

AN ABSTRACT OF THE THESIS OF

Michael Winfield Casey for the degree of Doctor of Philosophy presented on August 8, 1996

Title: The Effects of Career Planning on Self-Concept and Academic Achievement of At-Risk Middle School Students in an Urban Public School Environment.

Abstract approved: _____

Kenneth M. Ahrendt

The purpose of this study was to determine the effects of a six-week career planning dropout prevention program on the self-concepts and academic achievement of at-risk middle school students in an inner-city public school environment. The research population consisted of 1,434 students (grades seven, eight and nine) attending an inner city public junior high school in south-central Los Angeles, California. The selection of the research site and sample was based on the assumption that the student population met the criteria and demographic profile of at-risk students: Students are from low-income and/or single parent families; have low achievement scores in reading and mathematics; exhibit a high incidence of truancy, absenteeism and teenage pregnancy; have low career aspirations and plans; and exhibit other related characteristics of at-risk students.

The study was conducted from September, 1993 to January, 1994 (fall semester, 1993). All students were selected by random procedure from grades seven, eight and nine. The experimental group consisted of 195 students enrolled in a woodworking class. The control group consisted of 1,239 students who were not enrolled in a woodworking class but were enrolled in other elective classes.

The experimental treatment consisted of a six week career planning dropout prevention program. The career planning dropout prevention program was infused into the 20-week woodworking class during the 6th through 12th week, and consisted of seven interrelated topics and lesson plans. The objectives of the study were to research and explore career interests and options, and to construct personal career planning portfolios for students in the experimental group.

It was concluded that: a) There were no significant differences between pre and post measures of self-concept in the experimental group, b) There was no significant difference in the pre and post academic achievement scores between the control and experimental groups, c) There was a substantial increase in the academic achievement scores of the experimental group, but this increase did not equal or exceed the alpha value.

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The Effects of Career Planning
on Self-Concept and Academic Achievement
of At-Risk Middle School Students in an
Urban Public School Environment

by

Michael Winfield Casey

A THESIS

submitted to

Oregon State University

in partial fulfillment of
the requirement for the
degree of

Doctor of Philosophy

completed August 8, 1996
Commencement June 1997

Doctor of Philosophy thesis of Michael Winfield Casey
presented on August 8, 1996.

APPROVED:

Major Professor, Representing Education

Director of the School of Education

Dean of Graduate School

I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

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Michael Winfield Casey

ACKNOWLEDGEMENTS

I would like to express my sincere appreciation to members of my Oregon State University Advisory Committee: Drs. Kenneth Ahrendt, Alan Wallace, Lee Cole, Will Gamble, and Forrest Gathercoal. They provided direction, assistance, support and encouragement throughout the course of my graduate studies program.

Also, I would like to expressly thank the Los Angeles Unified School District (LAUSD), Los Angeles, California for allowing me to conduct an experiment thesis study at a middle school in South Central Los Angeles. Particularly, I owe my thanks to Gene McCallum, Edith H. Morris and Mattie Sanders. Without the cooperation and technical assistance of these middle school administrators, conducting the study and collecting statistical data would have presented an insurmountable problem. I am grateful to the students at the LAUSD middle school who were subjects in this study, for their participation in and contribution to the success of this study.

In addition, I would like to express my appreciation to a number of advisors who have guided, encouraged and supported my desire to pursue a Doctoral degree in the field of Education: Dr. Kenneth Ahrendt, Professor Emeritus of OSU, Dr. Jacob Stern, Professor Emeritus, and Hercules Kazanas of the University of Illinois, Urbana; also, Drs. Joe King, Jay T. Smith, V.A. Nelson and

Hillard Lackey of Jackson State University, Jackson, Mississippi.

Many other associates provided help with various aspects of my thesis. I would like to thank Dr. William (Bill) Thomas and Loraina Evans for their involvement in this project, providing technical assistance and recommendations for the final draft. I am grateful to Mr. Jeffrey Alonzo Boyd, for being a friend, confidant and sounding board when I experienced frustration and anxiety during the numerous summers that I spent at OSU between 1986-1996. To Sadie and Gerald Airth of Sadie's Word Processing, I thank you for being there to assist me in the processing of numerous research papers during the course of my enrollment as a Doctoral student at OSU from 1986-1996 and for processing the final thesis report. I am grateful to Dr. W. Kent Buys for providing editing, technical advice and encouragement.

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The Effects of Career Planning on Self-Concept and
Academic Achievement of At-Risk Middle School Students
in an Urban Public School Environment

CHAPTER I

INTRODUCTION

The magnitude of the dropout problem as reported by Kaufman (1990) was 34 percent in United States public high schools between 1989-1990, and 42 percent in the State of California (p. 106).

Rumberger (1983) examined the extent of the high school dropout problem, and reported on the influence of race, sex, and family background:

While various problems have besieged high schools over the years, one problem has remained since their inception - getting students to finish. Many people believe that the incident of dropping out has diminished over the years to a point where it is no longer a severe problem. Yet recent evidence suggest the contrary. The problem of dropping out, which historically was confined to minority youth appear to be increasing, especially among white, middle-class youth (p. 101-22).

There are several unique factors which have been shown to restrict the success of at-risk students:

1. Extended absence which exceeds 44 consecutive school days.
2. Failure to complete his/her education with an adequate level of skills.
3. A large number of peers.

4. Acting-out display of behavior problems.
5. Low achievement.

Statement of the Problem

Few educational issues have attracted the attention and accounted for such an array of publications, reports, monographs, and media materials as the issues surrounding at-risk youth (Knittel et. al., 1991). In addition, the problem of the decline in academic achievement and increased dropout rates at the secondary school level has been a concern to educators and service agencies for many years. Caliste (1984) found that secondary school dropout rates have reached epidemic proportions in large urban communities with a high concentration of youngsters from low-income families. Moreover, these inner city students tend to withdraw from school before attaining the minimal level of skills and employment competencies necessary to become informed and productive citizens and to sustain themselves economically.

Purpose of the Study

The purpose of this study was to determine the effects of a six-week career planning dropout prevention program on the self-concept and academic achievement of at-risk middle school students in an inner city public school environment.

Objectives of the Study

1. To determine if career planning has a significant effect on self-concept of at-risk middle school students in an urban public school environment.
2. to determine if career planning has a significant effect on academic achievement of at-risk middle school students in an urban public school environment.

Research Methodology

The research was conducted for one academic year, and was initiated during the fall semester (September) 1993, and concluded at the end of the school year (June) 1994. The population consisted of 1,434 junior high students in grades seven, eight, and nine; ages 13, 14, and 15, respectively, attending an inner-city public school located in South-central Los Angeles, California.

The rationale for selecting an inner city junior high school located in south central Los Angeles, California as the research site was based on two conditions: 1) the student population at the site met the criteria and demographic profile of an at-risk population, e.g., a significant percentage but not all students are from low-income and/or single parent families and have low achievement scores in reading and mathematics. They exhibit a high incidence of truancy, absenteeism and

teenage pregnancy, low career aspiration and related characteristics of at-risk students often described in the literature (Institute of Educational Leadership, 1986; and 2) the school site administration, counseling and support staff were interested in and supportive of the research project.

The experimental group consisted of 85 Junior high students in grades seven, eight, and nine, enrolled in five woodworking classes. The rationale used to select the students in woodworking classes was that student class assignments are essentially random. School administration and counseling personnel do not have uniform and accurate student ability information for assigning students to classes (Dr. David Blok, assistant principal, personal communication, July 12, 1991).

Justification of the Study

Given the extent of the dropout problem in the U.S. as demonstrated in the literature (Rumberger, 1983; Caliste, 1984 and Van Son, 1992), the justification for this research was premised on three inter-related conditions:

1. economic,
2. social,
3. the availability of a solution.

Catterall (1987) reported that in 1985 more than 600,000 young people dropped out of public schools at a projected economic cost to society of \$120 billion in lost productivity during their lifetimes.

In addition to substantial income consequences associated with dropping out, a variety of other effects have been claimed as social costs; particularly, added welfare and unemployment compensation dependency, increased crime and crime related services and more demand on health care services. Catterall (1987) suggested that these social costs exclusive of health for which no dollar estimates are available might amount to six billion dollars per year on top of the two hundred and eighty-eight billion dollars in lost tax revenue. Slavin (1989) found that programs that are effective in addressing at-risk students fall into three categories: prevention, classroom change and remediation.

Therefore the effects of the Six-week Career Planning Dropout Intervention Program seemed promising, due to its structure and methodology, which are consistent with recommendations cited in the literature, and which meet the criteria of an effective treatment of the problem of inner city secondary school at-risk student of drop out.

Limitations of the Study

It must be noted that during the implementation and administration of this study the attrition rate was a significant influence on post-treatment decisions regarding the selected experimental and control sample groups. Attrition is due to a combination of causative conditions which effect at-risk students, including truancy, periodic three-to-four day absences by girls during their menstrual cycles, periodic absences by mostly male students for juvenile fighting and gang related offenses, extended vacations during Christmas season, inter-school transfers and the normal relocation of families. These inter-related conditions will be referred to as "attrition dynamics". The attrition rate between September, 1993 and January, 1994 was approximately 8.45% (See Table 1).

Table 1. Attrition Rate: Sept. 1993 through Jan. 1994

	Sept. 1993	Jan. 1994	Attrition Rate
Control	1,239	1,026	8.3%
Experiment	195	168	8.7%
Total	1,434	1,198	8.5%

The cumulative effects of attrition dynamics in the research population are significant limitations to this

study. After consulting with the Oregon State University Statistics Department, this researcher randomly selected 85 subjects from the experimental and control groups for data analysis. It was determined that this random sampling represented a valid, qualified and defensible sample.

Further explanation of attrition dynamics is necessary to understand their influence as limitations to the study. Two data collection methods have been used by the Los Angeles Unified School District to identify the number and rate of students who drop out of school: 1) Senior high school reports of the Records of Transfer from students identified as L8's. The L8 code refers to students who are dropped from school rolls for specific reasons and will not be receiving instruction. The L8's are then referred to as "early school leavers", and defined as dropouts; and 2) The collection of attrition rate data for graduating classes by district-wide identification of the total number of students entering and leaving in one class as it progresses through the twelfth grade.

There is supplemental data of school counts of late graduates -- seniors who did not graduate in June, but who earned a diploma or were passed to the 10th grade by the end of August of the graduating year. However, any method of computing the actual dropout rate lacks accuracy.

Therefore, this study must be viewed in light of the following limitations:

- 1) The LAUSD dropout rates reported in this study were derived from information reported by 73 junior high schools on their L8 leavers, and from attrition data collected during the years 1985-86, 1987-88, and 1988-89.
- 2) Senior high schools were required to report on L8 leavers who were in grade ten through twelve. Ninth grade students who were dropped from school rolls for reasons identified under the L8 category were not reported on the Record of Transfer forms and were therefore not included in the dropout rate for high school students.
- 3) Those students who did not return to school after the summer vacation and those who transferred to other public or private schools and could not be verified were not reported as L8's, and were therefore, not included in this study.
- 4) Graduated ninth grade junior high students who choose not to matriculate to a public or private senior high program which lead to a diploma were not included as L8's.
- 5) There is no one procedure or method in LAUSD for identifying and reporting by name the intra-

and/or inter-district movement of students from kindergarten through twelfth grade graduation.

