An Analysis of the Effectiveness of the Excel Intervention Program for At-Risk Ninth and Tenth Graders

Alf E. Logan
Loyola University Chicago

Follow this and additional works at: https://ecommons.luc.edu/luc_theses

Part of the Education Commons

Recommended Citation

This Thesis is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Master’s Theses by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.

This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License.
Copyright © 1995 Alf E. Logan
AN ANALYSIS OF THE EFFECTIVENESS OF
THE EXCEL INTERVENTION PROGRAM FOR
AT-RISK NINTH AND TENTH GRADERS

by

Alf E. Logan

A Dissertation Submitted to the Faculty of the Graduate
School of Loyola University Chicago in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education
May
1995
ACKNOWLEDGMENTS

I wish to thank each of the members of my committee. Dr. L. Arthur Safer, Chairman, for his valuable support and assistance over the past four years in providing direction throughout my course of study and later completion of the research, Dr. Max Bailey for his logical and timely advice, and Dr. Phil Carlin for his cogent practicums and helpful comments. Further appreciation is extended to Charlotte Sonnenfeld for her unwavering encouragement in the completion of this process. Appreciation is also extended to Heidi Carty who provided invaluable statistical assistance. Special thanks to Sandy Hawbaker for her superb word processing skills and willingness to see this project to fruition.

A last expression of gratitude is owed to my wife, Anna Marie. I am infinitely thankful for her tolerance in providing the necessary time and energy that this research required, and for continual support and encouragement.
VITA

The author, Alf E. Logan, was born in Chicago, Illinois on March 18, 1943. He obtained his elementary and secondary education in the Chicago Public Schools, graduating from Taft High School in 1960.

In June of 1964, he earned the degree of Bachelor of Arts from Wheaton College in Wheaton, Illinois. In 1969 he graduated from Northern Illinois University with a Master of Science Degree in Education. Following the pursuit of these degrees, he completed the necessary requirements to obtain administrative certification. In September 1990, Mr. Logan entered the doctoral program in Educational Leadership and Policy Studies at Loyola University.

The author’s twenty-seven years of teaching and administrative experience include secondary school assignments in Shabbona, Illinois, Niles North High School, Skokie, Illinois and Fenton High School, Bensenville, Illinois. Among his current responsibilities as the Principal of Fenton High School are the leadership and supervision of an excellent faculty and staff committed to the ongoing improvement of a strong, dynamic educational program.
TABLE OF CONTENTS

ACKNOWLEDGMENTS .............................................................. ii
VITA ........................................................................ iii
LIST OF TABLES ................................................................. vi
CONTENTS OF APPENDICES ...................................................... viii

Chapter

I. INTRODUCTION .................................................................... 1
   Statement of the Problem ...................................................... 3
   Purpose of the Study .............................................................. 5
   Hypothesis ........................................................................ 5
   Definition of Terms .............................................................. 7
   Significance of the Study ....................................................... 9
   Limitations of the Study ........................................................ 10
   Organization of the Study ...................................................... 12

II. REVIEW OF RELATED LITERATURE .................................. 13
   Defining Who Is At-Risk ....................................................... 13
   Developing an Index to Identify At-Risk Youth ................... 17
   Characteristics of the Emerging At-Risk Population ............ 23
   Methods of Intervention ....................................................... 25
   Origin of the EXCEL Program ................................................. 34
   Conclusion ........................................................................ 37

III. METHODS AND RESEARCH DESIGN ................................. 39
   Design of the Study .............................................................. 39
   Demographics and Subjects .................................................. 41
   Instrumentation ................................................................. 46
   Analysis of the Data ............................................................. 48
   Summary ........................................................................ 51

IV. PRESENTATION AND ANALYSIS OF DATA .......................... 53
   Analysis of the Data ............................................................. 54
   Null Hypothesis I ............................................................... 58
   Null Hypothesis II ............................................................ 61
   Null Hypothesis III ............................................................ 64
Null Hypothesis IV .................................................. 67
Null Hypothesis V .................................................. 71
Qualitative Report .................................................. 74
Summary of the Data Analysis ................................. 79

V. DISCUSSION, IMPLEMENTATION AND RECOMMENDATIONS ...... 82

The Problem .......................................................... 82
The Purpose .......................................................... 84
The Hypotheses ...................................................... 84
Instrumentation ...................................................... 86
Data Analysis ........................................................ 87
The Findings .......................................................... 88
Qualitative Analysis ............................................... 95
Implications for Practice .......................................... 96
Recommendations ................................................... 100

REFERENCES .......................................................... 102

APPENDICES .......................................................... 107
LIST OF TABLES

Table                                                                 Page  
1. Means and Standard Deviation for Absence Rate, G.P.A., Credits Earned, Disciplinary Referrals Extra-Curricular Participation by Year for EXCEL Group and Control Group.......................... 56  
2. Analysis of Variance Results for Absence Rate, G.P.A., Credits Earned, Disciplinary Referrals, and Extra-Curricular Participation for 1991 and 1993 by EXCEL Group Versus Control Group........................................ 57  
3. t Test for Absence Rate as a Function of the EXCEL Group........................................ 59  
4. t Test for Absence Rate as a Function of the EXCEL Group Controlling for Gender (Male/Female).......................... 60  
5. t Test for Absence Rate as a Function of the EXCEL Group Controlling for Grade Level............. 61  
6. t Test for Grade Point Average as a Function of the EXCEL Group.................................... 62  
7. t Test for Grade Point Average as a Function of the EXCEL Group Controlling for Gender (Male/Female).......................... 63  
8. t Test for Grade Point Average as a Function of the EXCEL Group Controlling for Grade Level.......................... 64  
9. t Test for Credits Earned as a Function of the EXCEL Group........................................ 65  
10. t Test for Credits Earned as a Function of the EXCEL Group Controlling for Gender (Male/Female).......................... 66  
11. t Test for Credits Earned as a Function of the EXCEL Group Controlling for Grade Level.......................... 67
12. t Test for Number of Disciplinary Referrals Submitted as a Function of the EXCEL Group .......... 68

13. t Test for Number of Disciplinary Referrals Submitted as a Function of the EXCEL Group Controlling for Gender (Male/Female) ..................... 69

14. t Test for Number of Disciplinary Referrals Submitted as a Function of the EXCEL Group Controlling for Grade Level ...................... 70

15. t Test for Number of Extra-Curricular Programs Participated In as a Function of the EXCEL Group .............................................. 71

16. t Test for Number of Extra-Curricular Programs Participated In as a Function of the EXCEL Group Controlling for Gender (Male/Female) .................... 72

17. t Test for Number of Extra-Curricular Programs Participated In as a Function of the EXCEL Group Controlling for Grade Level .............................................. 73

18. The Impact of the EXCEL Program on Students as Assessed by EXCEL Graduates, Parents, and Teachers .......................................................... 76

19. EXCEL Graduates, Parents, Teachers Response to Question "Do you feel that student participation in extra-curricular activities increased as a result of the EXCEL Program?" (Number of graduates, parents, and teachers who selected each answer) .......................... 77
## CONTENTS OF APPENDICES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>EXCEL and Control Group Data Forms</td>
<td>108</td>
</tr>
<tr>
<td>Appendix B</td>
<td>EXCEL Student, Parent, and Teacher Surveys</td>
<td>111</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Summary of EXCEL Program Tallies for EXCEL Students, Parents, and Teachers</td>
<td>117</td>
</tr>
<tr>
<td>Appendix D</td>
<td>Summary of Comments made by EXCEL Students, Parents, and Teachers</td>
<td>121</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

America's public schools face tremendous challenges in trying to accomplish the mission articulated by the National Education Goals represented as the educational cornerstone of the Bush and Clinton Administrations. These goals confirm that by the year 2000:

- All children in America will start school ready to learn.
- American students will leave grades 4, 8 and 12 having demonstrated competency in challenging subject matter, including English, mathematics, science, history, and geography; and every school will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy.
- American students will be the first in the world in science and mathematics achievement.
- Every adult American will be literate and will possess the knowledge and skills necessary to compete in a
global economy and exercise the rights and responsibilities of citizenship.

- Every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning (National Education Goals Panel, 1993, p. 3)

The National Education Goals Panel considers these goals a wake-up call to all Americans. However, public schools charged to meet these lofty goals are facing unparalleled problems. These problems range from a growing diversity in student population to the meeting of the physical, emotional and educational needs of America's children of whom more than 23% live below the poverty line and, as a result, are in danger of failing to fulfill their physical and mental promise. According to Hodgkinson (1992) this is one of the highest youth poverty rates in the "developed" world and has shown virtually no decline.

In addition to the issues of diversity and poverty, our schools face a litany of other devastating economic, environmental, educational, and ethical dilemmas never before encountered. A disturbing number of babies now are born addicted to drugs. Infants are born infected with human immunodeficiency virus (HIV) or acquired immunodeficiency syndrome (AIDS). The number of homeless people, including children, is
estimated to be between three and four million and growing (Tower and White, 1989). Estimated cases of child abuse number over one million, many of whom are disabled (National Center on Child Abuse and Neglect, 1988). Children existing in these dire circumstances cannot help but be at risk for failure in our current educational system.

Statement of the Problem

Despite the efforts of educators to respond to the data gathered and the research on the characteristics of at-risk youth as well as the effects of the school environment on student success, the dropout rate in our public schools continues to be viewed with alarm. With the nation’s dropout rate estimated conservatively at 25% and in excess of 40% among some minority groups and as high as 60% in some urban cities, educators are attempting to develop interventions which will increase our schools’ holding power (Kunisawa, 1988).

The effect of this alarming attrition translates into a significant loss of productivity for the individual and for society as a whole (Wehlage and Rutter, 1986). In order to survive, as a society, our population must be educated. Since we live within a pluralistic society that is becoming ever more diverse, a single approach to education cannot and will
not meet the challenges that lie ahead.

Current research indicates that many at-risk youth perceive the traditional public school environment as a hostile place with little to offer them, yet we know that a positive school environment can be a major contributor to student success (Conrath, 1986). Schools should provide a healthy climate that encourages optimal personal and academic learning. Considering the wide variety of approaches implemented by school districts to meet the needs of at-risk students, establishing a culture that promotes a sense of competence in students is a challenging task (Childers and Fairman, 1986; Vallejo, 1987).

What is needed on the part of educators to put theory into practice is research that describes more specifically what was done (the intervention applied), to whom (the actual student group), and with what effect (what changes did or did not occur) (Waltz, 1989).

The study of Fenton High School’s EXCEL Program focused on this type of descriptive research; since it is based on a specific intervention program applied to an identifiable group of at-risk students. The research question to be answered is whether or not the intervention program caused significant changes in specific school related behaviors and attitudes of the participating at-risk students.
Purpose of the Study

The purpose of this study was to determine the effectiveness of a specially designed course for freshman and sophomore students identified as at-risk who were enrolled at Fenton High School in the 1991-92 school year. The study sought to determine if the EXCEL (Excellence in Education and Life) Program significantly improved the academic and social performance of those who participated in the Program during the 1991-92 school year.

A comparison of each student's academic and social performance was analyzed over a three year period of time to determine if this intervention program significantly improved student performance in the areas of student attendance, grades received, credits earned, disciplinary referrals, and extra-curricular participation.

Data from the experimental group were compared with a randomly selected group of students who did not participate in EXCEL in order to determine if changes in academic and social performance could be attributed to EXCEL, or were in fact a result of simple maturation.
Hypotheses

Does the EXCEL Program have any significant impact on student attendance, grades, earned credits, disciplinary referrals, and extra-curricular involvement?

The researcher assumed the following null hypotheses:

1. There will be no significant difference in the absence rate of the 26 students who participated in the EXCEL Program in the year following their participation in the program when compared with their absence rate the year prior to participation.

2. There will be no significant difference in the grades earned by the 26 students who participated in EXCEL in the year following their participation in the program when compared to grades received in the year prior to participation.

3. There will be no significant difference in the number of credits earned by the 26 students who participated in EXCEL in the year following their participation in the program when compared to credits earned in the year prior to participation.

4. There will be no significant difference in the number of disciplinary referrals made for the 26 students
who participated in EXCEL in the year following participation in the program when compared to the number of referrals made in the year prior to participation.

5. There will be no significant difference in the number of extra-curricular programs the 26 students who participated in EXCEL will join in the year following participation in the program when compared to the number of extra-curricular activities joined in the year prior to participation.

In addition to examining the stated null hypotheses, a qualitative component was included to survey a representative number of students who participated in EXCEL during the 1991-92 school year as well as parents of those students and faculty members in whose mainstream classes those students were enrolled.

Definition of Terms

The following definitions were applied to the terms as used in this study.

1. **At-Risk Student**: A student whose behaviors limit or jeopardize their success in school. At-risk students may exhibit one or more of the following characteristics:
   - Chronic truancy - 15 or more days in an 18 week marking period
- Multiple failures during a nine week grading period (three or more classes)
- Transfer student with multiple failures from the originating school
- Suspected substance abuse
- Parents who do not speak English
- Parents who knowingly do not value education;
- Economically deprived
- Significant loss (death/divorce)
- Significant health problems
- Gang affiliation
- Disruptive of the normal educational process
- High test scores, low achievement
- Slow learner not eligible for special education
- Student referred to the Teacher Assistance Team on two difference occasions

2. **EXCEL Program (Excellence in Education and Life):** A two semester course designed to provide a structured, general credit class in which ninth and tenth grade students will be provided academic and social support. This individualized course of study assists students in improving academic and social skills necessary for successful completion of their high school
program. The course stresses educational responsibility, improvement of study and social skills, improvement of self-esteem, and development of vocational skills.

3. **Teacher Assistance Team**: A multidisciplinary team to whom students are referred whose behaviors indicate difficulties with academics, alcohol, drugs, or other problems. School personnel or parents may make referrals to the TAT. Recommendations may then be made to involve the student with school or community resources.

