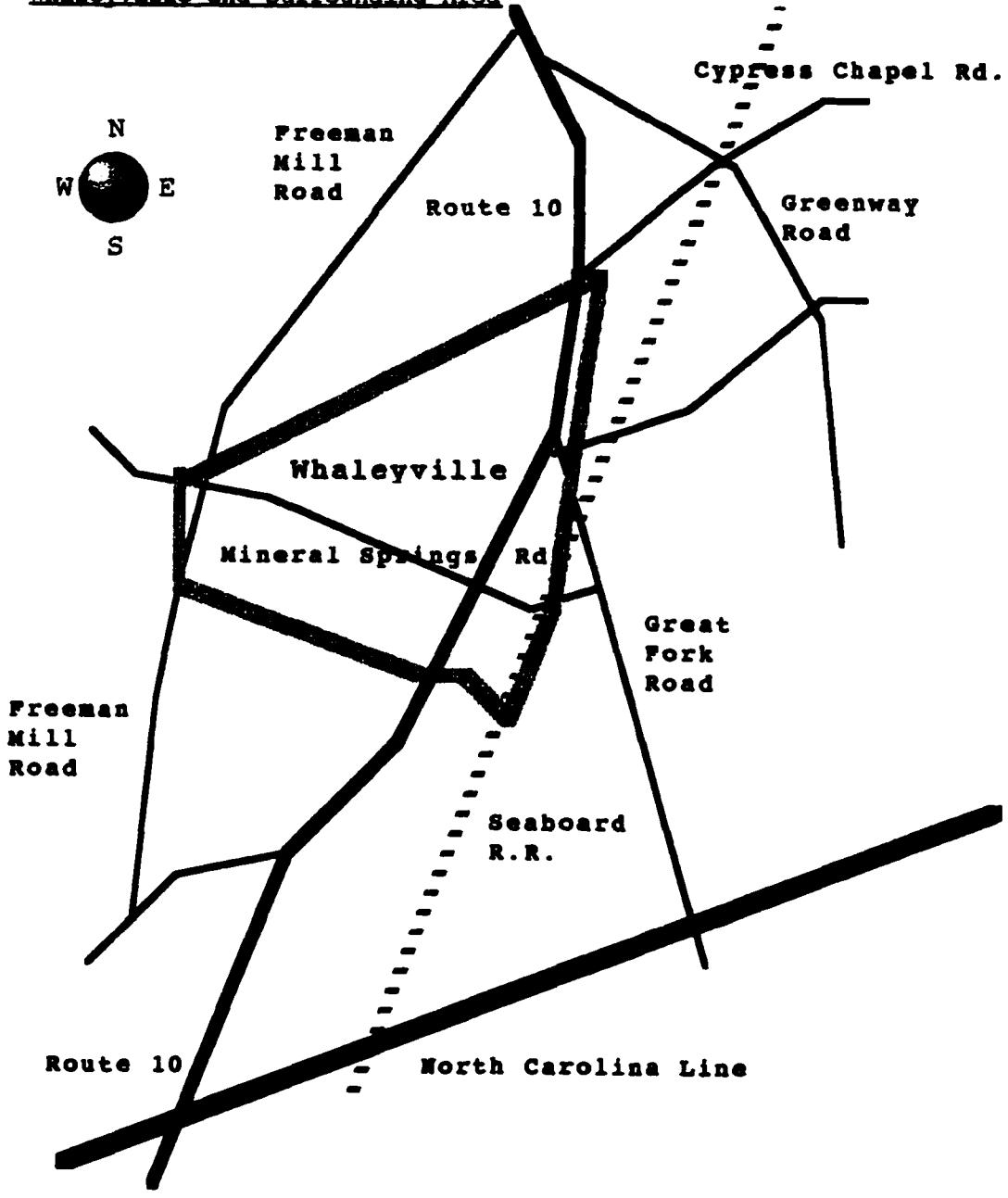
Northwest Suburban Growth Area



Note: Based on Map 2005 General Plan (1989) by the Department of Community Development, City of Suffolk, VA.