- 6) This study is limited to seventh, eighth and ninth grade students enrolled at Mary McLeod Bethune Junior High School, LAUSD during the academic year, 1993-94.

Definition of Terms

Academic Achievement - Scholarly progress in liberal and technical art subjects as measured in grade point average (GPA).

Advisor - One who advises or counsels students about their studies, careers, etc.

Advisor - Having the power and/or authority to advise.

Advocate - One who pleads the case of another, an intercessor.

Associate - A person united with another in some enterprise: partnership, colleague.

At-risk-youth - An adolescent student with common characteristics: from low-income or poverty setting, having low basic academic skills - especially reading and mathematics, shows limited (career) aspiration and perceives that they have little control over their futures.

At-Risk - One who is in danger of failing to complete her or his education without adequate level of skill. Risk factors include low academic achievement, retention in grade, behavior problems, poor attendance, low socioeconomic status, and attendance at school with large number of poor students (Slavin, 1989).

Benefactor - One that makes a charitable donation or gift to a student and/or protege.

Career - The course or progress of a person's life-work; occupation, profession.

Career Category - A specific area of interest or job title within a global industry. An occupational niche whereby persons participate in global economy as a professional, technician.

Career Development - The continuous process of making occupational choices and pursuing professional or technical training consistent with occupational options.

Career Education - A comprehensive educational program that focuses on individual career development options K-adult.

Career Exploration - The investigation of occupation options through real or simulated job experience.

Career Field - A specific area of occupational interest and port of entry and/or participation in

the global economy, example: educator, manager, consultant.

Career Guidance - A spectrum of activities and programs designed to help people identify, select, evaluate, and succeed in an occupation.

Career Information System - An apparatus for collecting, organizing and delivering data about occupations and relevant educational opportunities to support planning, decision making, and guidance - usually with the utilization of a computer.

Career Ladder - A hierarchy of occupational progression, with training, from entry level in the same occupational area.

Career Network - A group of interconnecting people who provide the protege and/or student with technical assistance in the pursuit of career and/or employment options.

Career Résumé - A concise summary of one's employment record and/or history: education and qualifications of a job applicant.

Checkout - The formal procedure of withdrawal from school for any pupil prior to his/she fulfillment of high school graduation requirements, (LAUSD, 1990).

Counseling - Advisement activities provided to clients toward identifying, evaluating and selecting appropriate career options.

Document on File - A signed statement by school administrator placed in student's cumulative record confirming enrollment in another school (LAUSD, 1990).

Dropout - A term referring to any student who leaves school prior to graduation from high school and who does not enter within 45 days, another public or private school program which leads to a diploma or its equivalent (LAUSD, 1990).

Dropouts - Students (usually adolescents) who never complete high school and do not gain either the social or academic skills necessary to function in the society as a worker, parent, or citizen, (Institute for Educational Leadership, 1986).

Extended Absence - Any absence of an enrolled pupil which has exceeded 44 consecutive school days (LAUSD, 1990).

Guide - One who can explain the educational system but can not champion a protege and/or student (Merriam, 1983).

Global Economy - An integrated, comprehensive, international group of industrial enterprises that facilitate the planned production, marketing and distribution of natural resources and products among consumptive agencies and institutions.

Global Industry - A cluster of inter-related enterprises that produce the same or similar products or services as subcomponents to a consumer product or service.

Junior High School - An organized school structure which serves the academic needs of adolescents and usually includes seventh, eighth and ninth grades.

L8 Code - refers to students who are dropped from school rolls for specific reasons and will not be receiving instruction.

Mentor - a) A wise and trusted teacher, guide, and advocate, b) A mentor function is to support and facilitate the realization of the dream, that is, the vision each person has about the kind of work lives they want as an adult (Mirriam, 1983).

No-Show - Any pupil whose enrollment was expected but did not enroll, even if current location is known (LAUSD, 1990).

Middle School - An organized school structure which serves the needs of pre-adolescent and adolescent students and usually includes sixth, seventh, and eighth grades.

Plan - A scheme, method, or design for attainment of some specific objective.

Protegé - One especially cared for by another, who is usually older and influential.

Self-Concept - 1) A person's perception of themselves. These perceptions are formed through their experiences with their environment, and are influenced especially by environmental forces and significant others (Shavelson et. al., 1977). 2) The totality of a complex, organized, and dynamic system of learned beliefs, attitudes and opinions that each person holds to be true about his or her personal existence (Purkey, 1988).

Sponsor - One who assumes responsibility for a protege or group.

Strategy - A plan or technique for achieving some end.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The review of literature focuses on 7 areas: the dropout problem, economics of the dropout problem, career guidance/counseling, dropout prevention programs, self-concept and academic performance, parent involvement and academic achievement, and early studies.

The purpose of Chapter II is to provide a systematic examination of available literature relevant to issues surrounding at-risk youth, dropout-prone youth and/or secondary school dropouts.

The objective of Chapter II is to identify, organize and compile research that offers practical, reliable and valid insights and possible solutions to the complex circumstances which constitute the problem of at-risk youth.

This review of literature is organized around specific topics and includes information retrieved from Educational Resources Information Center (ERIC) on disc, the Current Index to Journal in Education (CIJE), and Dissertation Abstracts International. The organization of Chapter Two follows the logical order of a research report, and the sequence of the sections listed herein is not meant to imply their relative importance.

The Dropout Problem

According to data from National Center for Educational Statistics (1991), each year twenty-five percent of American high school students drop out before graduation, and the problem is far more serious in the inner city where between 40 to 50% of secondary school students drop out of school. Figure 1. provides detailed statistics on the national average dropout rates for Blacks, Hispanics and whites, ages 14-19. From this figure, it is evident that Hispanics have the greatest number of secondary school dropouts, followed closely by Blacks and whites. Also, it is apparent that the national dropout rate for each group

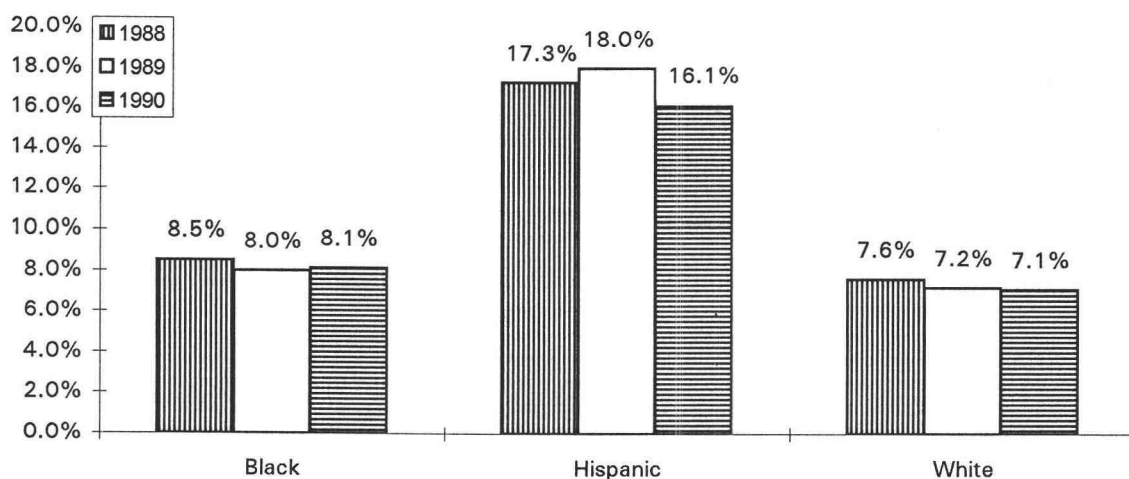


Figure 1. National average dropout rates for Black, Hispanic and whites, age 14-19 for academic years 1988, 1989, and 1990.

Compiled: National Center for Educational Statistics (1991). Digest of Education Statistics (Table 99, p. 108)

declined substantially during the reporting period, 1988-90 (see Figure 1). Figure 2. provides detailed statistics on the national average percentage of Black high school dropouts, age 14-19. This figure depicts a significant increase in the relative number of Black students who drop out of high school, starting at age 16-17 for grades nine and ten during the 1988-90 academic years.

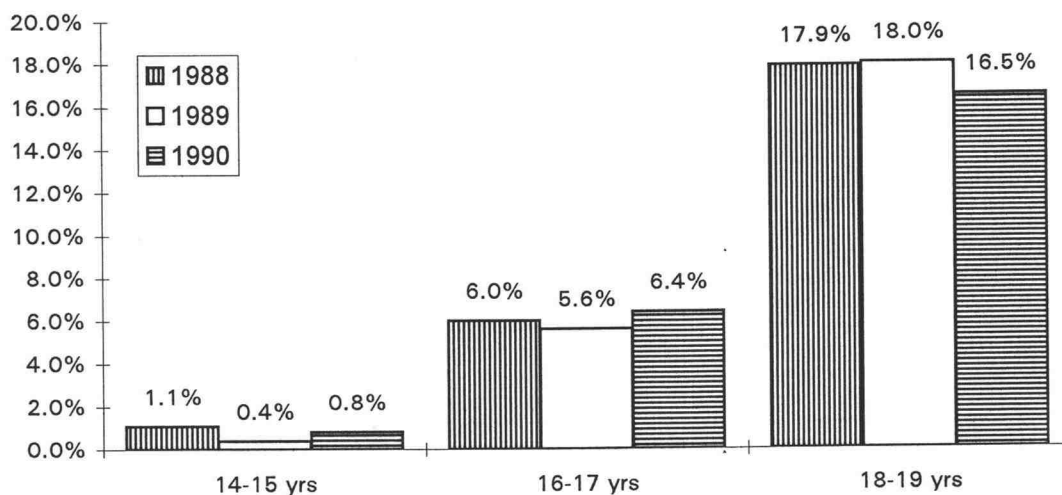


Figure 2. National percentage of Black high school dropouts, age 14-19.

Compiled: National Center for Educational Statistics
(1991) Digest of Education Statistics.

Figure 3. provides detailed statistics on national average percentage of Hispanic high school dropouts among 14-19 year-olds. There is evidence of a tendency (2.0%) for Hispanic students to drop out during the seventh to eighth grades and increases to 15% by the time students enter grade nine. Furthermore, the dropout trend is

significant (31%) as Hispanic students matriculate through grades 10-12.

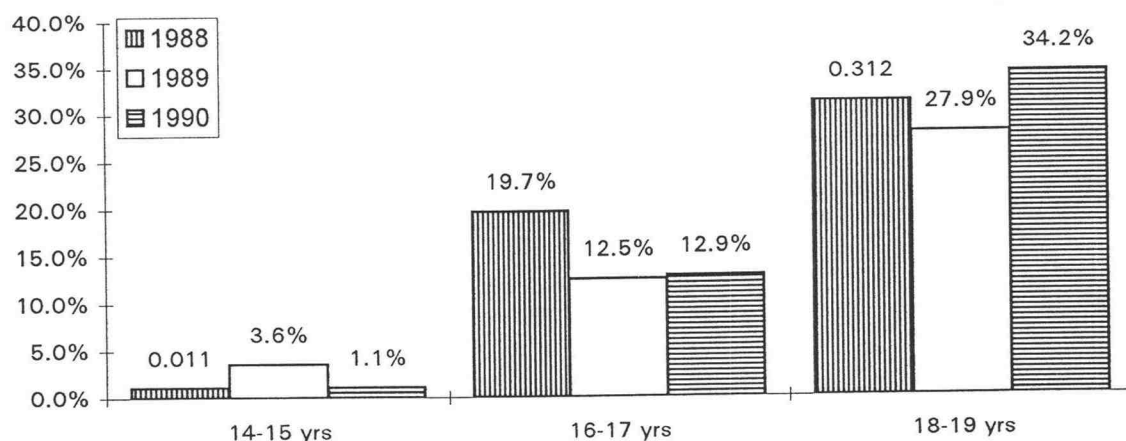


Figure 3. National percentage of Hispanic high school dropouts, 14-19 year old.