4. **Student assistance support groups**: Groups organized to share experiences and help students identify and express feelings and develop coping skills. Support groups are co-led by adults who have completed a group facilitator course.

5. **EXCEL Group**: A support group made up of students enrolled in EXCEL co-led by a Fenton social worker and the EXCEL teacher.

**Significance of the Study**

The goal of this study was to provide practitioners with a detailed longitudinal assessment of the at-risk intervention program designed by the Fenton High School At-risk Com-
mittee. Practitioners will have the opportunity to utilize the findings about the EXCEL Program as a resource in planning their own prevention programs. In addition, it may be helpful in improving an existing prevention program as well as identifying and developing intervention strategies that would meet the special needs of their own student population at the secondary level.

The necessity of identifying at-risk students and providing them with readily available programs which will cause them to be successful in school and enable them to graduate is now more important than ever as our nation's youth prepare for the technological workplace of the decade to come. To experience success within this rapidly changing workplace, all students will be required to demonstrate the ability to work in teams, use effective problem solving strategies and practice higher order thinking skills.

Limitations of the Study

Inherent in this study were limiting factors that had an impact on the results obtained.

1. The study was limited to data obtained from one, medium sized, comprehensive suburban high school located in DuPage County, Illinois.
2. The EXCEL Program evaluated in the study was implemented in 1991-92 and thus was going through its initial shakedown period. Since that time further improvements in efficiency and functioning have occurred.

3. It is possible that the students enrolled in the EXCEL Program in 1991-92 would have experienced greater social and academic success during the 1992-93 school year had they not been placed in EXCEL as a result of another year of maturation. In order to determine if maturation alone was the cause of their increased success in 1992-93, a second random representative group of students not enrolled in EXCEL was also examined and compared with the EXCEL student group.

4. The use of a survey as the qualitative component to this study has several inherent limitations. Isaac and Michael note that "surveys only tap respondents who are accessible and cooperative" and the "surveys are vulnerable to over-rater and under-rater bias - the tendency for some respondents to give consistently high or low rating" (1981, p. 128).
Organization of the Study

This study is organized under five major headings. Chapter I introduces the research problem and states the purpose of the study, the hypotheses, the definitions of the terms, and the limitations imposed by its design. Chapter II reviews the literature to include defining who is at-risk, methodology used to identify at-risk students, a survey of intervention programs implemented to serve these students concluding with a brief history of the birth of the EXCEL Program. Chapter III provides the methodology of the study, including a review of the subjects, procedures, instruments, treatments, hypotheses and methods of data analysis. The data are analyzed with respect to the study’s hypotheses in Chapter IV; and Chapter V examines the results for their implications and offers recommendations for future research.
CHAPTER II

REVIEW OF RELATED LITERATURE

The review of the literature in this chapter focused on important issues related to the entire topic of at-risk youth to include defining who is at-risk, methods used to identify at-risk students, and characteristics of the emerging at-risk population. In addition, a number of intervention programs educators have implemented to serve at-risk students as well as the results of these interventions were reviewed. A brief history of the origin of the EXCEL Program was included as well as general conclusions addressing the issue of at-risk youth.

Defining Who Is At-Risk

A review of the literature reveals two categories of definitions, one limited to the academic dropout and the second extending to all of the life events of the individual student.

Troob (1985) believes that the term “dropout” belongs to a world in which the completion of school is expected; in this world the incoming high school freshman can expect four
years of challenging academic experiences that will result in the earning of a diploma. In this context, risk denotes the potential to absent oneself from such experiences. Typically, educators use measures of academic failure (e.g., failing a course or courses in school, continued absences, retention in grade, suspension, not completing homework assignments) to identify potential dropouts. This strategy is the "academic" approach to educational risk.

Relying solely upon academic measures to determine which students are at risk is a less productive strategy than one that identifies indicators outside, as well as inside, the school. If academic measures, as many people believe, are largely manifestations or symptoms of more serious problems faced by young people outside school, these other factors must be understood more thoroughly. To collect complete and reliable data about them is a difficult task, and some critics might argue that this is not the responsibility of the educator. Yet, if students are to be identified early as being at-risk (so that intervention can lessen the key risks before problems become insurmountable), then a definition that is not limited to school activities is essential.

A definition of this kind does not imply that school activities are unimportant. In fact, increasing the likelihood of school success is the point of the interventions covered by any definition. It is simply better to consider academic in-
formation as necessary, but not sufficient, to characterize students' at-risk status.

Frymier and colleagues (Frymier, 1989; Frymier and Robertson, 1990) defined at-risk students as those being at risk of failure in school and life. They developed a concept of "total risk" composed of "academic risk" and "other risk." The academic subset closely parallels the factors outlined by Troob (1985) and others who have studied school dropouts. Frymier (1989) defined "other risk" as those factors outside school to include family socioeconomic status, family instability, family tragedy, and personal pain that place the student in jeopardy.

Failure to complete school or failure in life suggests young people are in complete control of their lives. Failure in school is not necessarily the result of a lack of motivation. Similarly, failure in life is not always a consequence of lack of responsibility or the result of indifference. Adults, as well as children, frequently find themselves in circumstances beyond their control.

The impact of poverty upon the lives of children is particularly striking. Children born and raised in poverty have many obstacles to overcome. Poverty seems, for example, to escalate the rates of teenage pregnancy, often with devastating intergenerational consequences (Reeves, 1988). Poor children give birth to poor children; and in the process, our so-
ciety gives birth to a permanent underclass. Some observers might argue that these teenagers are failing in life simply because they are not exercising the necessary responsibility and control. In circumstances other than poverty (which involves social and psychological dimensions) such an observation might be accurate. However, in poverty, the birth of a child seems to promise affection and attention to the prospective mother - someone to love and to be loved by.

An understandable and comprehensive definition of risk is required. Such a definition must allow for feasible intervention strategies that have the potential to improve the overall quality of a student's life.

Rutter (1980), in a discussion of causes and influences that must be considered before solutions can be prescribed for problems favored a comprehensive approach. He presented a modified model of a 1978 conceptualization of the group of variables contributing to an explanation of vandalism.

This model of causation has four principal components: individual predisposition; ecological disposition; current circumstances; and situations and circumstances prevailing at the time. Rutter pointed out that these four components were not truly separate and that there were complex interactions among them.

Pallas (Nutriello, McDill, and Pallas, 1990) formulated a revised definition:
Young people are at risk, or educationally disadvantaged, if they have been exposed to inadequate or inappropriate educational experiences in the family, school, or community (p. 13).

He conceded that this definition was intentionally vague about what constitutes "inadequate" or "inappropriate" because of the difficulty in securing agreement on what would be adequate or appropriate. The strength of this definition is that it provides broad guidance for assessing the extent to which children can be described as educationally disadvantaged. It is also in broad agreement with Rutter's conceptualization of adolescent behavior and Frymier's definition of failure in school and life. However, it does not suggest that children "fail", but rather that they are disadvantaged because they have been exposed to inadequate or inappropriate experiences, which may have taken place at any time during the child's life, from the moment of conception.

Developing an Index to Identify At-Risk Youth

With the conceptualization of a definition of at-risk, let us turn our attention to ways of identifying students at risk. Educators have long agreed that early identification of the strengths and weaknesses of individual students is a critical first step to providing appropriate learning experiences to meet their needs. This applies whether the student
is gifted, physically or mentally handicapped, or "average."

In the case of at-risk students, identification usually begins with a definition or list of factors considered to be associated with at-risk behavior. Typically such lists include five to twelve factors. Many factors are represented across different lists, but the specific group of factors varies from list to list. One can account for this phenomena by the differing philosophies, policies, and practices among communities that have developed their own definitions of at-risk students. Dougherty (1990) has, however, pointed out that, of all 50 states in the United States, 25 have developed formal definitions. Some of these definitions, like the one used by the National Drug Policy Board, a subsidiary of the U. S. Justice Department, focus narrowly on a particular risk. The Board, for example, has identified ten factors that increase a child's vulnerability to drugs.

Most identification programs have, for practical and statistical reasons, selected factors that provide a narrow focus concerning definitions of at-risk. Some researchers believe, however, that the weakness of a narrow focus is that it does not allow for complete understanding of the needs of an individual student.

McCarney and Bauer (1991) developed a checklist consisting of seventy-four factors that they believe research has
generated which characterize at-risk youth. These seventy-four factors are grouped into four categories - home, appearance, behavior and academic. McCarney and Bauer's checklist is designed to be completed by a classroom teacher or other school professional who, it is assumed, possesses information about the home, community, and school conditions of the students. However, as Stiggins and colleagues (Stiggins, 1985; Stiggins and Bridgeford, 1985; Stiggins, Conklin and Bridgeford, 1986) point out, there is very limited understanding of classroom data gathering practices. Teachers rely on their own sources of information about their students, yet the quality of that information is variable, and it is not known if such information is necessarily accurate. Classroom teachers, in relying on their own observations and memories of student behavior, may make mistakes. In light of the labeling of students that occurs in schools, teachers need to be trained appropriately in the collection and use of such information. With the growth in the size of the at-risk population, waiting for specialists to diagnose the learning and social problems of students becomes impractical. Each teacher must be equipped with the skills to assess student performance and behavior and understand the contributing factors. Stiggins (1985) notes that resources, other than a mere checklist, must be allocated for providing technical assistance to teachers. With appropriate assistance, teachers should be able to develop systematic ap-
proaches to gathering information concerning students and linking that information to decisions about instruction.

Frymier (1989) began by reviewing factors that previous research indicated were associated with at-risk. His intent was to develop an instrument to measure risk that would be valid and would also be practical for educators to use.

Frymier's review identified a wide range of factors associated with students who leave school before graduation. Typically these factors include data on personal demographic background; academic history; psychosocial components; and significant life events to include loss of a parent or sibling, a marital separation, teenage pregnancy, or an arrest arising from drug or alcohol abuse. Frymier paid particular attention to the multifaceted nature of risk, since previous efforts had concentrated on a few academically associated indicators (for example, reading scores, attendance records, retention in grade, suspensions and expulsions).

In attempting to develop an index of risk, Frymier considered two models: the medical and the psychiatric. The recognized approach used to diagnose coronary heart disease illustrates the medical model. Usually a patient is evaluated as being at risk of heart problems based upon factors which include family history, cholesterol levels, tobacco use, hypertension, overweight, and little or no exercise. The risk
associated with each factor is assessed, but so are the interactive effects of several factors. This approach resembles what some school districts are already attempting, although more confidence can perhaps be placed in the factors associated with coronary heart disease than those associated with failure to complete school (p. 35).

Psychiatry, on the other hand, involves working with complex elements of human behavior by distinguishing between two aspects of a person's life: predisposing factors (those that evolve over a long period of time, typically two or more years) and short term events (six months or less). Examples of the long-term predisposing causes may consist of marital discord in a family over an extensive period of time and other long-term crises. Short-term life events may include the loss of a loved one, divorce, or an unplanned pregnancy. Psychiatrists postulate that short-term life events may hasten the mental health deterioration of persons with predisposing factors (p. 36).

The appeal of an index or scale of risk lies in its potential to help identify students soon enough to intervene effectively. Developing a scale is, however, no easy task; many obstacles must be overcome before a reliable and valid instrument can be put together. These obstacles include the fact that every individual is unique, risk factors vary in significance and all ages of youth are not equally susceptible to risk.
These difficulties suggest that any scale or index of risk must be constructed and interpreted with extreme care. The task is feasible, but difficult. Whether a particular scale or index of risk is more useful than a collection of reliable data about an individual student is questionable.

Using the various models identified earlier to organize their thinking about risk, the researchers in the Frymier project began by agreeing on the forty-five factors that previous research had identified as contributing to risk. The assumption was not that these factors caused risk, but rather there might be a significant linkage between one or more of the factors and at-risk behavior. If one of the factors were present in a student’s life, that factor was assumed to be a symptom of risk that might make the individual more vulnerable to other factors present in his world.

It was also assumed that different students would cope with and respond to particular experiences and aspects of their world in different ways. Some students cope with the death of a parent relatively well, while others unravel under similar circumstances. Some students are stimulated to work harder when earning low grades in school while others abandon the attempts of teachers and other key adults who are willing to help them succeed.

Frymier and his colleagues then developed five clusters of data about the students through their forty-five factors.
These clusters were identified as:

- academic failure
- family socioeconomic status
- family instability
- family tragedy
- personal pain

Through longitudinal follow-up of students in the original study, Frymier and his colleagues attempted to establish the predictive validity of each cluster by associating them with such dependent variables as dropping out of school, unwanted pregnancies, attempting or actual suicides, and criminal behavior. The purpose of the exercise was to provide educators with an awareness of the multifaceted nature of at-risk, so they can not only recognize indicators of risk within a given cluster but across clusters as well.

Educators must still use their professional judgment about whether certain clusters are more important - as to severity and frequency - than others. Regardless of the approach, though, it would seem that the student whose record displays the presence of at least one indicator of risk in each of five clusters should be monitored carefully and, where appropriate, intervention should occur.

Characteristics of the Emerging At-Risk Population

The increased learning and behavior problems that are
confronting educators in our schools are the result of the changing nature of our society. We are seeing an increase in the number of students identified as being at-risk as well as an increase in the day-to-day problems experienced by the students referred to as "typical" or "average."

By anyone's perception, it must be recognized that the number of students considered at-risk is increasing at an alarming rate. In 1989, the poverty rate was 13.1%, indicating that one in eight Americans live at the poverty level. More than 12.6 million U.S. youngsters, nearly 23% of all children under the age of 18, are poor. Thus one in five American children goes to bed hungry or sick or cold (Youth Indicators, 1991). The future seems even more grim as the U.S. Department of Education estimated that by the year 2000, "as many as one-third of our young people will be disadvantaged and at-risk" (Reed and Sauter, 1990). If a child lives in a family headed by a woman, the chances are better than 50/50 that the child is poor (Reed and Sauter, 1990). In America 222,000 children are homeless; 65,000 of those 222,000 do not attend school.