Map 6

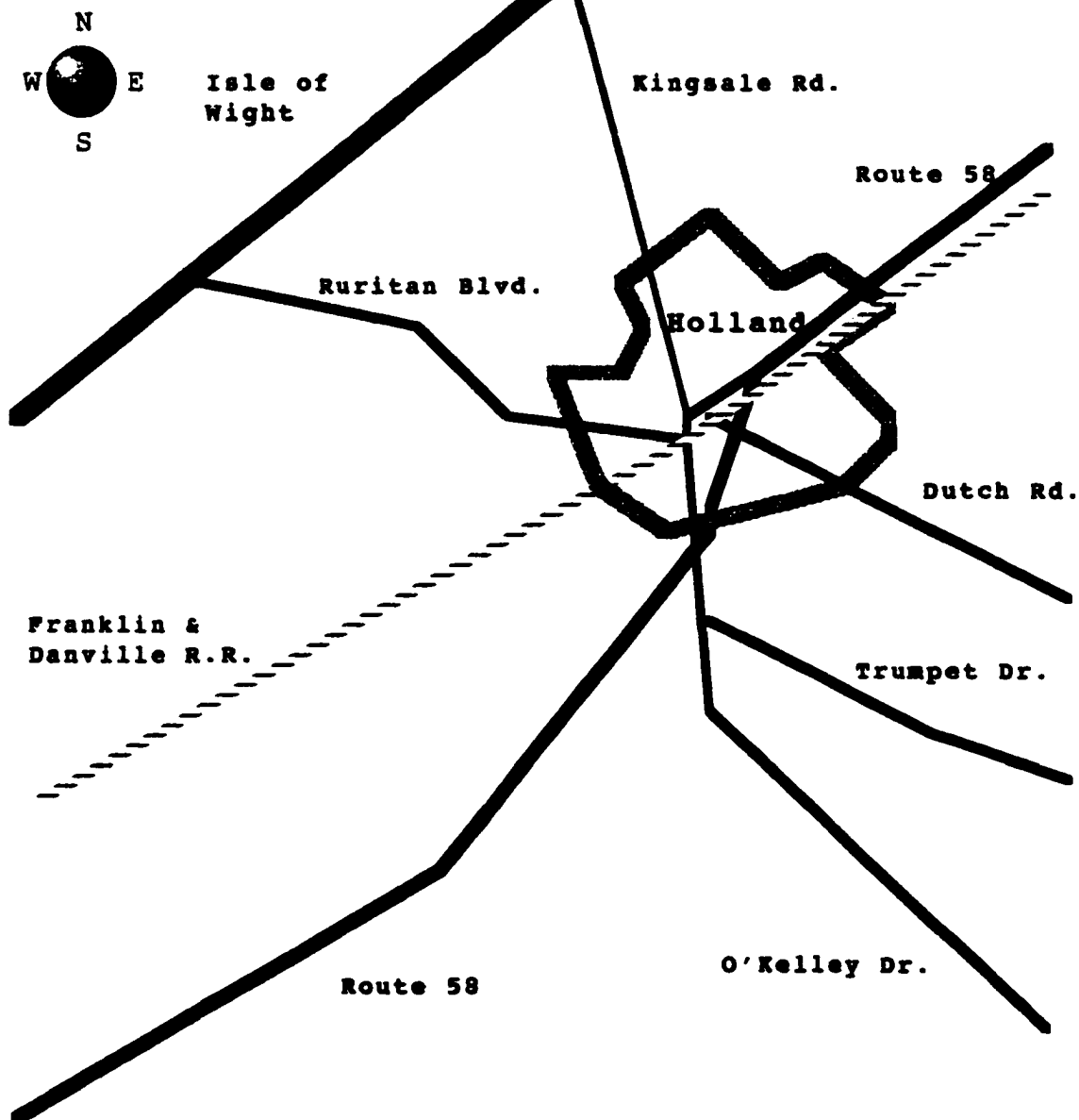
Whaleyville and Surrounding Area



Note: Based on 2005 General Plan (1989) by the Department of Community Development, City of Suffolk, VA.

Map 7

Holland and Surrounding Area



Note: Based on Map 2005 General Plan (1989) by the Department of Community Development, City of Suffolk, VA.