Compiled: National Center for Educational Statistics
(1991). Digest of Education Statistics.

Figure 4. provides detailed statistics on the national average percentage of white high school dropouts among 14-19 year-olds. This figure depicts a less than (1.0%) substantial tendency for white students to drop out during grades seven and eight. However, similar to Black and Hispanic students, the tendency to drop out during grades nine and ten is substantial (7.0%) and significant (14.0%) as white students matriculate through grades eleven and twelve for the statistical reporting period 1988-1990.

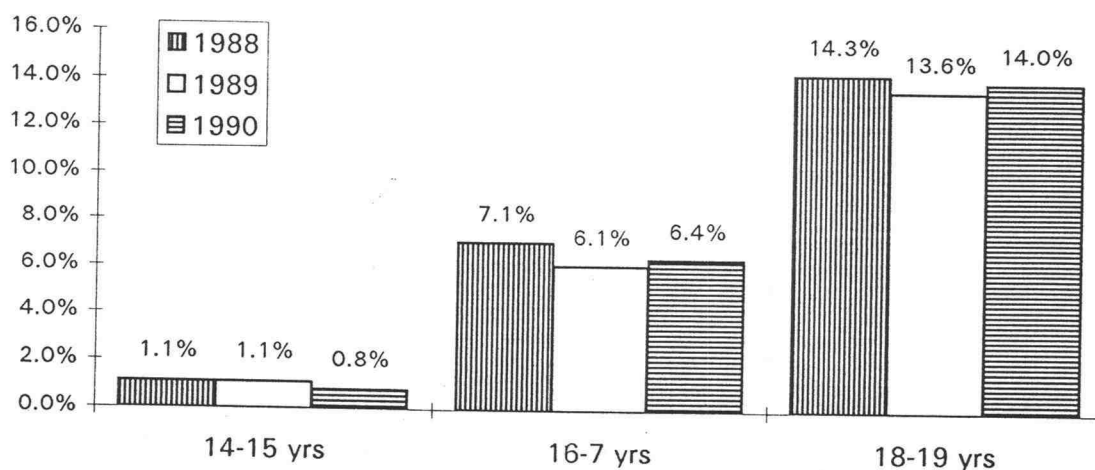


Figure 4. National percentage of white high school dropouts, 14-19 year olds.

Compiled: National Center for Educational Statistics (1991). Digest of Education Statistics.

Figure 5. provides detailed statistics on the average dropout rate for secondary school students in LAUSD grades 10, 11 and 12, academic years 1985 through 1991. This figure depicts a relatively stable rate of approximately 16.0 percent during the six-year period reported.

Figure 6. provides detailed statistics on average dropout rate for junior high school students in LAUSD grades seven, eight and nine, academic years 1985 through 1991. This figure depicts a declining dropout rate, ranging from 14.37 percent in 1985 to 7.07 percent in 1991.

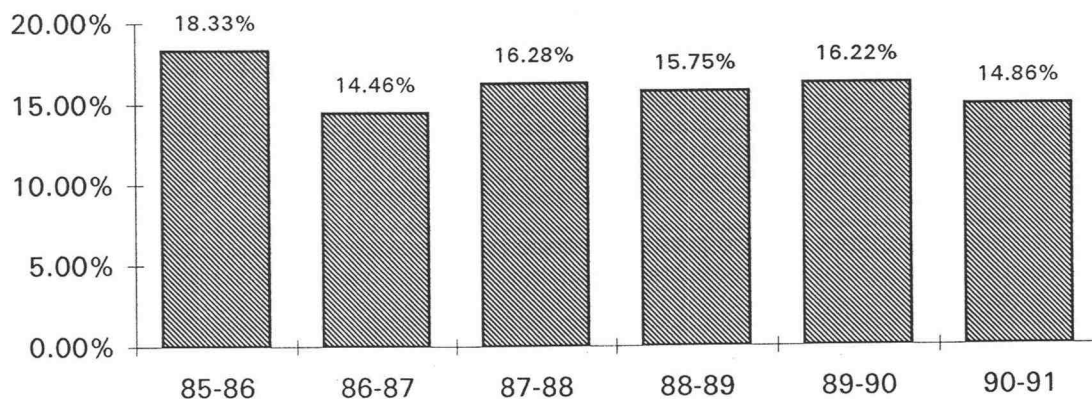


Figure 5. Los Angeles Unified School District; average dropout rate for high schools, grades 10, 11 and 12, academic school years 1985 through 1991.

Compiled: LAUSD Dropout Prevention and Recovery Report (1991), Los Angeles Unified School District.

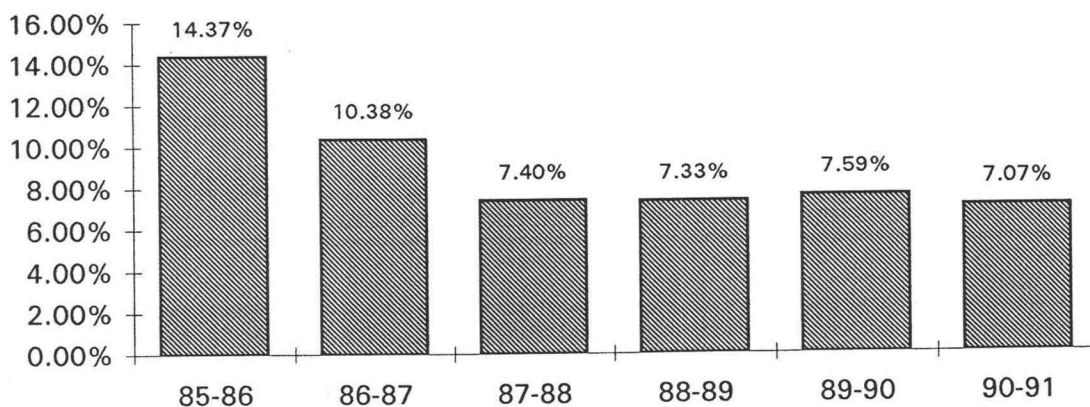


Figure 6. LAUSD, average dropout rate for junior high school students; grades seven, eight and nine, academic school years, ages 12, 13 and 14.

Compiled: Dropout Prevention/Recovery Report (1991), Los Angeles Unified School District.

Economics of the Dropout Problem

Several studies investigating the economic perspectives of the dropout problem are summarized in Table 2.

According to a report by the Institute of Educational Leadership (1986); every year there are some 700,000 students beyond the eighth grade who drop out of school. Cumulatively, as many as 28 percent of the 14-18 year-old population across the U.S. do not complete high school with their peers. Most, but not all, come from low-income families, have inadequate basic skills, especially in reading and mathematics; show limited aspiration and self-esteem; and perceive they have little control over their future.

In addition, Slavin (1989) provided a description of at-risk youth;

A student described as at-risk is one who is in danger of failing to complete her or his education without adequate level of skill. Risk factors include low achievement, retention in grade, behavior problems, poor attendance, low socioeconomic status, and attendance at school with large number of poor students. Each of these factors are closely associated with dropout rates, and by the time students are in the 3rd grade, these factors can be used to predict...which students will dropout and which will complete their education (p. 4).

Table 2.

Economics of the Dropout Problem

Author Findings/Recommendation	Year	Source
Institute for Educ. Leadership Cumulatively, 28 percent of the 14-18 year-old population do not complete high school. Most, but not all, come from low-income families.	1986	ERIC
Slavin At-risk factors include; low academic achievement, retention in grade, behavior problems, poor attendance, low socio-economic status...	1989	CIJE
Rhodes In 1985, U.S. businesses spent \$40 million to teach remedial reading, writing and math, and American citizens pay more than \$75 billion a year in unemployment, welfare, and other costs for dropouts and their families.	1987	ERIC
Catterall The economic and social cost of the dropout problem... for which no dollar cost estimates are available might amount to \$6 billion per year on top of \$288 billion in lost tax revenue.	1987	CIJE
NYCBE The report suggests that the causes of dropout are found in a complex relationship between the educational system and the students themselves... including economic needs.	1987	ERIC

Rhodes et. al. (1987) discussed the extent of the dropout problem from an economic perspective noting that the path to America's economic stability passes through the doors of the schools every day and there are no detours. Yet the public schools allow 27 percent of the teenagers to drop out of school every year. This national crisis threatens to undermine the economic health of the country.

To demonstrate the economic impact of the dropout problem, Rhodes et. al. (1987) states:

a) Nationally, one of every four students entering the eighth grade will dropout before graduating; the ratio jumps to two of four in the inner cities. b) Dropout estimates for Native American, Hispanic and Black youth range from 35 to 85 percent. c) The U.S. entry-level labor pool--14 to 24 year olds--is shrinking. Dropouts in the pool significantly increase training costs for businesses. d) In 1985, U.S. businesses spent \$40 million to teach remedial reading, writing and math, and e) American citizens pay more than \$75 billion a year in unemployment, welfare, and other costs for dropouts and their families (p. 3).

Rhodes et. al. (1987) research on the economics of the dropout problem are consistent with the Catterall (1987) report; in 1985-86 approximately 600,000 young people dropped out of public high schools at a projected cost to society of 120 billion in lost productivity during their lifetimes. In addition to substantial income consequences associated with dropping out, a variety of other effects

have been cited as social costs - particularly added welfare, unemployment compensation dependency, increased crime costs and more demand on the health services.

Catterall (1987) found that economic and social costs for which no dollar estimates are available might amount to \$6 billion per year on top of the \$288 billion in lost tax revenue (p. 25).

Rhodes et. al. (1987) reported that there is no singular cause for students to drop out. The reality is that dropout is based on the pressures of society that overwhelm youth. These conditions may be grouped into four categories: a) Environmental factors; students from low socio-economic backgrounds are at a great disadvantage. Opportunities are limited; moreover, home and school life are often in conflict. b) Academic factors; Students who drop out often perceive school as a hostile place. Their histories of failure often stem from a conflict with school authorities. c) Economic factors; to students who need money to help their family, or want it for self-support, being outside school looks better than being inside - a vision that leads to a bleak future. Other factors include teenage pregnancy and marriage, and d) Social factors; when teenagers experience problems that seem too overwhelming to them, they often turn to drugs, which frequently intensifies their problems. Drugs lead to crime. Over

83,000 teens between ages 13 and 19 are in correctional institutions.

Similarly, the NYC Dropout Prevention Program (1987) found that the causes for dropping out are found in the complex relationships between the educational system, the students themselves, and the structure of a rapidly changing society. The report suggests that if you listen carefully to adolescents and the adults who know, one thing becomes clear -- urban teenagers are a population under unusual stress. They have long-standing medical, emotional, and economic problems that can make staying and succeeding in school a heroic task. Students are put at further risk of dropping out in educational systems that are static, under-funded or in pursuit of excellence for a few, while neglecting the needs of many. Low achievement, course failure, expulsion, grade repeating, chronic absence, irregular attendance, substance abuse, criminal behavior, pregnancy, poor health, economic needs, alienation and boredom are some of the personal, social and educational factors that lead to dropping out of school.