At least half of all children in our schools are faced with divorce or separation in their families before they are 18 years of age. At least 1 million children a year are victims of child abuse and neglect, an increase of two-thirds over 1980 estimates as reported by the National Center on
Child Abuse and Neglect (1988). Women between the ages of 10 and 17 years of age make up 31% of the pregnant population. Five hundred suicide attempts are made every day among students ranging from 15-19 years of age (Youth Indicators, 1991).

These figures confirm that the number of students at risk for failure in our public schools is growing. A new population of children with special needs is emerging. The characteristics these children exhibit will vary, and their behaviors may be mild, moderate, or severe in intensity. The environment in which these children exist may exacerbate their problems, and changing the environment will not entirely eliminate the effects of the problem. Educators need to be aware of these facts and be prepared to make appropriate adjustments.

**Methods of Intervention**

Let us now turn our attention to methods of intervention used to address and potentially improve the status of at-risk youth in our school systems. To begin, the word "intervention" will refer to any planned action to modify some aspect of a student's school experience in response to a persistent and serious problem (Baker and Sansone, 1990). Although statistics are somewhat inconsistent, today most of our nation's youth do make it to the secondary level (grades
7 through 12) in our school systems. It is at this level that students who are at-risk most often times drop out of school ("Facts About," 1989). Thus, the secondary level represents the last opportunity to improve the status of the at-risk student in our schools.

There is a common theme found in the research that public schools have become the most important institutions depended upon in providing critical assistance in the comprehensive development of economically and educationally at-risk youth (Crawford, 1988). The institutions our society has traditionally relied upon (the family, the church, and other community institutions) are frequently dysfunctional or nonexistent in many communities. Due to the absence of the aforementioned institutions, the schools have taken on the role of parent, physician, and mentor (Crawford, 1988). Considering this heavy burden, the schoolhouse has the responsibility to attempt to serve all of these roles to some degree.

It is calculated conservatively that somewhere between twenty and thirty percent of the students of elementary and secondary school age are at risk. This percentage approximates forty-five million youths at-risk in the United States ("Facts About," 1989). Furthermore, nationwide the high school dropout rate is reportedly over twenty-five percent of the entire school population (Baker and Sansone, 1990). Edu-
Catators are searching for effective programs in order to increase student achievement and keep students actively involved in school and successfully graduate.

The majority of research on the issue of the at-risk youth focuses on the students (Baker and Sansone, 1990). The Phi Delta Kappa study of Students at Risk (Frymier, 1989) was a collaborative research project involving hundreds of members of Phi Delta Kappa. One hundred chapters of this organization were selected to participate in this project. This study identified certain risk behaviors to include low achievement, limited task performance, limited aspirations, little or no desire to engage in classroom and school activities and the exhibition of disruptive or delinquent behavior, implying that these student behaviors should be the targets for intervention in order to increase academic performance and decrease undesirable behaviors.

The data collected for Phi Delta Kappa's study was accomplished by chapter members and others in 276 schools between October 10 and December 10, 1988. Data on the 45 risk factors and 13 instructional strategies forming the basis of the study were collected on 22,018 students to include 6,173 fourth grade students, 7,762 seventh grade students, 7,417 high school sophomores, and 666 other students.
Data was also gathered from structured interviews with 276 principals at the elementary, middle or junior high, and high school levels. At the same time, each of the teachers in the 276 schools were asked to complete a survey instrument about at-risk students and about school practices. As a result a total of 9,652 teachers completed the survey.

The data was analyzed in two ways. First it was aggregated for the total group of 276 schools and reported in descriptive terms. Second, the data was analyzed separately site by site.

The Phi Delta Kappa study raised several issues. One issue suggests that the professionals surveyed in this study (principals, counselors, teachers) lacked skill with or confidence about particular approaches to working with at-risk students. Another issue that emerged relates to teachers' lack of information about the specific facts of their students' lives. During the course of the study, it was discovered that many schools maintain records of individual students in ways that prevent teachers or others in the building from having ready access to current information about the students. A third issue that arose focused on retention in grades as a strategy implemented by many educators. Of the factors identified in previous research as contributing to at-riskness, retention is the only one imposed by schools. Retention is an action that schools take in working with at-
risk students rather than something that happens to students as a function of where they live, what their parents are like, or how they feel about their lives. In Frymier's view the Phi Delta Kappa study established that retention in grade is harmful to at-risk students as the probability of dropping out of school is increased, and the likelihood of raising student achievement levels is diminished by retention (p. 33).

Larrivee and Bourque (1991) established a framework for categorizing interventions on three levels: (a) individual strategies, (b) school strategies; and (c) community strategies. In their study of six intervention models on student achievement, attitude, behavior, attendance, and dropout rates, five of the six models exhibited significant increases in the students' grades, and thus, academic achievement. Each successful program included support services; some attention to parental involvement, peer mentoring, small class size, strong building leadership and concern over physical setting.

The most effective programs in the Larrivee and Bourque study were the costliest programs. Other conclusions drawn from Larrivee and Bourque (1991) include the idea that programs implemented at an earlier age than the secondary level have a greater potential for positive impact on at-risk students. Also multi-faceted programs that take into consideration the multitude of factors which cause students to be at-
risk of school failure are more effective than single dimension programs.

The findings of Larrivee and Bourque (1991) that comprehensive, multi-faceted programs of intervention on academic achievement of at-risk students combined with well-qualified, supportive faculty in secondary schools are most successful was reiterated in the studies of Cipollone (1990) and Petrocelli (1992). Cippolone compared six comprehensive high schools and their dropout rates. In two of the six schools, whose dropout rates were lower than expected given the characteristics of their student populations, it was discovered that the teachers in these schools felt more positive about their school as a work place. They felt they had a greater voice in the school, were more appreciated and better supported. These teachers also seemed to operationalize their positive feelings by demonstrating high academic and social expectations, and worked collaboratively with colleagues around academic and affective issues related to at-risk students.

Petrocelli (1992) identified successful intervention components in four comprehensive high schools with dissimilar at-risk programs. These successful programs were not structured from a particular model or set of guidelines but were developed from available resources and designated to meet the specific needs of at-risk students. At the same time, these dis-
similar programs contained common intervention components including an on-campus setting, a high school diploma as the primary educational objective, an individualized instructional program, a high degree of staff commitment and autonomy, the use of alternative educational programs, and the willingness to provide quality staff development for program practitioners.

Further research conducted by Nardini and Antes (1991) in which 178 principals rated effective intervention strategies for at-risk students as well as the frequency of their usage, further strengthens the argument for multi-faceted programs. They concluded that the most effective programs of intervention included individualized instruction, teacher aides, peer tutoring, after school and summer school programs, flexible schedules, and parental involvement where at all possible. The Comer process, discussed by Hall and Henderson (1991), also supports this holistic or multi-faceted approach to intervention.

Many findings within the research on intervention strategies for at-risk youth emphasized the need for an individual-centered approach to intervention for academic achievement of at-risk students in high schools. Compton and Baizerman (1991) found that schools which are effective in serving the at-risk student are those that respond to the at-risk student’s di-
verse needs. Therefore, effective schools adapt their inter-
vention strategies to the individual student characteristics
which they serve. This point is further reinforced by Slavin
and Madden (1989), who concluded that effective strategies
for academic achievement at the secondary level for students
at-risk should be continuous progress programs in which stu-
dents can proceed at their own rate. Wehlage (1989) concludes
that schools sometimes contribute to at-risk student failure
by inadequate and incomplete responses to individual stu-
dents' needs. Wehlage reiterates the point that the school
system itself must bear significant responsibility for the
academic achievement of at-risk students.

Researchers are becoming increasingly concerned that the
effects of a successful intervention program for academic
achievement of at-risk youth could be lost if intervention is
not continuous and constant (Winters, 1988). Study has shown
that at-risk students tend to lose more of their knowledge
base than their advantaged peers over the summer months. Upon
returning to school the at-risk group will constantly be
playing "catch-up" during the first part of the school year
while subsequent gains made during the second part of the
year will be lost over the following summer (Winters, 1988).

Levin and Hopfenderg (1991) among other researchers are
opposed to constant remediation among at-risk students. They
showed through analysis that remediation, often a primary strategy for at-risk students, actually slowed down their progress and placed them farther and farther behind the mainstream student population.

Levin and Hopfenderg's findings support Wehlage's (1989) social bonding process. Although separate schools, schools-within-schools, and specialized scheduling of at-risk students have all improved academic achievement, the school must be careful not to impersonalize the education of at-risk students. These students already bring feelings of alienation and isolation to school with them everyday; if the school is insensitive to their emotional and social needs, academic achievement will be even less likely to occur. Compton and Baizerman (1991) also point out that the most successful intervention programs incorporate community attachment through joint partnerships between schools and available community resources. This increases the likelihood for academic achievement and a sense of belonging or membership in the greater community for the at-risk student. In addition, this school and community partnership is very helpful, since many school districts are bound by financial constraints in today's world of tax caps. As a result, they often do not possess all the resources or means by which proven effective interventions can be implemented among at-risk students in order to promote and increase academic achievement.
Origin of the EXCEL Program

In November of 1990, a planning committee consisting of the Principal of Fenton High School, Curriculum Director, the Administrative Dean, the Special Education Coordinator, and the Director of Guidance began to discuss educational options for those students who, while exhibiting dysfunctional behavior, should not necessarily be placed into the special education arena or removed from school through the board expulsion process. This group of students also included those who had serious attendance problems, were not successful in class, and exhibited signs of depression and unhappiness. During the first meeting of this committee, subsequently it would be come known as The At-Risk Committee, it was agreed that further meetings would be held to more carefully identify those students termed at risk. Plans were initiated to visit schools in the Chicago suburban area where at-risk programs were currently being implemented.

During the months of December 1990, January and February 1991, visits were made to approximately five high schools in the Chicago area to study at risk programming. In addition, the identification of the at-risk student population became a major project. Initially an "at-risk" student checklist made available from Hawthorne Educational Services was used by the deans, as well as the guidance staff, to identify freshmen and sophomores who could be considered at risk.
In addition to an in-district "at-risk" program, contact was initiated with the director of the Ombudsman Alternative Program. This program has satellite schools throughout the midwest and southwest and currently has an enrollment between 800 and 900 students attending various satellites. Students are responsible for attending the program for three hours each day. The program consists of a computerized instructional model with students working by themselves with microcomputers to access the instructional program. After a series of meetings it was agreed that the district would access the Ombudsman Program in concert with another local high school district for those students who are unsuccessful in the local at-risk program.

Late Spring 1991 found the At-Risk Committee solidifying plans for the new "at-risk" program. It would be known as the EXCEL (Excellence in Education and Life) Program. Students targeted for the program included sophomores and incoming freshmen who met one or more of the "at-risk" criteria. Counselors, social workers, and principals of the two sending districts met with the high school "At-Risk" subcommittee to finalize the list of incoming freshmen. The program consisted of three classes of no more than ten students each. The EXCEL teacher met with each of these classes on a daily basis teaching them organization and study skill strategies. At least once a week one of the high school social workers worked with the teacher and each class on
self-esteem issues. Twice weekly contact was made with parents of each student in September and October of 1991 in order to keep them informed of day to day progress in school as well as monitor situations arising in the home or community that were detrimental to the student’s academic progress.

Administrative responsibility for the program was assigned to the assistant principal who was also charged with formalizing an assessment program to evaluate the EXCEL Program.

The EXCEL Program was officially approved for funding by the Board of Education in July 1991. At the same time the Board authorized the funding of fifteen student slots for the Ombudsman Program at $3,000 per slot for a total of $45,000.

Following approval by the Board, the principal sent each faculty member a letter outlining the mission of the EXCEL Program and a job description for the EXCEL teacher. Candidates were then interviewed for the EXCEL instructional position with final selection made in the second week of August. During the month of August the Bensenville Press and the Daily Herald ran articles outlining the EXCEL Program and its benefit to “at-risk” students. At the same time, the final list of students was approved and each student’s parents were contacted by telephone. During this conversation the program was described to the parents and their approval for placement
of their student was requested. All but one of the thirty parents contacted approved placement of their child in EXCEL. In virtually every case, the parents expressed sincere thanks to the school for implementing the program.

Conclusion

In conclusion, education is a process that occurs both within and outside of schools. Schools are but one of the key social institutions responsible for educating our nation's youth. The issues surrounding the children at-risk problem is not strictly an educational issue but a societal issue. Programs to correct these ills need to be viewed as spokes in a wheel with children as the hub. Collaboration between families, schools, and communities is the answer. To borrow from Madeline Will, children at-risk are truly a shared responsibility (Will, 1987).

Nevertheless, research supports the claim that programs of intervention designed to meet the emotional and academic needs of at-risk students have increased the holding power of schools and, as a result, increased the academic achievement of these students. There also appears to be a cause and effect relationship between those programs offering a wide array of interventions and their rates of success with at-risk
youth. These findings give some credence to the call for multifaceted programs which take into consideration the multitude of factors which cause students to be at risk of school failure.
CHAPTER III

METHODS

Design of the Study

The purpose of this study was to examine the question: Did the EXCEL Program have any significant impact on student attendance, grades, credits earned, disciplinary referrals, and extra-curricular involvement? To answer this question the following null hypotheses were examined:

1. There will be no significant difference in the absence rate of the 26 students who participated in the EXCEL Program in the year following their participation in the program when compared with their absence rate the year prior to participation.