STUDENT NAME: _____ STUDENT NUMBER: _____

WEIGHTED FACTOR POINTS**RETENTIONS:**

TIMES RETAINED: 1 2 3 [] _____
 GRADE(S) RETAINED: [] [] [] [] _____

SOL CORE COURSE (S) NOT PASSED:

READING/ENGLISH MATH SCIENCE SOCIAL STUDIES _____

STANDARDIZED TEST SCORES FROM 199____ 199____ GRADE: _____

READING [] YRS. BELOW GRD. LEVEL []
 MATH [] YRS..BELOW GRD. LEVEL []
 LANGUAGE [] YRS.. BELOW GRD. LEVEL []

(ATTACH STANDARDIZED TEST SUMMARY SHEET)**GRADES:**

CURRENT GRADES: YEAR []
 ENGLISH [] READING [] _____ []
 MATH [] SCIENCE [] SC. STUDIES []
 LANGUAGE [] HEALTH/PE [] _____ []
 YEARLY AVERAGE POOR GRADES [] _____
 CREDITS EARNED [] CREDITS NEEDED FOR GRADUATION []
(ATTACH COPY OF REPORT CARD (S))

DISCIPLINE:

CURRENT YEAR'S NUMBER OF ADMINISTRATIVE HEARINGS []
 TOTAL NUMBER OF ADMINISTRATIVE HEARINGS [] _____
 NUMBER OF SUSPENSIONS DURING CURRENT SCHOOL YEAR []
 TOTAL SUSPENSIONS DURING PAST SCHOOL YEAR (S) [] _____
 NUMBER OF LONG TERM SUSPENSIONS [] [] _____
 (FIVE DAYS OR MORE) YEAR(S) _____
 EXPULSIONS [] DATES: { _____ }
(ATTACH ALL DISCIPLINE DOCUMENTATION)

ATTENDANCE RECORD:

NUMBER OF FAMILY GENERATED SCHOOL TRANSFERS: [] _____
 TOTAL AVERAGE YEARLY ABSENCES [] _____
 CURRENT YEAR [] PRESENT [] ABSENT []
(ATTACH ATTENDANCE REPORT)

DATE REVIEWED: _____ CHAIRPERSON _____ TOTAL POINTS- _____
 TEAM MEMBERS: _____

STUDENT NAME: _____ STUDENT NUMBER: _____

1. Age Overage for grade group (over 2 years) Current age
 At age for grade group
2. Physical size Small for age group
 Large for age group
3. Attendance Chronic Absenteeism (20) days or more per year
 Seldom absent (10 days or less)
 Frequent tardiness
4. Attendance record Year 1999-2000 Present Absent
Year 1998-1999 Present Absent
5. Functional Level in
Math On Grade Level Below Above
Reading On Grade Level Below Above
Language On Grade Level Below Above
6. Current Grades Failing 50% of classes or more
 Passing 50% of classes or more
- Studies English Math Language Science Sc.
 Reading Health/PE Band/Chorus Exploratory

FAMILY ENVIRONMENT:

Note: The school nurse is asked to rate health issues as minor/mild to chronic to major/catastrophic using a 1-5 scale with 5 being the highest level. The guidance counselor is asked to rate family stressors from minor to major using the same 1-5 rating scale.

- HEALTH ISSUES [1] [2] [3] [4] [5] _____
NURSE'S SIGNATURE
 Information
- unknown
 Consistently in good health Frequently ill Chronic illness
 Chronic physical complaints Pregnancies or child birth Number
 Child's health history (prenatal care, maternal age, birth complications, etc.)
 List medications prescribed: _____
List health problems _____

- FAMILY STRESSORS [1] [2] [3] [4] [5] _____
COUNSELOR'S SIGNATURE
 Information
- Are there extraordinary family stressors? Yes No
unknown
 Substance abuse Homelessness Incarceration
 Episodes of violence Parent's, student's child's, or sibling's health problem
 Student works Other: _____

What is the student's perceived attitude towards school? Good Poor Unknown Other: _____
General Concerns or
Comments: _____