Tuck (1989) discussed patterns of behavior and attitudes, as well as academic, demographic, social and economic circumstances of students who have dropped out of District of Columbia Public Schools. Also, Tuck's study examines factors that influence at-risk students' attitudes, career aspirations and needs after leaving

school, as well as factors affecting re-enrollment. The findings suggest that more than one-half (50%) of DCPS at-risk students leave school before entering or finishing their first year of high school, i.e. grade 10, and 59.8% of the leavers are males.

Tuck further contends that almost half (43%) of the dropouts have siblings who dropped out of high school while a substantial number of these students re-enter within a five year period after dropping out of school. Over half (56.6%) of all dropouts re-enroll in alternative or adult education programs, but it's estimated that less than five percent (4.5%) receive their diploma or GED. The average length of time between dropping out of school and re-enrollment for this group was one and one-half years.

Tuck (1989) found that schools tend to alienate many of the low achieving students by not providing adequate support mechanisms. Even though the majority of DCPS dropouts did not blame their teachers for leaving; they were dissatisfied with their teachers and the amount of patience shown toward them.

Tuck (1989) demonstrates the need for dropout prevention services for at-risk inner city students prior to entering secondary schools. These findings are consistent with national surveys and local research, showing that most prevalent causes of dropping out of school are failure, problems outside of school and conditions that are premised

on the social and economic situations of students' families.

Findings on the extent of the dropout problem are reported by the Institute of Educational Leadership (1986) and are collaborated by Hamby (1989), who provides details on the significance of the dropout problem from an economic perspective, and identifies several myths that must be resolved as a prerequisite to a solution for this condition:

During the 1985-86 academic year, more than 600,000 young people dropped out of public school at a projected cost to society of 120 billion of dollars in lost productivity during their (career) lifetimes. The cost aren't measured just in economic terms. We are talking about human lives and one wasted life is too many. The (dropout) problem is real and ownership of the problem and the solution must begin with the school. To start the solution process, we must dispel three myths: Myth One - There is not a dropout problem. Myth Two - Some children just do not belong in schools. Myth Three - Schools do not cause dropouts and can do nothing to keep children from dropping out (p. 21).

There is substantial evidence showing a serious dropout problem among secondary school students in America. It is hypothesized that a complex set of inter-related conditions are causative factors. They include the public education system, the students themselves, and the structure and operation of a rapidly changing society.

Anton (1982) presented an outline of findings and recommendations in his report, A Study of Dropouts and Divergent Youth in Los Angeles Public Schools.

Recommendations include but are not limited to:

Re-examine the instructional planning process which has caused academic remediation courses to replace electives classes in junior and senior high schools. Consideration should be given to the requirement that all students receive a balanced curriculum to include...career exploration, world of Work and Job Skill Preparation, and 3) Classes which develop essential personal and social skills (p. 7).

Since many Hispanic students leave school before they enter high school, both junior and senior high schools in the inner-city must increase their interest and involvement in students' needs and desires for employment. The National Commission on Secondary Schooling for Hispanics (1984) found that private business has played an important role in successful youth programs. The report points out that it is important that the business community and the schools to work together to design part-time and summer time job strategies which link together the school and the work place.

The National Commission on Secondary Schooling for Hispanics (1984) recommended that dropout prevention strategies include the following employment preparation components: A) Operate cooperative business/school

networks which can be located in the school or linked directly to the school and which provide: 1) worker readiness training, 2) Job and career counseling, 3) Job and employment placement, and 4) Follow-up and evaluation. B) Encourage special scheduling arrangements which permit students to work and attend school. Establish job links to school performance and attendance. C) Offer school credits for certain kinds of work and arrange for work supervisors to report to schools on job performance and vice versa. D) Establish transferability of credits between high school and evening or General Education Development (GED) for students who may need to combine day and night school; and E) Support Youth Employment legislation which would partially subsidize minimum wage jobs for in school youth.

Firestone (1989) suggests that students need personal reasons to meet achievement standards and found this need to be less acute with higher achieving students. Also, those students having the greatest trouble in school had the most limited view of what was worth learning. He further states that the clearest way to show at-risk students the relevance of schoolwork is to provide a short-term, direct connection to future (career) employability. Programs that trained students to be dental technicians, truck drivers, bank tellers and the like had considerable appeal (p. 43).

Additionally, Firestone (1989) reported that there are two factors which contribute to students' perceptions that schooling is relevant: 1) the availability of career oriented programs, and 2) counseling to help them identify and explore appropriate career options (p. 43).

Miller (1980) and more recently Miller et. al. (1985) suggested that:

Career/Life Planning is best accomplished in a group setting where participants are taught specific career and life planning skills. In fact, people who have participated in workshops or classes find employment faster and at a higher salary. Career/Life Planning is a structured action oriented approach to setting and achieving career goals. One of the most important dynamics of career/life planning is to help students see that they are in control of their own lives and that they must be responsible for planning and making decisions (p. 4).

Career Guidance/Counseling

During the 1980's, there were numerous studies which provided insight into the importance of career guidance, counseling and employment preparation (career guidance) as an essential ingredient of an effective dropout prevention program. Several studies investigating the relationship between career guidance and dropout prevention are summarized in Table 3.

Table 3.
Career Guidance/Counseling

Author Findings/Recommendation	Year	Source
Caliste A 12-week dropout intervention program: group counseling meeting on a weekly basis to consider; academic problem solving, career goal planning and other topics; did have a significant effect on absentee rates.	1984	CIJE
Miller Recommended the following as an effective approach to dropout prevention; institute a career guidance and counseling center, and a school linkage (network) to provide work/study experiences...	1987	ERIC
Mei Reported that career counseling programs which provide job readiness training and employment placement in an effort to motivate students to improve academic achievement and school attendance was found to be effective.	1900	ERIC
Anton Recommendation: Consideration should be given to the requirement that all students receive a balanced curriculum to include; career guidance and exploration, and job skill preparation.	1982	ERIC
NCSSH Recommended that programs utilize employment preparation components; operate cooperative/linked to school; career counseling, worker readiness training, and job placement.	1984	ERIC

Caliste (1984) assessed the effectiveness of a 12-week dropout intervention program, and found that the experimental intervention (group counseling meeting on a weekly basis. Topics included; motivation, relevance of school, academic problem solving, career goals planning and study habits) did have a significant effect on retention and absenteeism rates (p. 651).

Miller (1987) evaluated the special education component of a 1986-87 attendance improvement/dropout prevention program of the NYC Board of Education. Several recommendations pointed to the importance of career planning within the context of an effective dropout intervention program. They included a career guidance and counseling component, a health education component and a school linkage component to provide work/study experience and life skills training (p. 51).

Johnson (1988) discussed findings of a successful dropout prevention program involving career development processes for 21 learning disabled (LD) women on the campus of the University of Arkansas-Fayetteville. The project was designed to help the (LD) women to gain knowledge about the world of work and the demands of specific career (options), establish realistic goals for career growth, and develop skills for obtaining and retaining jobs.

Mei (1990) found that career counseling programs which provide job readiness training and employment placement to

motivate students to improve academic achievement and school attendance was found to be effective in increasing students' job-readiness and self-concept. Program improvement recommendations included: instituting and/or expanding job-preparation, career awareness and planning; providing teacher and coordinators with more time to administer programs, and creating work internships (p. 5).

Dropout Prevention Programs

Several studies investigating the effects of career planning and effective dropout prevention programs are summarized in Table 4.

In a study of Students Dropouts in The Los Angeles Unified School District (1985), these recommendations regarding data collection were pointed out to help remedy the dropout problem:

- a) Adopt the definition of "dropout" as recommended by the LAUSD Dropout Prevention and Recovery Committee in order to facilitate a more accurate collection and reporting of dropout data and information.
- b) Develop and implement a process for collecting and reporting data on a specific category of students designated as "dropouts".

Table 4.

Dropout Prevention Programs; 1989-92

Author Treatment, Sample, Methodology, Effects	Year	Source
Joseph 8 th grade urban middle school; 22; Skill training, remediation mentoring program, parent/teacher program; Improved reading skills and attendance.	1992	ERIC
Smyer Urban high school students; 103; Career related curriculum, and student incentives; Decline in rate of attendance.	1991	ERIC
Linder Urban high school students; 6 school district; The author concludes that a truly effective attendance and dropout prevention program would begin in elementary school when attendance patterns are formed.	1990	ERIC
Mei Urban high school students; 5.7 k; Job-readiness training, career counseling and job placement; Improved attendance, job readiness/ placement.	1990	ERIC
O'Sullivan Middle school students; 22; Students were paid wages for attending classes, completing assignments, etc; No increase in academic, achievement or self-confidence.	1990	ERIC
Cuban Urban high school students; Features of an effective drop-prevention program consider; school size, staff, curriculum flexibility and teacher/student relations.	1989	

Table 4. (Continued)

Author Treatment, Sample, Methodology, Effects	Year	Source
NYCBE Urban junior high school students; 78; Hands-on curriculum, social service to students, summer enhancement, program career counsel; Improved reading rates, stable attendance.	1989	ERIC
Solomon Urban high school youths; Programs designed to provide services included; facilitation, career guidance/counseling attendance. Out- reach tend to improve student, attendance and academic performance.	1989	ERIC
Johnson Elementary students; 525; Youth service "Elementary school tutor" and work/study program; Improved attendance and self- confidence.	1988	ERIC
Miller Special Education middle school students; 2.3 k students 43 middle schools; Attendance outreach, guidance/ counseling, health services, work/study experience; Improved attendance rates.	1987	ERIC
NYCBE Urban high school students low-SES; 7 urban high schools; Curriculum enhancements, job, development/placement health care/pregnancy preventive program and collaboration between school and community organizations; Improved attendance and reduced dropout rate.	1987	ERIC

Table 4. (Continued)

Author Treatment, Sample, Methodology, Effects	Year	Source
Shapiro Low SES students, high school; 94; Work/experience, academic/guidance counseling, and support services; Gains in mathematic and reading. Students involvement	1986	ERIC
LAUSD Urban students in high school; Recommendations: adopt definition of dropout in order facilitate a more accurate collection of data.	1985	
Caliste Urban high school with low SES; 55; Experimental intervention; language and math. enhancement, academic counseling, career guidance; 8 week treatment; Improved attendance, reduced dropout rates.	1984	
McBeath Urban high school students; Academic tutoring, home visitation, career guidance/ counseling; 3 year study; Increase self- esteem, reduced dropout.	1983	
Drane Urban middle school Students; 3 middle school sites; Work/study program, career guidance/ counseling, teen pregnancy services after school program; Improved attendance rates, and decreased dropout rate.	1971	

- c) Delete the reason "Over Age" from LAUSD documents as a reason for students dropping out or "early leaving".
- d) Develop an organizational plan for coordinating the senior high school and adult/ROC/ROP Programs, and,
- e) Extend the operating day and week of some senior high schools to provide for students who are employed or have personal responsibilities preventing them from attending all classes during 100 percent normal school days (p. 30-32).

In an attendance improvement study, Mei (1990), reported on a dropout prevention program in New York City that provided job-readiness and placement services to at-risk youths. The purpose of the program was to motivate students to improve academic achievement and school attendance. The program was implemented during the 1988-89 school year at NYC schools with average student attendance rates at or below the city-wide median of .87.