2. There will be no significant difference in the grades earned by the 26 students who participated in EXCEL in the year following their participation in the program when compared to grades received in the year prior to participation.
3. There will be no significant difference in the number of credits earned by the 26 students who participated in EXCEL in the year following their participation in the program when compared to credits earned in the year prior to participation.

4. There will be no significant difference in the number of disciplinary referrals made for the 26 students who participated in EXCEL in the year following participation in the program when compared to the number of referrals made in the year prior to participation.

5. There will be no significant difference in the number of extra-curricular programs the 26 students who participated in EXCEL will join in the year following participation in the program when compared to the number of extra-curricular activities joined in the year prior to participation.

It is possible that if the null hypotheses noted above were rejected as a result of significant changes in each of the five school related factors, the positive changes might have been a result of normal maturation. In order to determine if, in fact, maturation might be the cause for improvement, data on a second randomly selected, representative group of ninth and tenth grade students was
also gathered using the five school related elements.

A second phase of this study was to analyze surveys completed by a representative sample of students who participated in EXCEL during the 1991-92 school year as well as parents of those students and faculty members in whose mainstream classes those students were enrolled. Through a qualitative analysis of the surveys completed by these three groups, the study sought to determine if they believed the EXCEL experience:

1. Improved their attendance to school.
2. Improved their grade point average.
3. Assisted them in complying with school rules.
4. Encouraged them to increase their participation in extra-curricular activities.

Demographics and Subjects

The participants in this study were drawn from the freshman and sophomore classes of Fenton High School during the 1991-92 school year. Fenton High School was located in the far northeast quadrant of DuPage County just west of O'Hare International Airport. The school served the communities of Bensenville and Wood Dale which included an
attendance area of approximately 15 square miles.

Demographic information contained in the school's 1991-92 State Report Card included the following racial/ethnic makeup:

<table>
<thead>
<tr>
<th>Race</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>76.1%</td>
</tr>
<tr>
<td>Black</td>
<td>.37%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>19.1%</td>
</tr>
<tr>
<td>Asian/Pac Islander</td>
<td>4.3%</td>
</tr>
<tr>
<td>Native American</td>
<td>.2%</td>
</tr>
<tr>
<td>Total Enrollment</td>
<td>1,315</td>
</tr>
</tbody>
</table>

In addition, the breakout of Low-Income and Limited-English Proficient students were:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Income</td>
<td>6%</td>
</tr>
<tr>
<td>Limited English Proficient</td>
<td>5%</td>
</tr>
</tbody>
</table>

Attendance rates, student mobility and number of chronic truants were:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>94.3%</td>
</tr>
<tr>
<td>Student Mobility</td>
<td>15.4%</td>
</tr>
<tr>
<td>Chronic Truants</td>
<td>8</td>
</tr>
</tbody>
</table>

The vast majority Fenton High School students matriculated from two junior high schools. Blackhawk Junior High School served the community of Bensenville (nine square miles) while Wood Dale Junior High School served Wood Dale (six square miles).
The following demographic comparison of these two junior high schools revealed several contrasts.

*Student Enrollment (Ethnic Breakout)*

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Asian/Pac Islander</th>
<th>Native American</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackhawk Jr. H.S.</td>
<td>56.7%</td>
<td>.6%</td>
<td>32.5%</td>
<td>9.5%</td>
<td>.6%</td>
<td>514</td>
</tr>
<tr>
<td>(Bensenville)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood Dale Jr. H.S.</td>
<td>85.4%</td>
<td>.3%</td>
<td>10.7%</td>
<td>3.7%</td>
<td>0</td>
<td>310</td>
</tr>
<tr>
<td>(Wood Dale)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Low Income</th>
<th>Limited English Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackhawk Jr. H.S.</td>
<td>25.4%</td>
<td>20%</td>
</tr>
<tr>
<td>(Bensenville)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood Dale Jr. H.S.</td>
<td>7%</td>
<td>1.8%</td>
</tr>
<tr>
<td>(Wood Dale)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Attendance</th>
<th>Mobility</th>
<th>Chronic Truants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackhawk Jr. H.S.</td>
<td>95%</td>
<td>16.5%</td>
<td>2</td>
</tr>
<tr>
<td>(Bensenville)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood Dale Jr. H.S.</td>
<td>95.3%</td>
<td>9.8%</td>
<td>3</td>
</tr>
<tr>
<td>(Wood Dale)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Bensenville community where Fenton High School was located and in which two-thirds of Fenton's students resided, had experienced a significant shift in ethnicity. Once a bustling railroad town comprised of primarily German and Northern European immigrants, Bensenville was experiencing considerable growth in its Hispanic population. In 1986, approximately 12% of the student population at Blackhawk
Junior High School was Hispanic. During the ensuing six years this percentage virtually tripled. The rapid growth of this minority group created considerable social and educational pressures both in the community as well as the schools. The predominant majority (German, Scandinavians, Italians) viewed the accelerated growth of the minority population with alarm. Few efforts were made by the key taxing bodies in the community to share power with the expanding Hispanic minority.

Bensenville schools officials, in attempting to meet the educational needs of this minority population, experienced tremendous growth in their English as a Second Language and Limited English Proficiency Programs. Although, the financial base of the schools had eroded as a result of the tax cap imposed on the collar counties surrounding Chicago, the ESL and LEP programs were viewed as exemplary. Yet, the community leaders perceived these programs with concern and considered them as a magnet attracting additional Hispanic families to Bensenville.

In addition to the change in configuration of the Bensenville schools' population, students from families identified by the state as low income had doubled in the past six years. With virtually no growth in revenue, the Bensenville elementary schools also experienced difficulty
meeting the needs of students frequently identified as at-risk.

The Wood Dale community, likewise served by Fenton High School, had remained strikingly stable in its population. There had been no major shifts in Wood Dale’s ethnicity over the previous ten years. Wood Dale Junior High School’s reported low income percentage (7%) was inconsequential when compared to Blackhawk Junior High School’s percentage (25.4%). However, many Wood Dale residents perceived the change in the Bensenville population with concern and were fearful of the impact Bensenville’s demographic shift might have on their quality of life. Wood Dale Junior High School possessed neither ESL or LEP Programs. Likewise, Wood Dale’s elementary district had not experienced the negative effect of the tax cap felt in Bensenville. Significant growth in commercial real estate within Wood Dale over the prior eight to ten years allowed the schools in Wood Dale to provide quality educational offerings and build a noteworthy technology program.

Observing the striking dissimilarities in the two communities sending students to Fenton High School, the Fenton staff worked diligently to promote the benefits accruing from its cultural diversity. The staff also
responded by developing programs that were inclusive in nature and designed to meet the divergent needs of the student body.

Annually, the professional staff at Fenton High School was able to identify between 20 and 50 freshman and sophomore students who were in danger of dropping out of school and yet, were not found eligible for special education services. This group of students was characterized as reflecting common behaviors to include serious attendance problems, disruptive behavior, multiple course failures, exhibiting signs of depression, and lacking organization and problem solving skills.

The 26 subjects of this study were drawn from this group of students and included 12 ninth grade and 14 tenth grade students enrolled in the EXCEL Program in the fall of 1991. In addition, a control group of 26 ninth and tenth grade students enrolled at Fenton High School in the fall of 1991 who did not participate in EXCEL were also examined. Each of the students in both groups were tracked over a three year period of time. Subsequent comparisons were made of each group using the five dependent variables (absence rate, grade point average, credits earned, disciplinary referrals, extracurricular participation).
Instrumentation

The researcher developed the data coding form (Appendix A) for both the EXCEL students and the students included in the control group. The coding sheet was comprised of demographic information including an identification number, grade level, and gender. The second portion of information requested on this sheet was a breakout of each student's absence rate during school years 1990-91 and 1992-93, grade point average in 1990-91 and 1992-93, number of credits earned in 1990-91 and 1992-93, number of disciplinary referrals received in 1990-91 and 1992-93 and number of extra-curricular programs participated in during 1990-91 and again in 1992-93.

The information placed on the coding sheet was drawn by the researcher from each student's attendance file, dean's file, counselor's file, official transcript file, and extra-curricular participation file.

The qualitative component of this study was developed in the form of three surveys completed by ten students enrolled in the EXCEL Program in 1991-92, their parents and ten mainstream classroom teachers who had these students in class (Appendix B). The student and parent surveys were
administered by the researcher in person or by telephone depending upon whether or not the student was still in attendance at Fenton High School. The faculty surveys were completed on campus by each of the ten teachers and returned to the researcher.

The administrator of the survey explained to the students, parents, and teachers the purpose of the survey, instructed them not to include their names, and informed them that their answers were confidential.

The purpose of this portion of the study was to gain information on the affective side by securing anecdotal information from the students, parents, and teachers completing the survey.

Analysis of the Data

Data analyses were performed using the 52 completed coding sheets. All statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS-X).

**Null Hypothesis 1**: Item 1 from the coding sheet was analyzed. Item 1 compared the number of days of school unattended for each EXCEL student in 1990-91 and again in 1992-93.

**Null Hypothesis 2**: Item 2 from the coding sheet was analyzed. Item 2 compared each EXCEL student's grade point
average in 1990-91 with his/her grade point average in 1992-93.

**Null Hypothesis 3:** Item 3 from the coding sheet was analyzed. Item 3 compared each EXCEL student and the number of credits he/she earned in 1990-91 in contrast with 1992-93.

**Null Hypothesis 4:** Item 4 from the coding sheet was analyzed. Item 4 compared each EXCEL student and the number of disciplinary referrals received by each in 1990-91 in contrast with 1992-93.

**Null Hypothesis 5:** Item 5 from the coding sheet was analyzed. Item 5 compared each EXCEL student and the number of extra-curricular activities he/she participated in during school year 1990-91 in contrast with 1992-93.

The aggregated data relating to each of the null hypotheses were tested statistically using a *t* test to determine if there was a significant difference between the means of the EXCEL group on each of the five school related issues (attendance, grades earned, credits earned, disciplinary referrals, extra-curricular participation) from the school year prior to participation in EXCEL to the school year following participation in EXCEL.

Due to the small sample of scores (26) for the EXCEL group, a *t* test was used to make adjustments for the fact
that the distribution of scores for small samples became increasingly different from a normal population. Distributions for smaller samples tend to be higher at both the mean and ends. The probability level was set at .05 for rejecting the null hypotheses.

Simple or one-way analysis of variance (ANOVA) was used to determine if there was a significant difference between the means of the EXCEL group and the control group at the .05 level. A significant difference between the means of the EXCEL group and the control group on any of the five school related factors supported the possibility that the improvement of the EXCEL group could not be linked to normal maturation alone.

In addition to the statistical analyses related to the null hypotheses stated above, qualitative analysis was used to analyze data from the survey administered to ten EXCEL students, their parents, and ten teachers in whose mainstream classes these students were enrolled. This qualitative analysis was designed to examine the opinions, feelings and beliefs of these three groups and to solicit suggestions they might have for improving the EXCEL program. The responses to each question on the surveys were tallied and an average
grade, based on a 4-point scale, was calculated for each of the first seven survey questions. A summary of the tallies is shown in the Appendix C. Responses to the open-ended questions were compiled and appear in full in Appendix D.

Summary

To summarize, 26 ninth and tenth graders were identified by the faculty at Fenton High School and Fenton's two sending junior high schools as being at-risk for school failure. Following their participation in the EXCEL program during the 1991-92 school year their performance was tracked the following year. An EXCEL coding sheet was completed on each of the students in the EXCEL group including the demographics of grade and gender as well as a summary of aggregated data for each student on the five school related factors of attendance, grade point average, credits earned, number of disciplinary referrals and participation in extra-curricular activities for the school years 1990-91 and 1992-93. A t test was used to either accept or reflect the null hypotheses.

In addition, a second group of students (control group) was randomly selected from the same graduating classes as the students studied from the EXCEL program. The control group did not participate in EXCEL. The control group was then compared with the EXCEL group using the same five related
school factors noted above in an attempt to determine if improvement experienced by the EXCEL students in the five school related areas was a result of the treatment or normal maturation. An analysis of variance was used to analyze differences between the EXCEL group and the control group.

Finally, the survey administered to ten EXCEL students, their parents, and ten classroom teachers in whose classes these students were mainstreamed was tallied and the researcher analyzed both the qualitative and quantitative data.

Chapter IV will report the findings in terms of the hypotheses. Chapter V will examine the results for their implications and offer recommendations for further research.
CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

This chapter will present an examination of the question: Did the EXCEL Program have any significant impact on student attendance, grades, credits earned, disciplinary referrals, and extra-curricular involvement? This chapter will also provide a qualitative analysis of surveys completed by a representative sample of students who participated in EXCEL during the 1991-92 school year as well as parents of those students and faculty members in whose mainstreamed classes those students were enrolled. This analysis sought to determine if these three groups believed the EXCEL experience (1) improved their attendance to school; (2) improved their grade point average; (3) increased the number of credits earned; (4) assisted them in complying with school rules; and (5) encouraged them to increase their participation in extra-curricular activities.
Statistical Analysis of the Data

Data analysis was performed using the 52 completed coding sheets. All statistical analyses were accomplished using the Statistical Package for the Social Sciences (SPSS-X). Simple or one way analysis of variance (ANOVA) was used to determine if there was a significant difference between the means of the EXCEL group and the control group at the .05 level. A significant difference between the means of the EXCEL group and the control group on any of the five school related factors (school attendance, grades received, credits earned, disciplinary referrals, and extra-curricular participation) supported the possibility that the improvement experienced by the EXCEL group was not the result of normal maturation alone.