STUDENT NAME: _____ STUDENT NUMBER: _____

FAMILY ENVIRONMENT:

- A. Father's highest level of education completed:
 College graduate Some college High school graduate Non-high school graduate
 Highest grade completed _____ Information unknown
- B. Father's occupation unskilled skilled Semiprofessional
 Professional Managerial Information unknown
- C. Mother's highest level of education completed:
 College graduate Some college High school graduate Non-high school graduate
 Highest grade completed _____ Information unknown
- D. Mother's occupation unskilled skilled Semiprofessional
 Professional Managerial Information unknown
- E. Number of brothers/sisters in family
- F. Number of brothers/sisters dropping out of school Information unknown
- G. Number of brothers/sisters dropping out of school brothers sisters information unknown
- H. Are parents separated/divorced? Yes No Information unknown
- I. Does the child live in a one-parent or single parent home? Yes No Information unknown
- J. Does the child live with a stepfather or stepmother? Yes No Information unknown
- K. Does the child live in a family situation other than with parents (grandparent, foster care, etc.)?
 Yes No Information unknown
 Explain: _____
- L. Is there a history of frequent family moves/changes in schools?
 Yes No Explain: _____
- M. Is the student in a foster home? Yes Number of Foster Homes Information unknown
- N. Is the family currently receiving economic assistance in government sources (food stamps, AFDC, etc.) Yes No Information unknown
 Social Worker's Name: _____ Number: _____
- O. Does the child live in more than one household? Yes No Information unknown
 Other address: _____
- P. Is the student employed? Yes No Number of hours worked weekly
 Where: _____

Note: Please include a written narrative of interventions tried at the school level:

Student Interview Form

Name: _____ Male Female
 Date: _____ Passed LPT Yes No
 School: Lkld NR Dropout grade: _____
 Person Completing Form: Self Other _____
 Phone: _____ In person Phone Interview

1. What is your current education status?
 Re-enrolled in school Private school Home-schooled
 GED Graduate GED enrolled Trade school
 Employed Enrolled in another school system
 Other _____

Comments: _____

2. Can you give a reason as to why you dropped out of school? You may give more than one reason.

3. What important situation(s) or event(s) led to your decision to drop out? You may give more than one.

4. If you failed all or part the Literacy Passport Tests, what impact did being denied participation in activities have on your decision?

5. If you could have changed one thing that might have stopped you from leaving school early, what would it be?

Additional Information

1. Were you referred to the guidance counselor? Yes No
 By whom? Self Teacher Administrator Parent Other _____
 2. Why? Discipline Academics Home Problems
 Difficulty with students Excessive absences Health problems
 Difficulty with staff Other _____
 3. Using the staff questionnaire, what type of program would have helped you stay in school?

Staff Questionnaire

Student: _____ Dropout Grade: _____
 School: Lakeland Nansemond River Other _____

1. Are you aware of any significant events which preceded the student dropping out of school.

Student	Staff	Student	Staff
<input type="checkbox"/>	<input type="checkbox"/> POOR GRADE	<input type="checkbox"/>	<input type="checkbox"/> HEALTH ISSUES
<input type="checkbox"/>	<input type="checkbox"/> RETAINED	<input type="checkbox"/>	<input type="checkbox"/> EXCESSIVE ABSENCES
<input type="checkbox"/>	<input type="checkbox"/> WEAPONS	<input type="checkbox"/>	<input type="checkbox"/> DRUG/ALCOHOL VIOLATION
<input type="checkbox"/>	<input type="checkbox"/> FIGHTS OR VIOLENCE	<input type="checkbox"/>	<input type="checkbox"/> CHRONIC ILLNESS
<input type="checkbox"/>	<input type="checkbox"/> FAMILY PROBLEMS	<input type="checkbox"/>	<input type="checkbox"/> LAW/COURT INVOLVEMENT
<input type="checkbox"/>	<input type="checkbox"/> FAILURE ON THE LPT	<input type="checkbox"/>	<input type="checkbox"/> CHRONIC MISBEHAVIOR
<input type="checkbox"/>	<input type="checkbox"/> FREQUENT SCHOOL TRANSFER	<input type="checkbox"/>	<input type="checkbox"/> PARENTHOOD
<input type="checkbox"/>	<input type="checkbox"/> LACK OF INTEREST/MOTIVATION		
<input type="checkbox"/>	<input type="checkbox"/> DIFFICULTY WITH SCHOOL STAFF		
<input type="checkbox"/>	<input type="checkbox"/> FAMILY MEMBERS OR FRIENDS DROPPED OUT		
<input type="checkbox"/>	<input type="checkbox"/> PROBLEMS WITH OTHER STUDENTS		
<input type="checkbox"/>	<input type="checkbox"/> FINANCIAL NEEDS		