Mei further notes that the dropout prevention program was found to be effective in increasing students' job readiness, academic achievement, and self-confidence. The quality of the program varied from site to site. Recommendations were made to improve the program by expanding job preparation and career awareness components and to provide

teachers and coordinators with more time to administer the program (p. 5).

In a study on the effectiveness of a dropout prevention program involving a collaboration between Community School District No. 10 in the Bronx (New York) and the Victim Service Agency, NYCBE (1989) provided instructional support services to 78 at-risk students attending an alternative middle school. These findings were reported: a) the mean attendance rate for the students in the program remained stable, and b) students improved their reading scores more than would be expected over a year's time. Of the students who improved their attendance, 60.5 percent came to school at least two weeks more than they did the year before (p. 3).

O'Sullivan (1990), in a middle school dropout prevention program sponsored by the University of North Carolina at Greensboro, reported on a dropout prevention program wherein students were paid wages in script for attending class and completing assignments. Middle school students in grade six were the experimental population in this at-risk study. Furthermore, O'Sullivan reported that students in the program did not demonstrate change on achievement criteria. No significant difference in self-perception between at-risk and not at-risk students was found (p. 1).

Cuban (1989) explored what teachers and administrators can do to address the situation of at-risk students

attending inner city schools. He contends that the role of urban schools must be the primary issue facing the nation's educational system, asserting that the primary goal should be to create schools and classroom environments that build DESIRE in students toward completing school, increasing their desire to learn, build self-esteem, and enhancing academic performance. Cuban presented features of dropout prevention programs that have appeared in the literature and that coincide with practitioners' wisdom about what works with at-risk students in urban school districts. He made five recommendations:

- 1) SIZE - Successful school programs should enroll as few as 50 students, but seldom more than a few hundred.
- 2) STAFF - Teachers should choose to work in these programs and classes, thus investing in and making a commitment to at-risk students.
- 3) FLEXIBILITY - Because the program is small and the purpose is to rescue kids from what appears to be a grim future, teachers and principals should employ varied non-traditional approaches.
- 4) SCHOOL AS COMMUNITY - Successful programs should avoid the conventional model of school, wherein teachers' primary concern is academic achievement, wherein students remain

anonymous or emotionally distant from the teacher, and in which rewards and penalties dominate the relationship between teacher and student (p. 31).

Solomon (1989) found a program designed to provide services to students who were considered to be at-risk of dropping out of school which included these components: facilitation, attendance outreach, career guidance, health counseling, school-linkage and extended school day. Students in the program tended to improve their attendance, and passed to the next highest grade at the end of the school year. A small number continued to have trouble passing all their subjects. The findings suggest that such programs should be continued and staffing be increased.

Kaczynski (1990) reported on a summer employment and training project for high school dropouts that was conducted at Florida's Pensacola Junior College (PJC) through the college Adult Education Program. The program was designed to improve participants' reading and writing skills and found that pre- and post-test scores revealed significant gains in language and math. All but one of the students completed the employment component of the project.

Ochoa (1987) stated that in a report by The San Diego State University, College of Education, early intervention and educational expectations which promote access, quality

education, and the right to career options are necessary parts of any dropout prevention program which addresses the prevention of school failure. The report suggested that preventing school failure and empowering students to succeed should be the goals of such programs. He discussed student under-achievement and the inequity of educational services for language minority students, and asserted the importance of collaboration between school, community, and home in preventing dropping out.

Self-Concept and Academic Performance

Since 1986, numerous studies have investigated the relationship between Self-Concept and Academic Performance (Achievement). The section presenting authors with findings and recommendations are summarized in Table 5.

Bennett (1993), in a follow-up study, examined the role of effective variables in predicting academic achievement among middle school students. In a previous study, Sink (1991) found moderate to strong correlation among self-perceived competence scores, teachers' ratings of student competence, and grade six achievement. Bennett found teachers' perception and fathers' perception to be strongest predictors of grade seven student achievement on three of four subjects tested. Bennett contends that these findings underscore the stability and importance of

Table 5.
Self-Concept and Academic Performance

Author Findings/Recommendation	Year	Source
Bennett Teachers' perception and fathers' perception to be the strongest predictor of Grade 7 students' achievement on three of four subject areas tested.	1993	ERIC
Coakley Students exhibited significant improvements in self-esteem, reading and math. Treatment: large group session; self-esteem enhancement strategies, small group tutorials; math, reading and individual sessions; mentoring relationships.	1993	ERIC
Sherwood Many educators and psychologists disagree with the perception that flunking is an appropriate response to poor academic performance.	1993	ERIC
House Student self perception of academic ability and expectation for academic performance in college were significantly related to persistence.	1992	CIJE
Kallmann Findings: Individualization and concentrated efforts in learning strategies, conjunction with parent and faculty involvement aided in raising self-esteem and academic achievement of high school students.	1991	ERIC

Table 5. (Continued)

Author Findings/Recommendation	Year	Source
Purkey Provides an overview of self-concept theory; describes how people organize and interpret their personal existence. It discusses the beginning and recent history of the self-concept theory, and presents three major qualities of self-concept.	1988	ERIC
Shavelson Provides an integrated definition of self-concept; Self-Concept is a person's perceptions of himself, that are formed through their experiences with environment, and significant others.	1977	ERIC
Sink Found moderate to strong correlations among self-perceived competence scores, teachers' rating of student competence and academic achievement in grade 6 students.	1991	ERIC
Kramer Findings: The school experiences of at-risk and successful students are mostly a result of their perception of relationships with teachers and are responsible for their academic performance.	1990	ERIC
Alawiye Although Self-Concept among children has been of great interest, understanding Self-Concept has remained elusive. There are two theories of Self-Concept: "developmental self" and "social self".	1984	ERIC

Table 5. (Continued)

Author Findings/Recommendation	Year	Source
Fuller Monograph provides practical help to educators in understanding children's self-concept, its effects on their school experience and ways educators can have a positive effect on self-concept development.	1984	ERIC
Cohen Tutoring programs have positive effects on children who serve as tutors and the tutored. However, participation in tutoring program had little or no effect on self-esteem of tutors or children being tutored.	1982	ERIC
Guillen The effects of student meaning of work on their self-concept, intrinsic motivation and subsequent academic performance is to enhance motivation and self-concept which lead to improved academic performance.	1981	ERIC
Taliuli Results suggest that students with a history of academic success feel more capable to perform well than children with a history of failure.	1986	ERIC
Harter Reported that achievement precedes perceived cognitive competence, which leads to motivational orientation and stressed that these results are dependent on measures of Academic Self-Concept.	1983	ERIC

effective variables in understanding and predicting middle school academic performance.

Coakley (1993), in a study to improve the academic achievement of 35 third and fourth-grade under-achievers through improved self-esteem, reported that all of the objectives of the practicum were achieved..."students exhibited significant improvement in self-esteem, reading and math levels and overall grade point average."

Specific goals of this study included focusing on self-concept and learning skills reinforcement, with the ultimate goal of increasing academic performance and motivation. The study's methodology included: a) large group sessions with students focused on self-esteem enhancement strategies, study skills and time-management techniques, b) small group tutorial sessions focused on the reinforcement of math and reading concepts, and c) individual interaction centered on the development of mentor relationships with the school staff.

Sherwood (1993) reported that despite trends toward retention in grade of low achieving students and apparent public support for the practice, many educators and psychologists disagree with the perception that flunking is an appropriate response to poor academic performance. He asserts that in numerous studies the position that grade level retention produces little improvement in student achievement. Sherwood states, "studies...evidence that

students required to repeat, actually made less progress than comparable classmates who were promoted," and demonstrate significant damage to children, particularly in terms of lowered self-esteem."

House (1992) investigated the relationship between academic achievement and self-concept, achievement-related expectancies and college attrition. He reported, "It can be seen that students' self-ratings of their overall academic ability and drive to achieve were significantly related to...persistence." The sample consisted of 2,324 students enrolled as new freshmen during the fall semester at a large public research university in the Midwest. In this sample there were 996 male and 1,328 female students; 36 Asian, 36 Hispanic, 41 Black, and 2,211 white.

Kallmann (1991), developed and implemented an at-risk program to aid secondary students (n=35) with poor social and academic skills from grades seven, eight, and nine. Kallmann states in the ERIC abstract that ... "28 of 35 of these students met the stated goals and objectives of the program." He reported that individualization and concentrated effort in learning strategies, in conjunction with parent and faculty involvement, aided in raising self-esteem, and in keeping the at-risk student in school.

Purkey (1988), in an overview of Self-Concept Theory for Counselors, provides a theory which describes how people organize and interpret their personal experiences

and discusses the beginning and recent history of self-concept theory. Purkey asserts, "...three major qualities of self-concept; it is learned, organized, and dynamic." Purkey points out some basic assumptions regarding self-concept: A) No one is born with a self-concept, it gradually emerges in the early months of life and is shaped and reshaped through repeated experiences, particularly with significant others. B) Many of the successes and failures that people experience in many areas of their lives are closely related to the way they learn to view themselves and their relationships with significant others, and C) The fact that self-concept is learned has some important implications: 1) self-concept does not appear to be instinctive, but is a product developed through experience, it possesses relative boundless potential for development and self actualization.

In a review of educational research Shavelson (1976), discussed the dramatic increase in studies on self-concept as a re-emphasis on non-cognitive outcomes of education. Shavelson argues that improvement of students self-concept seems to be a valued educational outcome and self-concept has potential scientific importance for interpreting achievement outcomes. Most definitions of self-concept link this concept to achievement, and there is empirical evidence to support this theoretical linkage.

Shavelson (1976) concluded that "Self-concept is a person's perception of himself. These perceptions are formed through his experiences with his environment...and are influenced especially by environmental reinforcement and significant others."

The relationship between self-regulation, use of measures from the effective and cognitive domain, and academic performance of 62 middle school (grade 11) students was investigated by Sink (1991). Methodological aspects of self-regulated learning studies were: Self-assessment and career planning affective variables, self-concept and locus of control. Teachers' perspectives on students' academic ability were obtained, and standardized test scores were used as a measure of academic achievement. Sink (1991) reported that "...metacognitive variables, such as (career) planning and self-assessment abilities, were significantly related to achievement in mathematics, reading and science..." Also, he noted that students and teacher perception of scholastic ability were more salient factors in predicting academic performance.

Kramer (1990) examined the difference between the experiences and beliefs about school held by young adolescents who were identified as potential dropouts and those held by their more successful peers. The study was conducted at a large, urban junior high school with an ethnic composition of 47% Orientals, 31% whites, 16%

Hispanics, 6% Blacks and .3% Native Americans. A total of 110 junior high school students selected from three different achievement levels were surveyed using items drawn from the "self-concept in school" section of the Pennsylvania Quality Assessment. Following the completion of the survey, students were asked to write essays about their ideal futures and how they might prepare themselves for the future. The following assertions were reported as results of the study. The school experience of at-risk and successful students are mostly a product of their perception of relationships with teachers, and (2) both at-risk and successful students felt responsible for their performance, but at-risk students were unsure how to take responsibility for their learning.

Alawiye (1984) asserts that there are two main theories of self-concept development. The first theory is the notion of "developmental self." Proponents include psychologists and psychiatrists. Self-concept develops in a manner similar to, and heavily influenced by, the individual's self-concept. Interaction between the individual and the environment results in exhibition of the characteristics of the self. The second theory is the "social self" theory. Proponents include behaviorists and phenomenologists. Behaviorists view the development of self-concept as a development that occurs through one's perceptions of how others respond to her/him.