The aggregated data taken from the EXCEL code sheets relating to each of the null hypotheses were then tested statistically using a t test to determine if there was a significant difference between the means of the EXCEL group on each of the five school related factors (attendance, grades earned, credits earned, disciplinary referrals, extra-curricular participation) from the school year prior to participation in EXCEL (1990-91) to the year following participation (1992-93). Also, t tests were computed for absenteeism rate, grade point average, credits earned, number of disci-
plenary referrals, and participation in the extra-curricular activities as a function of the EXCEL group controlling for gender as well as grade level.

In addition to the statistical analyses relating to the differences between the EXCEL group and the control group, as well as the analyses pertaining to the aforementioned null hypotheses, qualitative analyses was applied to analyze the data from the survey administered to ten representative EXCEL students, their parents, and ten teachers in whose mainstream classes these students were enrolled. These qualitative analyses were designed to examine opinions, feelings, and beliefs not easily measured by standardized instruments. These surveys also solicited suggestions that these three groups might have for improving the EXCEL Program. The qualitative data drawn from these surveys were reported by tallying each question on the surveys and calculating an average grade for each question based upon a 4-point scale.

Table 1 presents the summaries of the means and standard deviations for absenteeism rate, grade point average, credits earned, disciplinary referrals, and extra-curricular participation by year for the EXCEL group and the control group.
Table 1 Means and Standard Deviation for Absence Rate, G.P.A, Credits Earned, Disciplinary Referrals, Extra-curricular Participation by Year for the EXCEL Group and the Control Group.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Year</th>
<th>EXCEL Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Absence Rate</td>
<td>'90-'91</td>
<td>25.58</td>
<td>29.14</td>
</tr>
<tr>
<td></td>
<td>'92-'93</td>
<td>24.19</td>
<td>17.36</td>
</tr>
<tr>
<td>G.P.A.</td>
<td>'90-'91</td>
<td>1.22</td>
<td>.71</td>
</tr>
<tr>
<td></td>
<td>'92-'93</td>
<td>1.70</td>
<td>1.80</td>
</tr>
<tr>
<td>Credits</td>
<td>'90-'91</td>
<td>8.44</td>
<td>3.69</td>
</tr>
<tr>
<td></td>
<td>'92-'93</td>
<td>8.84</td>
<td>3.87</td>
</tr>
<tr>
<td>Discipline</td>
<td>'90-'91</td>
<td>15.15</td>
<td>9.61</td>
</tr>
<tr>
<td></td>
<td>'92-'93</td>
<td>12.19</td>
<td>11.42</td>
</tr>
<tr>
<td>Extra-Curr.</td>
<td>'90-'91</td>
<td>.19</td>
<td>.49</td>
</tr>
<tr>
<td></td>
<td>'92-'93</td>
<td>.77</td>
<td>.99</td>
</tr>
</tbody>
</table>

An analysis of variance (ANOVA) was calculated for absence rate; grade point average, credits earned, number of disciplinary referrals, and extra-curricular participation for 1991 and 1993 comparing the EXCEL group and the control group. The summaries of these calculations are found in Table 2.
Table 2  Analysis of Variance (ANOVA) results for Absence Rate, G.P.A., Credits Earned, Disciplinary Referrals, And Extra-curricular Participation for 1991 and 1993 by Excel Group Versus Control Group.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Year</th>
<th>F(1,51)</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence Rate</td>
<td>'91</td>
<td>10.17</td>
<td>.002*</td>
</tr>
<tr>
<td></td>
<td>'93</td>
<td>24.63</td>
<td>.001*</td>
</tr>
<tr>
<td>G.P.A.</td>
<td>'91</td>
<td>46.86</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>'93</td>
<td>4.56</td>
<td>.038*</td>
</tr>
<tr>
<td>Credit</td>
<td>'91</td>
<td>21.70</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>'93</td>
<td>21.39</td>
<td>.001*</td>
</tr>
<tr>
<td>Discipline</td>
<td>'91</td>
<td>31.97</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>'93</td>
<td>15.47</td>
<td>.001*</td>
</tr>
<tr>
<td>Extra-Curr.</td>
<td>'91</td>
<td>18.42</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>'93</td>
<td>3.84</td>
<td>.056</td>
</tr>
</tbody>
</table>

* indicates a significant p level.

As is shown in Table 2, ten analysis of variance were calculated between each of the dependent variables (absence rate, grade point average, credits earned, number of disciplinary referrals and extra-curricular participation. Nine out of ten of these analysis of variance were found to be significant at the .05 level. This provided evidence for differences between
the EXCEL group and the control group establishing that the EXCEL group differed significantly from the control group on these variables. These ANOVA provided statistical evidence for the validity of the EXCEL group and established that any growth in the EXCEL group following treatment could not be the result of normal maturation alone.

The only variable among the ten dependent variables that was found to be insignificant occurred between Extra-Curricular Activity, EXCEL Group, and Control Group for 1993 (Table 2). This phenomena suggested that the EXCEL group did not differ significantly from the control group on this variable, providing evidence to support the benefit of the EXCEL experience for these students. The EXCEL students, following their EXCEL experience, participated in the same number of extra-curricular activities as did the students in the control group.

Null Hypothesis I

Null hypothesis I states that there will be no significant difference in the absence rate of the 26 students who participated in the EXCEL Program in the year following their participation in the program when compared with their absence rate the year prior to participation.
Null hypothesis I was examined by analyzing Item 1 from the EXCEL coding sheet. Item 1 compared the number of days of school unattended for each EXCEL student in 1990-91 and again in 1992-93. A t test was computed to analyze the data comparing the number of days of school unattended by the EXCEL group in 1990-91 and again in 1992-93. Table 3 presents the results of this test.

Table 3  t Test for Absence Rate as a Function of the EXCEL Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>t value</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence Rate</td>
<td>.27</td>
<td>.76</td>
</tr>
</tbody>
</table>

Overall, no significant difference was found at the .05 level between the number of days of school unattended in 1990-91 and in 1992-93.

The null hypothesis was not rejected when comparing the absence rate of the 26 students who participated in the EXCEL Program in the year prior to treatment with the year following treatment.
As shown in Table 4 a t test was computed controlling for gender (males and females).

Table 4  

<table>
<thead>
<tr>
<th>Variable</th>
<th>t value</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>1.02</td>
<td>.33</td>
</tr>
<tr>
<td>Females</td>
<td>-1.63</td>
<td>.13</td>
</tr>
</tbody>
</table>

Table 4 reflected that when controlling for gender there was no significant difference between the number of days unattended for males or females who participated in the EXCEL Program in the year prior to treatment when compared to the year following treatment.

A t test was then computed controlling for grade level (freshmen and sophomores). The results of this test are summarized in Table 5.
Table 5  \textit{t} Test for Absence Rate as a Function of the EXCEL Group Controlling for Grade Level

<table>
<thead>
<tr>
<th>Variable</th>
<th>\textit{t} value</th>
<th>(p&lt;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>-1.16</td>
<td>.27</td>
</tr>
<tr>
<td>Sophomores</td>
<td>.53</td>
<td>.65</td>
</tr>
</tbody>
</table>

Table 5 reflected that when controlling for grade level there was no significant difference between the number of days unattended for freshmen or sophomores in the year prior to treatment when compared to the year following treatment. However, upon analyzing the data in Table 1 for the EXCEL group it was observed that this group improved its attendance by an average of 1.39 days from 1991 to 1993. The reason the \textit{t} test did not reflect significance at the .05 level was likely due to the small size of the EXCEL Group (26 students).

\textbf{Null Hypothesis II}

Null hypothesis II stated that there would be no significant difference in the grades earned by the 26 students who
participated in the EXCEL Program in the year following their participation in the program when compared to grades received in the year prior to participation.

Null hypothesis II was examined by analyzing Item 2 from the EXCEL coding sheet. Item 2 compared the grades earned by each EXCEL student in 1990-91 with the grades earned in 1992-93. A t test was computed to analyze the data comparing the grade point average of the EXCEL group in 1990-91 and again in 1992-93. Table 6 presents the results of this test.

<table>
<thead>
<tr>
<th>Variable</th>
<th>t value</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.P.A.</td>
<td>-1.36</td>
<td>.19</td>
</tr>
</tbody>
</table>

Overall no significant difference was found at the .05 level between grades earned in 1990-91 and in 1992-93.

The null hypothesis was not rejected when comparing the grades earned by the 26 students who participated in the EXCEL Program in the year prior to treatment with the year following treatment.
As shown in Table 7 a $t$ test was computed for controlling for gender (males and females).

Table 7  
$t$ Test for Grade Point Average as a Function of the EXCEL Group Controlling for Gender (Male/Female)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$t$ value</th>
<th>$p&lt;$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>-1.00</td>
<td>.34</td>
</tr>
<tr>
<td>Females</td>
<td>-1.98</td>
<td>.30</td>
</tr>
</tbody>
</table>

Table 7 indicated that when controlling for gender there was no significant difference between the grades earned for males or females who participated in the EXCEL Program in the year prior to treatment when compared to the year following treatment.

A $t$ test was then computed controlling for grade level (freshmen and sophomores). The results of this test are summarized in Table 8.
Table 8  \textit{t} Test for Grade Point Average as a Function of the EXCEL Group Controlling for Grade Level

<table>
<thead>
<tr>
<th>Variable</th>
<th>\textit{t} value</th>
<th>\text{p&lt;}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>-.78</td>
<td>.45</td>
</tr>
<tr>
<td>Sophomores</td>
<td>-1.52</td>
<td>.15</td>
</tr>
</tbody>
</table>

Table 8 displayed that when controlling for grade level there was no significant difference between the grade point average for freshmen or sophomores who participated in the EXCEL Program in the year prior to treatment when compared to the year following treatment. However, upon analyzing the data in Table 1 for the EXCEL Group it was discovered this group improved their mean grade point average by .48 from 1.22 in 1991 to 1.70 in 1993. The reason the \textit{t} test did not reflect significance at the .05 level was likely due to the small size of the EXCEL Group (26 students).

Null Hypothesis III

Null hypothesis III stated that there would be no significant difference in the number of credits earned by the 26 students who participated in the EXCEL Program in the year
following their participation in the program when compared to
credits earned in the year prior to participation.

Null hypothesis III was scrutinized by analyzing Item 3
from the EXCEL coding sheet. Item 3 compared the number of
credits earned by each EXCEL student in 1990-91 with the
credits earned in 1992-93. A $t$ test was computed to analyze
the data comparing the number of credits earned by the EXCEL
Group in 1990-91 and again in 1992-93. Table 9 presented the
results of this test.

Table 9  \textit{t Test for Credits Earned as a Function of the EX­
CEL Group}

<table>
<thead>
<tr>
<th>Variable</th>
<th>$t$ value</th>
<th>$p&lt;$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credits Earned</td>
<td>-.38</td>
<td>.71</td>
</tr>
</tbody>
</table>

Over all no significant difference was found at the .05
level between credits earned in 1990-91 and in 1992-93.
The null hypothesis was not rejected when comparing the total
number of credits earned by the 26 students who participated
in the EXCEL Program in the year prior to treatment with the
year following treatment.
As shown in Table 10 a t test was computed controlling for gender (males and females).

Table 10  t Test for Credits Earned as a Function of the EXCEL Group Controlling for Gender (Male/Female)

<table>
<thead>
<tr>
<th>Variable</th>
<th>t value</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>.63</td>
<td>.54</td>
</tr>
<tr>
<td>Females</td>
<td>-1.27</td>
<td>.23</td>
</tr>
</tbody>
</table>

Table 10 revealed that when controlling for gender there was no significant difference between the total number of credits earned for males or females who participated in the EXCEL Program in the year prior to treatment when compared to the year following treatment.

A t test was then computed controlling for grade level (freshmen and sophomores). The results of this test are summarized in Table 11.
Table 11  \( t \) Test for Credits Earned as a function of the EXCEL Group controlling for Grade Level

<table>
<thead>
<tr>
<th>Variable</th>
<th>( t ) value</th>
<th>( p &lt; )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>1.56</td>
<td>.15</td>
</tr>
<tr>
<td>Sophomores</td>
<td>-1.86</td>
<td>.09</td>
</tr>
</tbody>
</table>

Table 11 reflected that when controlling for grade level there was no significant difference between the total number of credits earned for freshmen or sophomores who participated in the EXCEL Program in the year prior to treatment when compared to the year following treatment. However, once again upon analyzing the data in Table 1 for the EXCEL Group it was observed that this group improved their mean number of credits earned by .40 from 8.44 credits in 1991 to 8.84 credits in 1993. The reason the \( t \) test did not reflect significance at the .05 level was likely due to the small size of the EXCEL Group (26 students).

Null Hypothesis IV

Null hypothesis IV stated that there would be no significant difference in the number of disciplinary referrals submitted for the 26 students who participated in EXCEL in the year
following participation in the program when compared to the number of referrals submitted in the year prior to participation.

Null hypothesis IV was explored by analyzing Item 4 from the EXCEL coding sheet. Item 4 compared the number of disciplinary referrals submitted for each EXCEL student in 1990-91 with the number of referrals submitted in 1992-93. A $t$ test was computed to analyze the data comparing the total number of disciplinary referrals submitted for the EXCEL Group in 1990-91 and again in 1992-93. Table 12 presents the results of this test.

Table 12  $t$ Test for Number of Disciplinary Referrals Submitted as a function of the EXCEL Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>$t$ value</th>
<th>$p&lt;\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disciplinary Referrals</td>
<td>1.47</td>
<td>.15</td>
</tr>
</tbody>
</table>

Overall no significant difference was found at the .05 level between the total number of disciplinary referrals submitted for the students in the EXCEL Group in 1990-91 and in 1992-93.

The null hypothesis was not rejected when comparing the total number of disciplinary referrals submitted for the 26 students who participated in the EXCEL Program in the year prior to treatment with the year following treatment.
As shown in Table 13 a t test was computed controlling for gender (males and females).