2. Was the students referred to the guidance counselors? Yes No

Why? Discipline Academics
 Home Problems Difficulty with students
 Excessive absences Health problems
 Difficulty with staff

Other _____

3. What was the student's attitude towards school?
 Good Poor Unknown Other explain _____

4. What type of Alternative placement program or combination of programs would you recommend for this yourself or this student?

Student	Staff
<input type="checkbox"/>	<input type="checkbox"/> Academic
<input type="checkbox"/>	<input type="checkbox"/> Behavioral
<input type="checkbox"/>	<input type="checkbox"/> Vocational
<input type="checkbox"/>	<input type="checkbox"/> Attendance
<input type="checkbox"/>	<input type="checkbox"/> Medical
<input type="checkbox"/>	<input type="checkbox"/> Counseling
<input type="checkbox"/>	<input type="checkbox"/> Life Skills including conflict resolution money or time management, parenting, etc.
<input type="checkbox"/>	<input type="checkbox"/> Use of Family services and community agencies
<input type="checkbox"/>	<input type="checkbox"/> GED preparation

**Informed Consent Document
for
Old Dominion University**

INFORMED CONSENT DOCUMENT:

The purposes of this form are to give you information that may affect your decision whether to say YES or NO to participate in this research, and to record the consent of those who say YES.

TITLE OF RESEARCH:

Site-based Dropout Identification And Prescription Procedures For Alternative Education In A Diverse School System

Researcher:

William P. Krupp, Principal
Robertson Elementary School
B.A. June 1967, Randolph-Macon College
M.Ed. May 1976, University of Virginia
Darden School of Education
Urban Services, Education Concentration

DESCRIPTION OF RESEARCH:

Several studies have been conducted looking into the subject of how to determine the best means to predict potential school dropouts. None of them have explained the impact of students' failure to pass competency tests and how this affects their choice to drop out of school prior to graduation.

If you decide to participate, then you will join a study involving research on school dropouts. You will be asked to complete a five question survey centering on the effects of competency testing and your decision to drop out of school prior to graduation. If you say YES, then your participation will involve completing the questionnaire at a location convenient to you and the researcher. Approximately 25 dropout students will be participating in this survey.

EXCLUSIONARY CRITERIA:

To the best of your knowledge, you are not aware of any reasons that will prohibit your participation in this study.

RISKS AND BENEFITS:

RISKS: If you decide to participate in this study, then you may face the risk of a loss of confidentiality and privacy. The likelihood of harm is rare. The researcher tried to reduce these risk by removing all linking identifiers, retaining all data in a confidential and secure manner, removing names, and coding student questionnaires. The researcher proposes to consider aspects of sensitive personal behavior with the utmost care. Activities concerning illegal, sexual, or

criminal behavior such as drug or alcohol abuse, court or law involvement, pregnancy or health problems shall not be recorded with specifics, but merely as indicators of potential problems, predictors, stressors, or triggering events. Again, once the data are collected all identifying information shall be removed. And with any research, there is some possibility that you may be subject to risks that have yet to be identified.

BENEFITS: A benefit from your participation in this study is assisting in the attainment of information relative to efforts to develop procedures and alternative education programs to predict and encourage potential dropout students from dropping out of school. Personal benefits to the study's subjects include: a) students involved in the survey would receive a summary of the results; b) Students in similar situations and predicaments would benefit from initiatives and may be less likely to dropout from school before completion; and c) Some dropout students may return to school and benefit from the proposed programs.