Fuller (1984), authored a monograph that is designed to help educators develop a better understanding of children's self-concept, the effects of children's self-concept on their school experience, and ways educators can have a positive effect on self-concept. The first section defines self-concept and presents two case studies; the second discusses factors influencing the formation of self-concept. The effects of self-concept on academic achievement are presented in Section Three. Section Four includes suggestions for teachers which discusses classroom environment, positive feedback, success, and "treating yourself good" for the good of the children.

Cohen (1982), investigated outcomes of tutoring and reported that educational literature on tutoring is clear. These programs have definite and positive effects on the academic performance and attitudes of those who receive tutoring. Tutored students outperform their peers on examinations, and they express more positive attitudes toward the subject in which they were tutored. These tutors not only developed more positive attitudes toward the subjects that they were teaching, but they also developed a more **positive attitude** towards the students they were teaching, but they also gained a better understanding of the area. Also, tutoring programs had a lesser effect on the self-concept of children. Neither

tutors nor students changed their self-concept as a result of the tutoring program.

There is a popular belief that self-concept and motivation are intricately related to performance. To test this theory, Talbot (1981) investigated the effects of Students' Meaning of Work on their self-concept and intrinsic motivation, and subsequent academic performance. The objective of the study was to determine if increases in student self-enhancement and intrinsic motivation would explain increased academic performance. Students (n=472) in experimental groups completed interest inventories, which were then used by professors to prepare classes, based on what students felt was meaningful. The results revealed that by increasing the professors' awareness of how students perceive the meaningfulness of their disciplines and then applying this knowledge to course preparation directly enhanced students' intrinsic motivation and directly influenced students' self-enhancement. Both factors were found to be significantly related to academic performance.

Parent Involvement and Academic Achievement

Several studies investigating the relationship between parent involvement and academic achievement is summarized in Table 6.

Table 6.

Parent Involvement and Academic Achievement

Author Findings/Recommendation	Year	Source
Rogers A practicum project implementing a developmental appropriate intervention increase school success of at-risk children in kindergarten through grades three. The goal of the project was to determine the causes of at-risk status before retention or school failure occurs, and to involve parents in their children's educational process.	1993	ERIC
Nweze The purpose of this study was to determine the effects of parent volunteer programs at an alternative middle school for 100 at-risk students located in an impoverished rural area on student attendance and appropriate school behavior.	1993	ERIC
Count The goal of this study was to investigate the effectiveness of an extended-day school program implemented in Franklin County, Tennessee, to help at-risk high school students with specific subjects. The program sought to deal with several problems of at-risk students: fewer study aids, little parental involvement, incomplete homework and low test scores and grades.	1992	ERIC
Brock The goal of this Kansas City, Missouri school district program was to reduce the number of children with developmental delays through parent education and active parent involvement in the early learning processes of their children.	1991	ERIC

Table 6. (Continued)

Author Findings/Recommendation	Year	Source
McDaniel This study involved minority parents of At-Risk, predominantly African-American population. It sought to improve student attendance, academic performance, and parent involvement.	1992	ERIC
Jenkins This Ed.D practicum, Nova University, was designed to increase the academic success of potentially at-risk first graders and train teachers to identify such students. Objectives were to: 1) improve teachers' ability to accurately identify first graders at-risk of failing first grade, 2) help parents become knowledgeable about working with at-risk students at home, 3) increase students' readiness for achievement in first grade.	1990	ERIC

Rogers (1993), implemented an extended-day early intervention program (after school) two days per week for one hour per day to help Chapter 1 students experience success in Language Arts. Eight home-school partnership workshops in English and Spanish were provided to the students' parents. In addition, there was a two-week program of daily parent involvement that included a home-school lending library. The results of student skills tests and pre- and post-program surveys indicated that the parent involvement program was the most successful part of the practicum. Although the at-risk students did show gains, the gains were not as expected.

Nweze (1993), in a parent partnership practicum, reported that parents signed an agreement to volunteer their time and talents to the school. Documentation of parent visits through sign-in sheets showed that parent involvement increased from 285 visits to 472 during the practicum implementation period. The number of discipline referrals for a six-month period decreased from 82 to 59. Also, there was a 62 percent decrease in absences during the practicum implementation. Additional components of the parent partnership practicum included a parent support group, a student support group, a peer leadership training program, and a designated parent room in the school.

Count (1992), in an extended day school (EDS) study, focused on students who were failing. A student was given

a temporary incomplete rather than a failing grade. After the regular school day was over, the student would work on skills and concepts not mastered in class with a teacher or tutor. At the end of the six-week program, the student was given the grade earned in EDS in place of the incomplete. An assessment of EDS participants found that 86 percent were successful. A significant higher percentage of black students utilized EDS than were represented in the student population. However, race was not a factor in the success of the program. Black males did have a lower level of success than black females.

Brock (1991) reported on a Kansas City, Missouri School District Early Childhood Development program that consisted of two components: Parents as Teachers (PAT) and Early Learning Centers (ELCs). Both programs had a screening component, with PAT screening children 12 to 36 months of age and ELC screening 3, 4, and 5 year-old children. The ELC instructional curriculum directly intervened to eliminate developmental delays of at-risk students before they entered kindergarten. PAT is an educational program for parents of children younger than six years of age. An evaluation indicated the two programs curbed developmental delays and allowed the students to catch up academically with their peers.

In a study by McDaniel & Mack (1992), which served predominantly African-American at-risk students, program

components included parent workshops, a learning resource center, an incentive program to reduce student absenteeism and a communication network.

An evaluation of this program found that during the 1991-92 school year, parent participation was significantly better than it had been during the 1990-91 school year. In a pre- post-survey, most parents said they benefitted from the workshops. Student scores on the California Achievement Test improved by 13 percent and absenteeism was reduced by 20 percent.

In an Ed.D practicum by Jenkins (1990), in-service workshops were provided for parents, teachers, and volunteer tutors. Participants had the opportunity to share teaching strategies and techniques, and to use materials that were effective with at-risk students in school and at home. Students were grouped according to deficiencies and provided with activities that addressed their needs. A major element of the intervention was the Whole Language Approach.

Practicum evaluation data indicated that outcomes of the intervention were positive. Teachers could successfully identify at-risk students; students showed significant gains in readiness skills, and parent involvement improved.

Early Studies of the Piers-Harris Children' Self-Concept Scale

An early study by Piers-Harris (1964) investigated the stability of the Piers-Harris, using a 95-item version of the scale with a retest interval of four months. Approximately half the early standardization sample was used from grades three, six, and ten. The resulting coefficients of .72, .71, and .72 were judged satisfactory for a personality instrument in the experimental stage of development, especially given the relatively long test-retest intervals. The revised 80-item scale, though shorter, was shown to have better stability using both a two month ($r=.77$) and a four month ($r=.77$) test-retest interval (Wing, 1966). These coefficients were based on 244 fifth graders (see Table 6. for additional information).

Platten and Williams (1979, 1981) conducted two studies of the scales factorial stability and reported test-retest reliabilities. The scale was administered to White, Black and Mexican-American students in grades four, five and six. The investigative team of Platten and Williams (1981) reported reliability coefficients of .65 and .75. In a study by Shavelson and Bolus (1982), involving a test-retest interval of five months, a reliability coefficient of .81 for a group of white, upper-class, seventh and eighth graders was obtained.

Thus, temporal stability estimates generally support the results reported with the standardization sample (see Table 7. for additional information).

Table 7.
Test-Retest Reliability for the Total Score

Study	Sample	Sex/ Grade	Re-test n	Interval	r
Piers and Harris (1964)	public school	both 3-6	56	4 mo	.72
		both/6	66	4 mo.	.71
		both/10	60	4 mo.	.72
Platten and Williams (1979)	mixed ethnic groups	both 4-6	159	10 wks.	.65
Platten and Williams (1981)	mixed ethnic groups	both 4-6	173	10 wks.	.75
Shavelson and Bolus (1982)	public school	both 7-8	99	5 mo.	.81

Internal Consistency

Several studies during the 1970s: (Piers, 1973), (Lefley, 1974), (Winne, 1977), (Smith and Rogers, 1978) reported similar internal consistency coefficients of .88 through .93. Finally, Franklin et. al., (1981) reported an

internal consistency coefficient of .92 for a sample of fourth and sixth graders. Two split-versions of the scale, each with 40 items and with item content matched, were administered six months apart to 180 students, half of whom received treatment during the six-month period. Internal consistency coefficients of .74 for the pre-test and .77 for the post-test were found. Several studies investigating the internal consistency of the Piers-Harris total score are summarized in Table 8.

Standard Error of Measurement

The Standard Error of Measurement (SEM) Piers-Harris (1984) reported that the total scale and the cluster scale was based on a normative sample of 582 school children. The formula for calculating the SEM is $SD = \sqrt{\frac{\sum (X_i - \bar{X})^2}{n-1}}$. For a total scale, the SEM was computed for the overall reliability estimate of .90 and a standard deviation of 13.87. Thus, across a large number of observations on the same individual, two-thirds of the total scores should fall within about 4 scale points above or below the theoretical true score.

The Piers-Harris appears to be a highly reliable instrument. Test-re-test reliability coefficients range from .42 to .96 and internal consistency estimates for the total score range from .88 to .93. The reliability figures compare favorably with other measures used to assess

Table 8.
Internal Consistency Coefficients for the Total Score

Study	Sample	Grade/Age	Sex	n	r
Piers (1973)	Normal	grade 6	F	70	.88
		grade 6	M	76	.90
		grade 10	F	84	.88
		grade 10	M	67	.93
Lefley (1974)	Native American	7-14 yrs.	both	53	.91
Yonker, Blixt & Taylor (1974)	Normal	grade 10	both	208	.90
Winne, Marx & Taylor (1977)	Normal	grades 3-6	F	42	.90
Smith and Rogers (1978)	Learning Disabled	6-12 yrs.	both	206	.89
Franklin, Duley, Rousseau and Sabers (1981)	Normal	grades 4,6	both	180	.92

personality traits in children and adolescents. For instance, March (1983) reported stability and internal consistency of .61 and .92 for student self-concept rating, using the Self-Description Questionnaire. The Piers-Harris is thus judged to have adequate temporal stability and good internal consistency.

Convergent Validity

Significant correlations between measures intended to assess similar constructs provide evidence of convergent validity. Conversely, discriminant validity attempts to demonstrate that self-concept is differentiated from other variables which are theoretically different, such as ability, achievement or anxiety. In a review of the Piers-Harris, Wylie (1974) stressed the need for use of the multitrait-multimethod matrix technique when evaluating convergent validity. Since that time, a number of studies have been conducted and five are discussed below.

a) An important study of the construct validity of self-concept was conducted by Shavelson (1976), who examined three aspects of self-concept (definition, instrumentation, and empirical data) for five self-concept instruments, among them the Piers-Harris. They concluded that self-concept interpretations of the total score on the Piers-Harris are warranted, based on convergent validity coefficients. Although high correlations between measures of other constructs and the Piers-Harris have been obtained, further research into its discriminant validity is required.

b) Winne et. al. (1977) examined the construct validity of self-concept in a multitrait-multimethod study involving the Piers-Harris, the Sears Self-concept Inventory (Sears, 1966) and the Gordon How I See Myself

Scale (Gordon, 1968). The sample consisted of 103 third through sixth graders of mixed ethnicity. Trained examiners administered the measure to small groups of students. Test order was balanced across groups. A mean item score was computed for each subscale to control for differing numbers of items in the cluster scales.