Table 13  

<table>
<thead>
<tr>
<th>Variable</th>
<th>t value</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>.95</td>
<td>.36</td>
</tr>
<tr>
<td>Females</td>
<td>1.10</td>
<td>.29</td>
</tr>
</tbody>
</table>

Table 13 revealed that when controlling for gender there was no significant difference between the total number of disciplinary referrals submitted for males or females who participated in the EXCEL Program in the year prior to treatment when compared to the year following treatment.

A t test was then computed controlling for grade level (freshmen and sophomores). The results of this test are summarized in Table 14.
Table 14  *t* Test for Number of Disciplinary Referrals Submitted as a Function of the EXCEL Group Controlling for Grade Level

<table>
<thead>
<tr>
<th>Variable</th>
<th><em>t</em> value</th>
<th><em>p</em>&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>1.18</td>
<td>.26</td>
</tr>
<tr>
<td>Sophomores</td>
<td>2.55</td>
<td>.02*</td>
</tr>
</tbody>
</table>

*indicates a significant *p* level

The computed *t* test for sophomores is shown to be statistically significant (*t* = 2.55, *p* < .02) with 25 degrees of freedom at the .05 level, while the *t* test for freshmen was not statistically significant. Table 15 indicates that sophomores participating in EXCEL significantly reduced the number of disciplinary referrals submitted on them from school year 1991 to 1993.

After examining the data in Table 1 for the EXCEL Group it was noted that this group reduced the mean number of disciplinary referrals submitted on them by 2.96 from 15.15 referrals in 1991 to 12.19 referrals in 1993. Once again, except for the sophomore EXCEL students, the *t* test did not reflect significance at the .05 level. This was likely due to the small size of the EXCEL Group (26 students).
Null Hypothesis V

Null hypothesis V stated that there would be no significant difference in the number of extra-curricular programs the 26 students who participated in EXCEL will join in the year following participation in the program when compared to the number of extra-curricular activities joined in the year prior to participation.

Null hypothesis V was studied by analyzing Item 5 from the EXCEL coding sheet. Item 5 compared the number of extra-curricular programs each EXCEL student participated in during 1990-91 and again in 1992-93. Table 15 presents the results of this test.

Table 15  t Test for Number of Extra-Curricular Programs Participated in as a function of the EXCEL Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>t value</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra-Curricular Participation</td>
<td>-2.76</td>
<td>.01*</td>
</tr>
</tbody>
</table>

*indicates a significant p level

An analysis of the data in Table 15 established that the computed t test (t = -2.76, p < .01) is shown to be statistically
significant with 24 degrees of freedom at the .05 level. Table 15 indicated that the EXCEL Group was more likely to participate in extra-curricular programs the year following the treatment as compared to the year prior to treatment. Null hypothesis V was therefore rejected.

As shown in Table 16 a $t$ test was also computed controlling for gender (males and females).

**Table 16**  
$t$ Test for Number of Extra-Curricular Programs Participated in as a Function of the EXCEL Group Controlling for Gender (Male/Female)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$t$ value</th>
<th>$p&lt;$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>2.94</td>
<td>.01*</td>
</tr>
<tr>
<td>Females</td>
<td>-.81</td>
<td>.44</td>
</tr>
</tbody>
</table>

*indicates a significant $p$ level

The computed $t$ test for males was shown to be statistically significant ($t = 2.94$, $p < .01$) at the .05 level, while the $t$ test for females was not statistically significant. Table 15 indicated that males participating in the EXCEL Program were more likely to increase their participation in extra-curricular programs from school year 1991 to 1993.
A *t* test was computed controlling for grade level (freshmen and sophomores). The results of this test are summarized in Table 17.

**Table 17 t Test for Number of Extra-Curricular Programs Participated in as a function of the EXCEL Group Controlling for Grade Level**

<table>
<thead>
<tr>
<th>Variable</th>
<th>t value</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>-2.42</td>
<td>.03*</td>
</tr>
<tr>
<td>Sophomores</td>
<td>-1.44</td>
<td>.17</td>
</tr>
</tbody>
</table>

*indicates a significant *p* level

The computed *t* test for freshmen was shown to be statistically significant (*t* = -2.42, *p* < .03) at the .05 level, while the *t* test for sophomores was not statistically significant. Table 17 indicated that freshmen participating in the EXCEL Program were more likely to increase their participation in extra-curricular programs from school year 1991 to 1993. (A summary of this data analysis is found on page 76.)
Qualitative Report

In addition to the statistical analyses related to the null hypotheses, qualitative analyses were used to examine the opinions, feelings and beliefs of ten representative EXCEL students, their parents, and ten teachers concerning the EXCEL Program as well as to solicit suggestions they might have for improving this Program.

This component of the study consisted of a written survey of ten EXCEL students who participated in the EXCEL Program in 1991-92 and who were currently seniors at Fenton High School, were members of the graduating class of 1994, or who had transferred to another educational program following their EXCEL experience. A telephone survey was conducted of parents of these ten students while ten representative faculty members at Fenton High School, in whose classes these students were mainstreamed, completed a written survey during a two week period in January, 1995.

All surveys asked the respondents to grade the EXCEL Program in terms of its success in fulfilling its goal of helping students to:

1. improve attendance
2. recognize the value of school
3. be better organized
4. learn study skills
5. improve their class grades
6. understand the rules at Fenton High School
7. see the value of extra-curricular activities

In addition to the above questions, all respondents were asked if the EXCEL program increased their participation in extra-curricular activities. In an open-ended question, respondents were asked to give any suggestions they might have to improve the program. Parents and former students were asked to give particulars about extra-curricular participation during the year prior to participation in EXCEL and the year following participation in EXCEL.

Responses to each question were tallied, and an average grade, based on a 4-point scale (A = 4 points, B = 3 points, C = 2 points, and D = 1 point), was calculated for each of the seven survey questions for each group of respondents. A summary of the tallies is shown in Appendix F.

Table 18 displays the average grades given by the EXCEL graduates, their parents, and selected Fenton teachers concerning critical aspects of the EXCEL Program. (Complete tables showing each group's responses to each question are given in Appendix C.) Two particular findings stood out:

- all groups gave grades of B minus (2.7) or better to five of the seven program outcomes while a grade of C plus (2.5) was given to the program outcomes of "understanding school rules" and "recognizing the value of extra-curricular activities"; and
• parents and graduates were more satisfied with program outcomes than were the teachers.

Table 18  **The Impact of the EXCEL Program on Students as Assessed by EXCEL Graduates, Parents, and Teachers**

<table>
<thead>
<tr>
<th></th>
<th>grades given by</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>graduates</td>
<td>parents</td>
<td>teachers</td>
</tr>
<tr>
<td>improving attendance</td>
<td>3.1</td>
<td>3.3</td>
<td>2.9</td>
</tr>
<tr>
<td>realizing the value of school</td>
<td>3.4</td>
<td>3.4</td>
<td>2.8</td>
</tr>
<tr>
<td>becoming better organized</td>
<td>3.4</td>
<td>3.1</td>
<td>3.1</td>
</tr>
<tr>
<td>learning study skills</td>
<td>3.2</td>
<td>3.2</td>
<td>2.8</td>
</tr>
<tr>
<td>getting better grades</td>
<td>3.6</td>
<td>3.3</td>
<td>2.7</td>
</tr>
<tr>
<td>understanding the rules at FHS</td>
<td>2.7</td>
<td>2.6</td>
<td>2.3</td>
</tr>
<tr>
<td>seeing the value of extra-curricular activities</td>
<td>2.7</td>
<td>2.6</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Data in Table 18 indicated that the areas receiving grades lower than a B from all three groups were "understanding the rules at Fenton High School" and "seeing the value of extra-curricular activities." This phenomenon may be related to a lack of formal information presented to the students in their EXCEL classes concerning these topics rather than disappointment with the EXCEL program.
A specific question addressing participation in extracurricular activities was asked of all groups: "Do you feel that student participation [your participation/your child's participation] in extracurricular activities increased as a result of the EXCEL program?" Tallied responses to this question are shown in Table 19.

Table 19 "Do you feel that student participation in extracurricular activities increased as a result of the EXCEL program?" (Number of graduates, parents, and teachers who selected each answer)

<table>
<thead>
<tr>
<th></th>
<th>graduates</th>
<th>parents</th>
<th>teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Partly</td>
<td>4</td>
<td>1</td>
<td>NA</td>
</tr>
<tr>
<td>Not Sure</td>
<td>0</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

The large number of parents and teachers who answered "not sure" to this question and the small number who answered "no" suggested that some of the lower grades given to this issue in Table 19 may once again be related to a lack of information rather than disappointment with the EXCEL Program. On the other
hand, graduates appear well-informed on this subject (no graduate answered "not sure"), and still gave lower grades to this topic as shown in Table 18.

Parents and graduates also answered two open-ended questions about extracurricular participation, asking for a list of extracurricular activities that students participated in during their Freshman and Sophomore years. Among the students who responded to this question, four increased participation from Freshman to Sophomore year; two did not change their level of participation; and one student participated in three sports during Freshman year, and not at all during Sophomore year. Only three parents were able to answer this question: two said their child's participation increased and one said it decreased from Freshman to Sophomore year.

In a final open-ended question, all respondents were asked to give suggestions for improving the EXCEL program. (A complete listing of all responses is given in Appendix D.)

Six graduates responded to this question. Two graduates recommended extending the program to juniors, two recommended keeping the current teacher, one suggested a focus on study skills, and one other suggested coffee and donuts in the morning. Several of the comments also emphasized the value of the program for the student and the extent to which they had improved due to their participation in EXCEL.
The three parents who wrote a response to this question did not actually offer suggestions; instead they commended the program for its positive impact on students.

The teachers, on the other hand, wrote long responses to this question. The responses commended the teachers involved in EXCEL and made a number of unique suggestions for improvement. Because the responses showed little consensus, no summary was attempted here; all comments are shown in full in Appendix D.

Summary of the Data Analysis

Statistical analyses revealed the following:

1. The EXCEL Program did not significantly reduce the absence rate of the 26 students who participated in the EXCEL Program in the year following their participation in the program when compared to their absence rate the year prior to participation. However, it was observed that this group did improve its attendance by an average of 1.39 days from 1991 to 1993.

2. The EXCEL Program did not significantly improve the grade point average of the 26 students who participated in the EXCEL Program in the year following their participation of the program when compared to their grade point average the year prior to participation. However, it was observed that this group improved their mean grade point average by .48 grade points from 1.22 in 1991 to 1.70 in 1993.
3. The EXCEL Program did not significantly increase the total number of credits earned by the 26 students who participated in EXCEL in the year following their participation in the program when compared to the total number of credits earned prior to participation. However, it was observed that this group improved the mean number of credits earned by .40 credits from 8.44 credits in 1991 to 8.84 credits in 1993.

4. The EXCEL Program did not significantly decrease the number of disciplinary referrals submitted for the 26 students who participated in the EXCEL Program in the year following their participation in the program when compared to the number of disciplinary referrals submitted in the year prior to participation. However, it was noted that this group reduced the mean number of disciplinary referrals submitted on them by 2.96 referrals from 1991 to 1993. In addition, the sophomores who participated in EXCEL significantly reduced the number of disciplinary referrals completed on them from school year 1991 to 1993.

5. The group of students who participated in the EXCEL Program in 1991-92 did participate in significantly more extra-curricular programs in the year following their EXCEL experience compared with the year prior to EXCEL. In addition, males participated more heavily in extra-curricular programs than females while those who were freshmen in EXCEL in 1991-92 participated more actively in extra-curricular programs
than did the EXCEL sophomores in the year following treatment.

Qualitative analyses revealed that the EXCEL students, their parents, and selected teachers at Fenton High School gave grades of B minus or better to five of the seven program issues while parents and EXCEL students were more satisfied with program outcomes than were teachers.

Chapter IV has presented an analysis of the data for the study. A further discussion and summary of the findings, conclusions of the investigation, and implications for future research are presented in Chapter V.
CHAPTER V

DISCUSSION, IMPLEMENTATION AND RECOMMENDATIONS

The Problem

Despite the efforts of educators to respond to the data gathered and the research addressing the characteristics of at-risk youth, the dropout rate in our public schools continues to be viewed with alarm. The dropout rate varies between 40% and 60% in Boston, Chicago, Detroit, Los Angeles and other large metropolitan areas; it is highest among Native Americans, Hispanics, and African-Americans. Teen suicide rates are rising. There are now in excess of 1.3 million teenage pregnancies annually. Eighty percent of all prisoners are high school dropouts, a statistic that reinforces the bleak insight of Margaret M. Clifford who, in a 1990 Educational Leadership article (Clifford, 1990), noted:

The term dropout may not be adequate to convey the disastrous consequences of the abandonment of school by children and adolescents; educational suicide may be a far more appropriate label.
Current research indicates that many at-risk youth perceive the traditional public school environment as a hostile place with little to offer them. Yet, we know that in many schools the process of setting the educational bar a little higher and encouraging students to try new, more timely and cooperative ways of clearing this bar, combined with appropriate help from other key adults including parents, can reverse the statistical trends and improve performance in many areas of learning (Vallejo, 1987).

What is needed on the part of educators to put theory into practice is research that describes more specifically what was done (the intervention applied), to whom (the actual student group), and with what effect (what changes did or did not occur) (Waltz, 1989).

The study of Fenton High School’s EXCEL Program focused on this type of descriptive research, as it is based on a specific intervention program applied to an identifiable group of at-risk students. The research question to be answered was whether or not the intervention program caused significant changes in specific school related behaviors and the attitudes of the participating at-risk students.
The Purpose

Accordingly, this investigation examined the research question: Does the EXCEL program have any significant impact on student attendance, grades, credits earned, disciplinary referrals, and extra-curricular involvement? The investigator also studied the manner in which gender and grade level influence student attendance, grades, credits earned, disciplinary referrals, and extra-curricular participation when combined with participation in the EXCEL Program.