COST AND PAYMENTS

The researcher wants your decision about participation in this study to be absolutely voluntary. The research is unable to give you any payment for participating in this study.

NEW INFORMATION

If the researcher finds new information during this study that will reasonably change your decision about participating, then he will give it to you.

CONFIDENTIALITY

The researcher will take reasonable steps to keep private information obtained about you from this research, including questionnaires, review of student records, or interviews with school staff members. The researcher will remove identifiers from the information and store information in a locked cabinet or safe prior to processing. The results of this study may be used in reports, presentations, and publications, but the researcher will not identify you. Of course, your records may be subpoenaed by court order or inspected by government bodies with oversight authority.

WITHDRAWAL PRIVILEGE:

It is OK for you to say NO. Even if you say YES now, you are free to say NO later, and walk away or withdraw from the study--at any time. Your decision will not affect your relationship with Old Dominion University or otherwise cause a loss of benefits to which you might otherwise be entitled.

COMPENSATION FOR ILLNESS AND INJURY:

If you say YES, then your consent in this document does not waive any of your legal rights. However, in the event of harm or injury arising from this study, neither Old Dominion University nor the researcher are

able to give you any money, insurance coverage, free medical care, or any other compensation from such injury. In the event that you suffer injury as a result of participation in any research project, you may contact Dr. Robert Lucking at 683-3000 or Dr. Val Derlega at 683-3118 at Old Dominion University, who will review the matter with you.

VOLUNTARY CONSENT:

By signing this form, you are saying several things. You are saying that you have read this form or have had it read to you. that you are satisfied that you understand this form, the research study, and its risk and benefits. The researcher should have answered any questions you may have had about the research. If you have any questions later on, then the researcher should be able to answer them. Please contact William Krupp at 925-5515.

If at any time you feel pressured to participate, or if you have any questions about your rights or this form, then you should call Dr. Val Derlega, at 757-683-3118, or Old Dominion University Office of Research, at 757-683-3460.

And importantly, by signing below, you are telling the researcher, that you agree to participate in this study. The researcher will give you a copy of this form for your records.

_____	_____	_____
Subject's Name	Signature	Date
_____	_____	_____
Parent/Legally Authorized Representative's Name	Signature	Date
_____	_____	_____
Witness's Name	Signature	Date

INVESTIGATOR'S STATEMENT:

I certify that I have explained to this subject the nature and purpose of this research, including benefits, risks, costs, and any non-experimental procedures. I have described the rights and protections afforded to human subjects and have done nothing to pressure, coerce, or falsely entice this subject into participating. I am aware of my obligations under state and federal laws and promise compliance. I have answered the subject's questions and have encouraged him/her to ask additional questions at any time during the course of this study. I have witnessed the above signature(s) on this consent form.

William P. Krupp, Investigator

Date

VITA

William P. Krupp was born February 1, 1945 in Petersburg, Virginia, the son of Frances and Paul Krupp. He graduated from Randolph-Macon College in 1967 with a B.A. in History and began his career in education as a seventh grade teacher in Virginia Beach, Virginia. As a teacher he served as a supervisor for student teachers, administrative assistant, and grade level chairperson. He was elected president of Virginia Beach Education Association and served as a founding co-chairperson of the VBEA PACE committee.

He was selected to participate in the Curry School of Education's Administrative Internship Program and received a M.Ed. from the University of Virginia in 1975. In the program he maintained a 4.00 GPA and was selected to Phi Delta Kappa.

In 1977 he was appointed principal of Florence Bowser Elementary School in Suffolk, Virginia. From 1982 to 1986 he served as account representative for Horace Mann Insurance company selling and servicing auto, home, life, disability and annuity products. He was contracted by the State of Virginia Department of Education as a BTAP observer to validate the Beginning Teacher Assistance Program (BTAP) instrument and to later observe and report beginning teachers' progress towards mastery of teaching skills.

In 1986 he returned to Suffolk as an elementary school principal and retired as of July, 2000. While a principal he pursued his doctoral studies in Urban Services, Educational Administration, at Old Dominion University. He is married to the former Linda Collins of Sandston, Virginia, and they have a grown daughter, Jennifer.