Subtests were grouped into three major categories (physical, social and academic) and results were discussed according to these groupings. Strong convergent validity was demonstrated for the physical appearance subtests, some of the social interaction subtests (including the Piers-Harris Popularity Scale), and the academic subscales.

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c) A study by Winne (1977) was replicated by Mark & Winne (1978). It reported on a sample of 488 students, fourth through sixth grade. The physical subscales gave evidence of strong convergent validity and consisted primarily of physical appearance with physical ability secondary.

d) Shavelson and Bolus (1982) evaluated the assumption of a multifaceted, hierarchical construct of self-

concept and examined the casual predominance of self-concept and achievement. The sample consisted of 99 junior high school students. Subject-specific, academic, and general self-concept were measured. General self-concept was assessed by the Piers-Harris in conjunction with the Tennessee Self-Concept Scale (Fitts, 1965). Zero-order correlations indicated the Piers-Harris to be stable across test administrations ($r=.81$). Correlation between the two measures of general self-concept were .80 and .73 for two test administrations. Thus, the average correlation between the Piers-Harris and the Tennessee Self-Concept Scale over the two test administrations was .77, providing evidence for convergent validity.

Discriminant Validity in the Shavelson and Bolus (1982) study, was examined by comparing the correlation between the two measures of general self-concept with the correlation between measures of different constructs, such as self-concept of ability. The average convergent validity coefficient (.77) was used to compare general self-concept with measures of different constructs, with resulting coefficients ranging from $-.02$ to $.38$. These results support discriminant validity for the construct of general self-concept.

Moderator Variables

In assessing the psychometric properties of the Piers-Harris Childrens' Self-Concept Scales, it is necessary to consider the effects of age, sex, and other respondent characteristics on the total (cluster scale) scores. Such variables include any factor, usually an attribute of the respondent, which results in differential performance by various socio-demographic groups. It is important to evaluate the effects of possible moderator variables both to protect against test bias and to identify interaction patterns which reflect valid group differences. The effects of age, sex, intelligence, and achievement differences on Piers-Harris scores have been evaluated in a number of studies.

A number of theorists have predicted changes in self-concept in relation to the age of the examinee. Wylie (1979), in a review of the existing literature, noted that the majority of studies do not support an association between age and self-concept scores for persons between the ages of 8 and 23 years. More recently, Herter (1983) suggested that stability of self-concept may relate to contextual factors such as environmental demands, performance expectations, and one's social comparison group; and that these relate to age changes (e.g., transition from primary to junior high school).

Osborne and LeGette (1982) conducted a study of factors influencing the self-concept of 374 seventh, ninth, and eleventh graders in North Carolina. Three measures of self-concept were administered, including the Piers-Harris. Analysis of variance was used to evaluate the difference between group means. Most of the total and cluster scores showed an upward trend as grade level increased. However, no significant differences in overall self-concept were evident when scores were compared by grade. Among the cluster scales, the popularity means were significantly higher for the eleventh grade than for either the seventh or ninth grades.

Sex Difference

Studies investigating sex differences in self-concept have generally found no significant difference (Wylie, 1979). Early studies using the Piers-Harris confirm these findings; no significant sex differences in total scale scores were found for the sample of Piers and Harris (1964), Piers (1965), Millen (1966), or Farls (1966).

Cruse (1981) investigated children's self-concept and perception of parental behavior, and analyzed students' total scores on the Piers-Harris to determine whether self-concept varied as a function of sex. They reported no significant difference due to sex in their sample of 172 fifth and sixth graders. Three additional studies report-

ing on the relationship between self-concept and sex of the student found no significant differences. Devoe (1977) found no sex differences or interaction effects in a study of the relationship of self-concept to sex and race in 290 black and white ten year olds. Moyal (1977), in a study of depression, found no effects due to sex in a sample of 225 fifth and sixth graders. Ketcham and Snyder (1977) investigated the relationship between self-concept and achievement in 148 second, third and fourth graders. Also, they examined the significance of variance in age, sex and reading achievement. The correlation between self-concept and sex was non-significant.

Self-Concept and Achievement

Interest in the relationship between self-concept and academic performance has been extensive. The acknowledged relationship between ability and achievement has directed investigations to an examination of all three variables. Interest has been extended beyond mere consideration of the relationship between self-concept, achievement and ability and recently has focused on causal predominance.

Purkey (1970), summarizing the literature on self-concept and academic performance, stated, "There is a persistent and significant relationship between the self-concept and academic achievement," and that, "change in one seems to be associated with change in the other (p. 27)."

Wylie (1979) concurred with this evaluation and hypothesized a number of plausible causal links relating ability, achievement and self-concept. He reported that variations in success in academic activities can influence self-perception; that overall self-concept may be related more to achievement than to ability. He also noted that persons tend to evaluate themselves against the reference group that seems relevant to them. Wylie summarized the research, relating achievement and self-concept: correlations ranged from .10 to .50 and typically were in the 30's and low 40's range.

Harter (1983) investigated the relationship between achievement and self-concept with emphasis on the causal priorities. She cited conflicting evidence from a number of studies: Bachman and O'Malley (1977) provided evidence that academic ability and achievement exert a causal influence on self-concept, whereas Rubin et. al. (1979) reported that ability predicts self-esteem but achievement does not.

Finally, Harter reported that achievement precedes perceived cognitive competence which leads to motivational orientation, stressing that these results are dependent on measures of academic self-concept. In her opinion, the Piers-Harris is a measure of general self-concept only.

Shavelson and Bolus (1982) used structural equation modeling to examine the causal predominance of self-concept

and achievement. A hierarchical model of self-concept is a model in which inferences about the self in general are at the apex and perceptions of self become increasingly specific as one descends the hierarchy. The model investigated in this study consisted of general self-concept (measured by the Piers-Harris and the Tennessee Self-Concept Scale), academic self-concept and subject specific self-concept. Achievement was measured by grades in Mathematics, English and Science. Subjects were 99 seventh and eighth-grade students in an upper-middle-class school district. Study results support the causal predominance of self-concept over achievement and support the hierarchical model of self-concept.

In summary, studies investigating the relationship between self-concept (as measured by the Piers-Harris) and achievement provide inconclusive evidence. Moderate correlations between achievement and global self-concept were reported by the majority of the studies. Few studies have examined the relationship between academic performance and self-concept as measured by the cluster scale. However, the studies that did examine this issue lend support to the notion, as proposed by Shavelson et. al. (1976) and others, that self-concept is hierarchical in nature with an academic component strongly related to achievement.

Socio-economic Status

Assertions of a positive relationship between socio-economic status (SES) and overall self-concept have not been supported in the literature (Wylie, 1979). Although few studies have examined the relationship of SES and scores on the Piers-Harris, the findings of these studies point to complex relationship between SES and self-concept and warrant further investigation.

Osborne (1982) divided a research sample of 374 students in seventh, ninth, and eleventh grades into five socio-economic levels. Differences in mean scores were evaluated using analysis of variance techniques. Socio-economic difference in self-concept were observed, with total score means following a general downward trend. Differences were significant at the .01 level. A comparable pattern existed for the Intellectual and School Status scale which was also significant (p is less than .01).

A study by Smith (1978), investigated the relationship between SES, academic achievement, and self-concept of learning disabled students placed in special education classes. Although no significant effect for SES on self-concept was reported, an inverse trend was observed. High-SES students had low self-concept, medium-SES students had moderate self-concepts, and low-SES students had the highest self-concepts. Additionally, a marginally significant interaction between SES and achievement was observed

($p = .09$). Smith et. al. (1982) found that parents and teachers expect children from higher socio-economic background to excel academically, relative to socio-economically disadvantaged children. When children from high socio-economic homes experience academic failure, the discrepancy between adult expectancy and child performance is comparatively large. This expectancy-performance discrepancy results in lowered self-concept.

CHAPTER III

RESEARCH DESIGN

The following is a description of the elements and procedures which constitute the design and methodology employed in the study. The objective was to provide future researchers and secondary school administrators with appropriate insight to this study in order to evaluate the validity of its results and to provide details such that the dropout program (treatment and related elements) could be replicated at other urban school sites. Chapter Three includes, but is not limited to, a detailed discussion of elements of the study that are important and necessary for estimating the validity and reliability of the results produced therefrom; and to facilitate the application of findings to resolve issues related to the problem of at-risk students.

The rationale for selection of the research site was based on two conditions. The first condition is that the school population must meet the criteria and profile of an at-risk population. In other words, the population must be from low income families with a significant number of single parent families, have low scores in reading and mathematics and possess a relative high incidence of truancy and teenage pregnancy. Students must also show limited career aspirations. Classrooms must be crowded and

there must be evidence of a substantial number of juveniles with criminal behavior. The second condition is that the researcher must be employed at the Middle School site. Additionally, counseling and support staff were interested in and supportive of the research initiative. The method used to select the woodworking classes as the experimental group was based on a random sampling procedure. Since school administration and counseling personnel do not have access to uniformly accurate ability information for assigning incoming students to classes, the distribution process is essentially random by de facto (Blalok, 1991).

The Population

Subjects for this study were 1,434 students who attended an inner city public junior high school within the Los Angeles Unified School District. The research site was located in south-central Los Angeles, California. The research population was composed of students primarily from low-income families, and the research site was designated as a compensatory education school by the Los Angeles Unified School District. Between September, 1985 and June, 1991 the school population at the research site underwent an ethnic shift from 75% African-American and 25% Hispanic-American to approximately 65% Hispanic-American, 35% African-American. Also, the research site is designated as a predominantly Hispanic, Black, Asian, and other (PHBAO)

school, a "receiver school," and a "permit with transportation (PWT) school." During the 1993-94 academic school year the total number of students enrolled at this school was 1,434 students in grades seven, eight, and nine, with approximate ages of 12, 13 and 14, respectively.

Control Group

The control group consisted of 1,239 students in grades seven, eight, and nine; ages 12, 13 and 14, respectively. All of the subjects are residents of south-central Los Angeles, California and possess numerous attributes of at-risk youth from inner city communities, as noted in the literature (Institute of Educational Leadership, 1986).

The selection was at random from a total group of 1,236. A random numbering sequence was used to draw a sample from this group. An attempt was made to select at random from the 1,236 at-risk students those seventh, eighth, and ninth grade students who were comparable to the experimental group in gender, age, ethnic group, class standing and grade point average.

Experimental Group

The experimental group consisted of 195 junior high school students (grades seven, eight, and nine) ages 11, 12, 13, 14 and 15, respectively, enrolled in five woodworking classes. The rationale and justification for

selecting students enrolled in woodworking classes was: 1) since the school administration and counseling personnel did not have uniformly accurate ability information for assigning incoming students to classes, the distribution process is essentially random by de facto, and 2) the researcher was the woodworking teacher at the research site.

Random Sample Procedure

The research sampling process employed in this study was a random systematic sample. The sampling procedure was administered in two phases, pre- and post-treatment. Prior to selecting the middle school site where the study was conducted, several urban junior high schools were examined. The South Central Middle School was selected because the population met the collective characteristics of an at-risk group. Also, the wood-working class or experimental group was selected from numerous elective classes because according to the site administration, "students are assigned to elective class by a random process...since class assignments were computer generated." Therefore, students enrolled in the wood-working class were selected via a random process by defacto (See Figure 7. for details).