The Hypotheses

This study investigated the following null hypotheses:

1. There will be no significant difference in the absence rate of the 26 students who participated in the EXCEL Program in the year following their participation in the program when compared with their absence rate the year prior to participation.

2. There will be no significant difference in the grades earned by the 26 students who participated in EXCEL in the year following their participation in the program when compared to grades received in the year prior to participation.

3. There will be no significant difference in the number of credits earned by the 26 students who participated
in EXCEL in the year following their participation in the program when compared to credits earned in the year prior to participation.

4. There will be no significant difference in the number of disciplinary referrals made for the 26 students who participated in EXCEL in the year following participation in the program when compared to the number of referrals made in the year prior to participation.

5. There will be no significant difference in the number of extra-curricular programs the 26 students who participated in EXCEL will join in the year following participation in the program when compared to the number of extra-curricular activities joined in the year prior to participation.

In addition to the statistical analyses relating to the null hypotheses stated above, qualitative analysis was used to examine opinions and feelings of a representative number of students who participated in EXCEL during the 1991-92 school year, as well as parents of those students and faculty members in whose mainstream classes those students were enrolled. This qualitative analysis revealed that the EXCEL students, their parents, and selected teachers gave grades of
B minus (2.7) or better to five of the seven program issues. In addition, parents and EXCEL students were more satisfied with program outcomes than were teachers.

Instrumentation

The researcher developed the data coding form (see Appendix A) for both the EXCEL students and the students included in the control group. The coding sheet was comprised of demographic information including an identification number, grade level, and gender. The second portion of information requested included a breakout of each student's absence rate, grade point average, credits earned, number of disciplinary referrals received, and number of extra-curricular programs participated in for school year 1990-91 and for school year 1992-93.

The qualitative component of this study consisted of three surveys (see Appendix B) with seven survey questions. These questions solicited information on seven program issues (improving attendance, recognizing the value of school, being better organized, learning study skills, improving course grades, understanding rules, and realizing the value of extra-curricular participation).

Responses to each question were tallied, and an average grade, based on a 4-point scale was calculated for each of the seven survey questions for each group of respondents.
Data Analysis

One way analysis of variance (ANOVA) was used to determine if there was a significant difference between the means of the EXCEL Group and the control group at the .05 level. The \( t \) test was then applied in order to determine if there was a significant difference between the means of the EXCEL Group on each of the five school related factors (attendance, grades received, credits earned, disciplinary referrals, extra-curricular participation) from the school year prior to participation in EXCEL (1990-91) to the year following participation (1992-93). The null hypotheses were rejected if any calculated value was less than the critical value of .05.

In addition to the statistical analyses related to the null hypotheses stated above, qualitative analysis was used to explore the feelings and opinions of EXCEL students, their parents, and faculty on seven program issues as well as suggestions these three groups might have for improving the EXCEL Program. The qualitative data were reported by tallying each question on the surveys and calculating an average grade for each question based upon a 4-point scale.
The Findings

Hypothesis I

There will be no significant difference in the absence rate of the 26 students who participated in the EXCEL Program in the year following their participation in the program when compared with their absence rate the year prior to participation.

No significant difference was found when comparing the absence rate of the 26 students who participated in the EXCEL Program in the year prior to treatment with the year following treatment. Neither was there a significant difference when controlling for gender (males and females) nor grade level (freshmen and sophomores). However, it was observed that the EXCEL Group as a whole improved its attendance by an average of 1.39 days from 1991 to 1993. This improvement in attendance may have been the result of the EXCEL teacher establishing weekly telephone contacts with parents and in some cases apprising parents of their children's attendance to class on a daily basis. At the same time, the importance of regular attendance to school was stressed continually within the EXCEL classes.

Nineteen of the 26 students who participated in EXCEL had been absent from school 15 or more days the year prior to treatment. Patterns of poor attendance oftentimes develop in
the primary and junior high years. These patterns are extremely difficult to remediate in a short period of time due to enabling behaviors on the part of parents and/or guardians. Therefore, the noted improvement in attendance experienced by the EXCEL group in the year following treatment, though not statistically significant, may have been a key ingredient in the group’s overall improvement.

**Hypothesis II**

There will be no significant difference in the grades received by the 26 students who participated in EXCEL in the year following their participation in the program when compared to grades received in the year prior to participation.

No significance was found when comparing the grades received by the EXCEL students in the year following treatment to the grades received prior to treatment. Likewise, when controlling for gender (males and females) and grade level (freshmen and sophomores) there was no significance in grades received. Yet, when analyzing the EXCEL Group’s mean grade point average from 1991 to 1993, this group did improve its mean grade point average from 1.22 to 1.70.
The noticeable gain in grade point average by the EXCEL group following treatment may be the result of improved self-esteem as well as the integration of positive patterns of attending to academic tasks learned in EXCEL. The daily use of the Chandler's Assignment Notebook by each student during their year of treatment combined with the close monitoring of the completion of daily assignments by the EXCEL teacher were important components of the EXCEL class. Also, the implementation of guided study time during the EXCEL class period enabled these students to learn important study skills that were seemingly transferable and applied by these students in the year following treatment. Finally, as one compared the change in mean grade point average of the EXCEL group with the control group (Table 1) an interesting phenomena was observed, while the EXCEL group G.P.A. improved, the control group experienced a slight decline in G.P.A. Once again, the inference can be made that the treatment experienced by the 26 students in EXCEL, though not significant statistically, paid dividends in improving grades.
Hypothesis III

There will be no significant difference in the number of credits earned by the 26 students who participated in EXCEL in the year following their participation in the program when compared to credits earned in the year prior to participation.

No significant difference was found when comparing the number of credits earned by the 26 students who participated in EXCEL in the year prior to treatment with the year following treatment. Neither was there a significant difference when controlling for gender (males and females) nor grade level (freshmen and sophomores). However, once again it was noted that the EXCEL Group did improve its mean number of credits earned from 8.44 credits in 1991 to 8.84 credits in 1993.

The noted improvement in average credits earned could have been attributed to a variety of factors. The EXCEL students perhaps began to understand the importance of earning credits towards graduation which was a natural outgrowth of passing more courses. The necessity of earning credits had been foreign to a number of EXCEL students who, in conversation with the researcher, stated that initially they had believed they would be promoted from ninth to tenth grade automatically even though they had failed a number of
courses. They were accustomed to this as a result of the
social promotions they had experienced in junior high school.
It is conceivable that a second, more cogent reason for the
increase in credits earned by the experimental group was
related to the positive feelings this group experienced
through learning to set short term academic goals and
attaining these goals by passing courses. The successful
passing of courses resulted in the earning of more credits.

Hypothesis IV

There will be no significant difference in the number of
disciplinary referrals made for the 26 students who
participated in EXCEL in the year following participation in
the program when compared to the number of referrals
submitted prior to treatment. When controlling for gender
(male and female) there was also no significant difference
between the total number of disciplinary referrals submitted
for males or females in 1993 when compared with 1991.

Significance was found between grade levels as the
number of disciplinary referrals submitted on sophomores was
significantly reduced from 15.15 in 1991 to 12.19 in 1993. In
contrast, freshmen students participating in EXCEL did not
significantly reduce their number of disciplinary referrals
from 1991 to 1993.

However, when comparing the entire EXCEL Group and the
number of disciplinary referrals submitted on them in 1991 and again in 1993, it is evident that this group reduced its overall average from 15.15 referrals per student to 12.19 referrals per student.

The reduction in numbers of referrals from 1991 to 1993 was possibly linked to the feelings engendered by the experimental group due to their academic successes. The positive relationships developed with the EXCEL teacher were transferred to other members of the instructional staff as these students participated more constructively in their course work. They no longer felt the need to receive attention through primarily negative means.

**Hypothesis V**

There will be no significant difference in the number of extra-curricular activities the 26 students who participated in EXCEL will join in the year following compared to the number of extra-curricular activities joined in the year prior to participation.

A significant difference was found between the EXCEL Group's participation in extra-curricular programs in 1991 and 1993. The EXCEL Group participated in significantly more programs in the year following treatment as compared with the year prior to treatment. In addition, male students
participated to a significantly greater degree in these programs from 1991 to 1993 while the same was not true for female students.

Upon controlling for grade level, it was noted that freshmen who participated in the EXCEL Program in 1992 significantly increased their extra-curricular participation from 1991 to 1993 while sophomores did not show a significant increase.

The significant increase in extra-curricular participation by the experimental group may have been directly related to their passing of additional courses. In order to have participated in extra-curricular athletics as well as other state sanctioned activities, students must have been passing a majority of their courses. It is possible that the EXCEL students were formerly ineligible to participate due to grades; however, with their improved academic performance they were eligible to participate.

In addition, it is likely that as the EXCEL students experienced greater academic success, they became more intrinsically attached to positive aspects of the school culture.
Qualitative Analysis

Qualitative analysis was used to explore the opinions, feelings, and beliefs of the EXCEL students, their parents, and faculty in whose classes the EXCEL students were mainstreamed concerning seven key program outcomes as well as to solicit suggestions for improving the Program.

Qualitative analyses revealed that the students who participated in EXCEL in 1991-92 believed that this Program improved their attendance to school, helped them realize the value of school, caused them to become better organized, learn beneficial study skills and thus earn higher grades. The two outcomes receiving less than excellent grades from the EXCEL students were “understanding the rules at Fenton High School” and “realizing the value of extra-curricular activities.” It was interesting to note that even though the EXCEL students did not consciously view the EXCEL Program as encouraging greater extra-curricular participation in school activities, yet this is the one key school related factor that showed significant improvement (higher participation following treatment as compared with prior to treatment).

The parents surveyed shared similar opinions with the students. Five of the seven EXCEL program outcomes were rated excellent by the parents while the outcomes “understanding the rules at Fenton High School” and “seeing the value of extra-
curricular participation" were given a slightly less than excellent rating.

Generally, the group of teachers surveyed assigned lower grades for six of the seven EXCEL Program outcomes. The one program outcome that was awarded an excellent grade by the teachers was the outcome "helping the students become better organized," while a C minus grade was assigned to the outcome "seeing the value of extra-curricular activities." The ratings of the teachers may warrant further study as it may be representative of secondary school teachers who do not work within institutions organized around self-contained tasks. In general, secondary schools have retained the functional division of labor model in which a single student receives instruction from multiple teachers, each of whom is a specialist in some segment of the curriculum. Attempts to personalize the educational experience of at-risk students and provide more cohesive programs (Sizer, 1984) for secondary students is viewed by some secondary teachers as "lowering standards" and "coddling".

Implications for Practice

The results of this inquiry suggest that the EXCEL Program in its initial, formative stage produced a positive change in the academic lives and personal attitudes of the 26 students
participating in its first year of conception. The EXCEL Program was a grassroots effort initiated by the professional staff at one high school to meet the needs of their at-risk ninth and tenth graders. A critical element in the EXCEL design was articulated by Donald Sevener in an issue of Synthesis (August, 1990) when he presented the conclusion drawn by an overwhelming number of educational researchers that mainstreaming is an essential ingredient in meeting the educational needs of at-risk students. The 26 students who participated in EXCEL were mainstreamed for the vast majority of their academic program. In addition, the EXCEL Program provided the students with the tacit knowledge necessary to survive in school. The EXCEL teacher helped these students learn organizational skills which in turn allowed them to manage tasks and, as a result, themselves while at the same time assisting them to fit into school. The practical skills provided by the EXCEL teacher consisted of helping these students improve their learning, solve specific school related problems, and learn to cooperate with others. These learner outcomes were also critical ingredients in the EXCEL curriculum.

Although four of the five null hypotheses were not rejected at the .05 level; yet, the EXCEL group improved its mean score on each of the five school related factors (Table 1). As was noted earlier, when studying the results of the t
test on the number of disciplinary referrals submitted for the EXCEL Group, the number of referrals submitted for sophomores was significantly reduced while the referrals submitted for freshmen did not show a significant reduction. A possible explanation for this difference in grade levels may be attributed to the fact that the sophomores participating in EXCEL had an additional year of teaching as well as first hand experience with the attendance and disciplinary code of Fenton High School. In contrast, the freshmen participating in EXCEL had been held accountable for a somewhat different set of attendance and behavioral expectations in middle school.

The null hypothesis rejected due to significant difference, measured increased extra-curricular participation. This may have been a significant bi-product of the EXCEL experience. As these students grew to feel a more integral part of the student body, and as their self-esteem increased, they became more comfortable and were willing to contribute to the extra-curricular life of the school.

When analyzing student responses to the qualitative component, the EXCEL Program was given B plus grades on five of the seven program outcomes. During their EXCEL participation the students appeared to feel more positive about themselves and their school experience. Given the opportunity to make suggestions, two of the EXCEL students recommended extending this program to juniors and seniors in
need of academic assistance and personal support (Appendix D).

Finally, the results of this study indicate the importance of involving parents in the school lives of their adolescent children. The EXCEL teacher maintained regular, ongoing communication with the parents of the 26 students. As difficult as it was to connect with parents who had historically received only negative feedback on their children's school experience, the parents of the 26 students participating in EXCEL in 1991-92 overwhelmingly appreciated this teacher's efforts to communicate with them. This commitment is confirmed in Appendix D, wherein parents expressed their appreciation for the consistent effort made to draw them in as invested partners in the EXCEL experience.
Recommendations

As a result of the limitations of this study noted in Chapter 1 and the experiences encountered in this investigation, the following recommendations are presented for further study.

1. Replicate this study using the EXCEL model in a middle school/junior high school to determine if earlier intervention would provide greater benefit to at-risk students at a younger age.

2. Expand the EXCEL program to juniors and seniors and replicate this study to determine if older students would benefit from treatment.

3. Establish a formal group intervention program for the parents of EXCEL students. Assess the degree to which this intervention program for parents would influence the school related factors of attendance, grades received, credits earned, disciplinary referrals and extracurricular participation for their students who participate in EXCEL.

4. Provide more intense training for regular education teachers whose students participate in EXCEL concerning the causes of at-risk student behavior as well as instructional strategies proven successful with at-risk students. Determine the degree to which this effort would improve the achievement of the EXCEL students in their regular education courses.
5. Replicate the study presented in this paper each year over a five year time period to determine if any of the school related factors (attendance, grades received, credits earned, disciplinary referrals, extra-curricular participation) change in level of significance.
REFERENCES


EXCEL DATA CODING FORM

1. I.D. NUMBER: __________

2. GRADE LEVEL (circle response): 1. freshman 2. sophomore

3. GENDER (circle response): 1. male 2. female

4. a) ABSENCE RATE (# of school days unattended) in 1990-91 __________
   b) ABSENCE RATE (# of school days unattended) in 1992-93 __________

5. a) G.P.A. in 1990-91 __________
    b) G.P.A. in 1992-93 __________

6. a) # of CREDITS EARNED in 1990-91 __________
    b) # of CREDITS EARNED in 1992-93 __________

7. a) # of DISCIPLINARY REFERRALS in 1990-91 __________
    b) # of DISCIPLINARY REFERRALS in 1992-93 __________

8. a) # of EXTRA-CURRICULAR PROGRAMS ATTENDED in 1990-91 __________
    b) # of EXTRA-CURRICULAR PROGRAMS ATTENDED in 1992-93 __________
CONTROL GROUP DATA CODING FORM

1. I.D. NUMBER: ______________

2. GRADE LEVEL (circle response): 1. freshman 2. sophomore

3. GENDER (circle response): 1. male 2. female

4. a) ABSENCE RATE (# of school days unattended) in 1990-91 ______________
   b) ABSENCE RATE (# of school days unattended) in 1992-93 ______________

5. a) G.P.A. in 1990-91 ______________
   b) G.P.A. in 1992-93 ______________

6. a) # of CREDITS EARNED in 1990-91 ______________
   b) # of CREDITS EARNED in 1992-93 ______________

7. a) # of DISCIPLINARY REFERRALS in 1990-91 ______________
   b) # of DISCIPLINARY REFERRALS in 1992-93 ______________

8. a) # of EXTRA-CURRICULAR PROGRAMS ATTENDED in 1990-91 ______________
   b) # of EXTRA-CURRICULAR PROGRAMS ATTENDED in 1992-93 ______________
**FENTON HIGH SCHOOL**

**EXCEL PROGRAM SURVEY**

For former EXCEL students

*Telephoners will start with this statement:*

Hello. I am a volunteer with Fenton High School. We are conducting a survey of students who were in the EXCEL program. We want to improve the program where we can, and your ideas and opinions are very important to us. I will be recording your answers anonymously because I want you to feel free to give your honest opinions.

Can you take about five minutes right now to talk to me?

(IF "NO," ASK WHEN CONVENIENT TO CALL BACK. THANK THEM AND NOTE WHEN TO CALL BACK.) Day: ______ Time: ______

(IF "YES":) Thank you for agreeing to respond to this survey!

I would like to ask how you feel about the EXCEL program. Students are often given the grades A, B, C, D, and F to denote the quality of their work. Suppose the EXCEL program was graded in the same way. What grade would you give EXCEL in each of the following areas?

[CIRCLE THE ANSWER GIVEN]

1. First, how well did the EXCEL program help you improve your attendance?
   
   A  B  C  D  F

2. How well did the EXCEL program help you realize the value of school?
   
   A  B  C  D  F

How well did the EXCEL program help you in the following areas - please give a grade in each area:

3. Helping you be better organized?
   
   A  B  C  D  F

4. Helping you with study skills, like outlining, note-taking, reviewing, keeping track of assignments?
   
   A  B  C  D  F
5. Helping you get better grades?
   A     B     C     D     F

6. Helping you understand the rules at Fenton High School?
   A     B     C     D     F

7. Helping you see the value of extracurricular activities?
   A     B     C     D     F

8. Do you feel that your participation in extra-curricular activities increased as a result of the EXCEL program? [DON'T READ THE ANSWERS]
   ____ yes  ____ no  ____ not sure  ____ partly

9. What did you participate in during Freshman year? [RECORD RESPONSES]

10. What did you participate in during Sophomore year? [RECORD RESPONSES]

11. What suggestions can you give us to make EXCEL a better program for students?
FENTON HIGH SCHOOL
EXCEL PROGRAM SURVEY
For parents of former EXCEL students

Telephoners will start with this statement:

Hello. I am a volunteer with Fenton High School. We are conducting a sur­vey of students who were in the EXCEL program. We want to improve the program where we can, and your ideas and opinions are very important to us. I will be recording your answers anonymously because I want you to feel free to give your honest opinions.

Can you take about five minutes right now to talk to me?

(If "NO," Ask when convenient to call back. Thank them and note when to call back.) Day: _______ Time: _______

(IF "YES"): Thank you for agreeing to respond to this survey!

I would like to ask how you feel about the EXCEL program. Students are often given the grades A, B, C, D, and F to denote the quality of their work. Suppose the EXCEL program was graded in the same way. What grade would you give EXCEL in each of the following areas?

[CIRCLE THE ANSWER GIVEN]

1. First, how well did the EXCEL program help you improve your attendance?
   A   B   C   D   F

2. How well did the EXCEL program help you realize the value of school?
   A   B   C   D   F

How well did the EXCEL program help you in the following areas - please give a grade in each area:

3. Helping you be better organized?
   A   B   C   D   F

4. Helping you with study skills, like outlining, note-taking, reviewing, keeping track of assignments?
   A   B   C   D   F
5. Helping you get better grades?
   A   B   C   D   F

6. Helping you understand the rules at Fenton High School?
   A   B   C   D   F

7. Helping you see the value of extracurricular activities?
   A   B   C   D   F

8. Do you feel that your participation in extra-curricular activities increased as a result of the EXCEL program? [DON'T READ THE ANSWERS]
   ____ yes   ____ no   ____ not sure   ____ partly

9. What did you participate in during Freshman year? [RECORD RESPONSES]

10. What did you participate in during Sophomore year? [RECORD RESPONSES]

11. What suggestions can you give us to make EXCEL a better program for students?
We are conducting a survey of teachers regarding the EXCEL program. We want to improve the program where we can, and your ideas and opinions are very important to us. Please give your honest opinions.

Students are often given the grades A, B, C, D, and F to denote the quality of their work. Suppose the EXCEL program was graded in the same way. What grade would you give EXCEL in each of the following areas?

A B C D F no opinion

1. How well has the EXCEL program
   a. helped students improve attendance?
   b. helped students realize the value of school?
   c. helped students be better organized?
   d. helped students with study skills, like outlining, note-taking, reviewing, keeping track of assignments?
   e. helped students get better grades?
   f. helped students understand the rules at Fenton High School?
   g. helped students see the value of extracurricular activities?

2. Do you feel that student participation in extra-curricular activities increased as a result of the EXCEL program?
   _____ yes   _____ no   _____ not sure

3. What suggestions can you give us to make EXCEL a better program for students
FENTON HIGH SCHOOL
EXCEL PROGRAM SURVEY
FORMER STUDENTS (n=10)

Students are often given the grades A, B, C, D, and F to denote the quality of their work. Suppose the EXCEL program was graded in the same way. What grade would you give EXCEL in each of the following areas?

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>average grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How well has the EXCEL program</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. helped you improve attendance</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3.1</td>
</tr>
<tr>
<td>b. helped you realize the value of school?</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3.4</td>
</tr>
<tr>
<td>c. helped you be better organized?</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3.4</td>
</tr>
<tr>
<td>d. helped you with study skills, like outlining, note-taking, reviewing, keeping track of assignments?</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3.2</td>
</tr>
<tr>
<td>e. helped you get better grades?</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3.6</td>
</tr>
<tr>
<td>f. helped you understand the rules at Fenton High School?</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>2.7</td>
</tr>
<tr>
<td>g. helped you see the value of extracurricular activities</td>
<td>1</td>
<td>7</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2.7</td>
</tr>
</tbody>
</table>

2. Do you feel that your participation in extra-curricular activities increased as a result of the EXCEL program?

   2  yes   3  no   0  not sure   4  partly

Survey of Former Students
Students are often given the grades A, B, C, D, and F to denote the quality of their work. Suppose the EXCEL program was graded in the same way. What grade would you give EXCEL in each of the following areas?

<table>
<thead>
<tr>
<th>1. How well has the EXCEL program</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>average grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. helped your child improve attendance</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3.3</td>
</tr>
<tr>
<td>b. helped your child realize the value of school?</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3.4</td>
</tr>
<tr>
<td>c. helped your child be better organized?</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3.1</td>
</tr>
<tr>
<td>d. helped your child with study skills, like outlining, note-taking, reviewing, keeping track of assignments?</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3.2</td>
</tr>
<tr>
<td>e. helped your child get better grades?</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3.3</td>
</tr>
<tr>
<td>f. helped your child understand the rules at Fenton High School?</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>2.6</td>
</tr>
<tr>
<td>g. helped your child see the value of extracurricular activities</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>2.6</td>
</tr>
</tbody>
</table>

2. Do you feel that your participation in extra-curricular activities increased as a result of the EXCEL program? __2__ yes    __2__ no    __4__ not sure    __1__ partly

Survey of Parents
Students are often given the grades A, B, C, D, and F to denote the quality of their work. Suppose the EXCEL program was graded in the same way. What grade would you give EXCEL in each of the following areas?

<table>
<thead>
<tr>
<th>1. How well has the EXCEL program</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>no opinion</th>
<th>average grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. helped students improve attendance</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>b. helped students realize the value of school?</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2.8</td>
</tr>
<tr>
<td>c. helped students be better organized?</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3.1</td>
</tr>
<tr>
<td>d. helped students with study skills, like outlining, note-taking, reviewing, keeping track of assignments?</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2.8</td>
</tr>
<tr>
<td>e. helped students get better grades?</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2.7</td>
</tr>
<tr>
<td>f. helped students understand the rules at Fenton High School?</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>g. helped students see the value of extracurricular activities</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1.9</td>
</tr>
</tbody>
</table>

2. Do you feel that student participation in extra-curricular activities increased as a result of the EXCEL program?

   _2_ yes   _1_ no   _7_ not sure
FENTON HIGH SCHOOL
EXCEL PROGRAM SURVEY
COMMENTS

11. What suggestions can you give us to make EXCEL a better program for students?

Parents of Former EXCEL Student

• Use of Chandler’s was most helpful
• weekly communications by teachers with parents assisted parents significantly in keeping track of assignment completion’s.

Excellent program - calls from Ms. George on regular basis were most helpful.

It was an excellent experience for Bridgett.

2 - None

Former EXCEL Students

Coffee and donuts in the morning.

Focus on study skills.

Keep Ms. George as the teacher.

I greatly improved while in the EXCEL program although when forced to leave the program for junior/senior year, my grades and attendance greatly decreased, so for my suggestion I think you should have EXCEL for older students who still need the help.

When I was a freshman, I had a lot of problems and I hated everyone. Ms. George was the teacher of EXCEL at the time and helped me the most. She put up with me and taught me a lot of things about life and school. My grades improved and my attitude. I loved EXCEL and I don’t think anything needs to be improved except that I think Ms. George should go back to teaching it. I think she could help a lot of kids.

Make EXCEL available to juniors.

None

No suggestions, good program.
I'd like to see an established curriculum which focuses on study skills, comprehension strategies, memorizing techniques, and time management. I'm not sure if this is already done, but discussion and guidance regarding goal setting would surely be beneficial. Also, I believe it should be possible for students to fail EXCEL. In other words, they should be held accountable for their efforts (or lack of effort) which they are afforded the privilege of participation in the program. Overall, I think EXCEL is a fine concept, and I have observed tangible improvement in the performance of the students involved. I believe that the refinements described above would enhance the impact of an already effective program.

Eliminate treats on Friday morning and field trips. I realize this sounds negative but some borderline students notice the special treatment given to other borderline EXCEL students and do less in class to qualify for the program. You might also have EXCEL students meet before or after school with their teachers instead of during the day. If their assignments are completed and signed off by the classroom teacher, they need not attend that day.

EXCEL is working much better with the new leader. The correct person for that position is key. Some of my less successful students are doing much better due to EXCEL, others show no change.

Keep up the good work.

EXCEL is an excellent program. Both Robin George and Rick Johnson did great jobs. I just feel that the parents need to make more of an effort to be more supportive.

Smaller classes. Bigger budget.

Smaller classes. Less "Shirley" groups. More incentive with bigger budget for prices/donuts/etc.

Not really sure. I'm sure the staff is sincere in its attempt to improve students in this area, but I don't know if its working.

I gave EXCEL a "C" average because I realize that some students choose to fail this too. I know the teachers have worked really hard to make this program a success. I strongly object to giving them a credit for failing everything else. However this does not mean I believe that the program should be dropped. On the contrary, I believe students should stay in EXCEL till they get their acts together and prove they're on task for an extra semester. If they fail to fly on their own, back to EXCEL till exit time from school. Again NO credit!!
The dissertation submitted by Alf E. Logan has been read and approved by the following committee:

Dr. L. Arthur Safer, Director
Associate Dean, School of Education
Educational Leadership and Policy Studies
Loyola University of Chicago

Dr. Max Bailey
Associate Professor, Educational Leadership and Policy Studies
Loyola University of Chicago

Dr. Philip L. Carlin
Associate Professor, Educational Leadership and Policy Studies
Loyola University of Chicago

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Education.

Date: April 5, 1975

Director's Signature