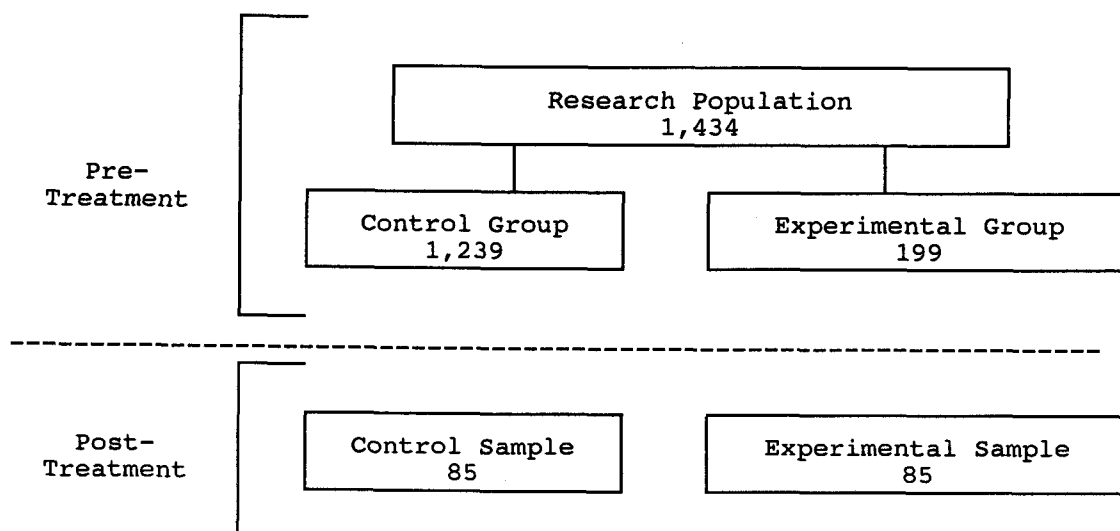


Figure 7. Flow Diagram of the Random Sampling Procedure

During phase two, the process employed to select a control and experimental sample for data analysis was essentially a random process. The control and experimental groups experienced substantial attrition between September, 1993 and June, 1994; 1234 to 1026 in the control group and 199 to 168 in the experimental group. After consulting with the Oregon State University Statistic Department about the appropriate procedure, the researcher decided to select a total of 85 subjects from the control and experimental groups for the purpose of conducting data analysis. The random selection procedure included:

- a) Organizing the control and experimental groups into alphabetical order.
- b) Assigning consecutive numbers to each member of the control and experimental groups.

- c) Applying the random number table to the sample until the desired number of units had been selected.

Experimental Treatment Procedure

Few educational issues have attracted so much media attention and accounted for such an array of publications, reports and monographs as the issues surrounding at-risk youth. Moreover, a review of literature concerning effective treatment of the problem of at-risk youth have produced a series of approaches to a solution to this emergent problem. The most affective approach consists of a Dropout Prevention program that includes career counseling, mentoring and work experience (Shapiro, 1986); (Glass, 1991); (Burton, 1977) and (McGill, 1986); motivational counseling, and remedial instruction (Caliste, 1984); and the presence of caring personnel and bilingual education (Steinberg, 1984).

The experimental treatment was integrated into each of the five woodworking classes as a six-week unit of the 20 week-semester curriculum. The treatment time-frame was one week in duration per component. For details on the Schedule of Experimental Treatment Components, see Table 9. Each component employed a student centered approach: teacher initiated presentations, small group discussions, individualized completion of student worksheets with the

Table 9.

Schedule of Experimental Treatment Components
(October 04, 1993 through November 15, 1996)

Dates: Days	Treatment Topics/Activity/Activity Activities and subcomponents....
10/04- 10/08 Monday Tuesday Wednesday Thursday Friday	Global Industry/Career Aspiration Statement Introduce topic; importance, justification... Review Resource; Global Industry/Economy Matrix Consult on global economy/industry matrix Select/Construct Career Industry Options Submit Global Industry/Career Aspiration Statement
10/11- 10/15 Monday Tuesday Wednesday Thursday Friday	Career Goal Statement Introduce topic; importance, justification... Review video; Ready, Set, Goals (30 minutes). Submit technical report on video; Ready, Set... Consult on Career Goal Statement with Advisor Construct and submit Career Goal Statement
10/18- 10/22 Monday Tuesday Wednesday Thursday Friday	Career Advisory Network/Mentor Introduce topic; importance, justification... Review Journal Articles on Career Mentoring Submit Technical Report on Journal Article Consult with Peer/Advisor about Career Advisory Submit Career Advisory Network/Mentoring Plan
10/25- 10/29 Monday Tuesday Wednesday Thursday Friday	Career Development Plan/Strategy Introduce topic; importance, justification... Review Journal Article on Career Development Submit Technical Report on Career Development Consult advisory about Career Development Plan Submit Career Development Plan Work-sheet
11/01- 11/05 Monday Tuesday Wednesday Thursday Friday	Career Resume Instrument/Resource Introduce topic; importance, justification... Review Educational video; The Career resume Submit Technical Report on The Career Resume Consult with Advisor on Personal Career Resume Develop/Submit Resume Instrument Work-sheet
11/08- 11/09 Monday Tuesday	Employment Search Cover-Letter Introduce topic; importance, justification... review/Report on video; Employment Cover-Letter Submit Employment Search Cover-Letter Work-sheet
11/10- 11/12 Wednesday Thursday Friday	Employment Search Plan and Strategy Introduce topic; importance, justification... Review poster on Employment Search Plan/Strategy Complete/Submit Employment Search Plan Work-sheet

assistance of the workshop coordinator. Finally, each subject in the experimental group utilized a hang-folder to organize and store their resources which constituted a career portfolio. This was placed in a secure storage area until all seven components were completed. Components were compiled into a career planning portfolio, stapled together and distributed to subjects of the experimental group.

The length of the experimental treatment was six-weeks in duration -- from Monday, 04 October, 1993 to 19 October, 1993. An academic semester at the research site is 20 weeks. The experimental treatment was infused into the 20 weeks woodworking class during the sixth through twelfth week.

The independent variable used in the experimental group was the Career Planning Dropout Prevention Workshop (see Research Variables Schedule, Table 10). Also, the Piers Harris Childrens' Self-Concept Scale was administered to the subjects in the experimental group only. A pre-treatment and post-treatment administration of the Piers-Harris was conducted on October 11, 1993 and January 23, 1994, respectively.

Research Management Schedule

The research management schedule is shown on the following page. (See Appendix for additional information).

Table 10.
Research Variables Schedule

Frequency	Description
1	Independent Variables: Career Planning Dropout Prevention Program.
2	Dependent Variables: a) Self-Concept Score as measured by the Piers-Harris Children's Self-Concept Scale b) Academic Achievement as measured in the Grade Point Average (GPA)

Independent Variable

Career Planning Dropout Prevention Program

Self-Concept

Academic Achievement

The Career Planning Workshop Lesson Plan (Table 11) was given to the experimental group to assist the students in the selection of a career industry that would be consistent with the student's personal occupational interests, within the global economy.

Design

The design for the control and comparison groups was as follows:

1. Observation was: Academic year 1993-94.

Table 11.

Career Planning Workshop Lesson Plan

RESEARCH MANAGEMENT SCHEDULE

(September 01, 1993 through June 24, 1994)

WEEKS/DATES	RESEARCH ACTIVITY AND TASKS
09/01- 09/03/93	Satisfy Prerequisites; Beginning of the semester tasks. Collect and calculate Pre-treatment GPA Scores for subjects in the control and experimental groups.
09/06- 09/14/93	Administer Piers-Harris Children's Self-Concept Scale to subjects in the experimental group and calculate Pre-treatment Self-Concept Scores.
10/04- 11/12/93	Apply Experimental Treatment: Career Planning Dropout Prevention Program; <ul style="list-style-type: none"> * Global Industry/Career Aspiration Statement * Career Goal Statement * Career Advisory Network/Mentor * Career Development Plan/Strategy * Career Resume Instrument/Resource * Employment Cover-Letter/Resource * Employment Search Plan/Strategy
01/05- 01/06/94	Administer Piers-Harris Children's Self-Concept Scale to determine Post-treatment Self-Concept Scores for subjects in the experimental group.
01/10- 01/11/94	Calculate Pre-Self Concept Scores for subjects in the experimental group. Apply Piers-Harris scoring procedure and resources to determine Self-Concept Scores. Collect data and calculate Post-treatment GPA-1 Scores for subjects in the control and experimental group.
06/13- 06/17/94	Collect data and calculate Post-treatment GPA-2 Scores for subjects in control and experimental group.
07/10- 07/14/94	Apply statistical/regression analysis to Academic Achievement and Self-Concept data to test research hypothesis.
12/04- 12/08/95	Apply statistical techniques (the SAS system) to Academic Achievement and Self-Concept data to test research hypothesis.

2. Concluded at the end of the seventh, eighth and ninth grades.

Design Matrix

Before-After Static Group Comparison

Group Observation	Before Observation	Treatment	After
Experimental	W_1	X	Y_1
Control	W_2	--	Y_2

This is a design in which the experimental group experienced treatment (X) is compared with the control group which did not experience treatment (Y), for the purpose of establishing the effect of the treatment (X).

Reliability and Validity

Since its development in 1964, numerous studies have investigated the psychometric properties of the Piers-Harris Children's Self-Concept Scale. This section presents data from studies that investigated the test-retest stability of the Piers-Harris Children's Self-Concept Scale.

Piers-Harris Children's Self-Concept Scale: Psychometric Properties

The Piers-Harris Children's Self Concept Scale (Piers-Harris) is a self-report inventory consisting of 80 first

person, declarative statements. It is intended for use with children in grades 4 through 12 and can be administered either individually or in a group. Presentation format is a four-page booklet with statements on one side of the page and "Yes" or "No" on the other side. The response requirement is that the child circle either "Yes," indicating that the statement describes the way he feels about himself, or "No", indicating that the statement does not describe the way he feels about himself. Raw scores (total number of responses marked in the positive direction) can be converted to percentiles, stanine and T-scores, and are available in the form of an overall self-concept score, or as a profile of six cluster scores (Behavior, Intellectual and School Status, Physical Appearance and Attitude, Anxiety, Popularity, and Happiness and Satisfaction).

The scale takes about 20 to 25 minutes to complete and may be administered and scored by a teacher or trained paraprofessional under supervision. The manual cautions, however, that subsequent interpretation and use of the results should not be undertaken by anyone other than a professional with advanced training in psychological testing (completion of a "User Qualification Form" was required in order to purchase the scale from the publisher).

The manual suggests several uses for the scale: as a component in individual assessment, or as a research instrument. One chapter in the manual is devoted to an extensive discussion of the specialized use for which the scale has been employed (as a research instrument and as a measure of treatment outcome). Description of its use with specific, minority, and exceptional populations is also provided.

The Piers-Harris has not been re-normed since the original standardization in the 1960s on 1,183 children in grades 4 through 12 from one school district in Pennsylvania. Cautions regarding the generalizability of these norms and suggestions for developing local norms for interpretive purposes are presented in the manual. The manual provides complete information regarding scale development, rationale, and standardization procedures.

Recent reliability studies generally confirm and expand on the results of the original studies. Test-retest reliability ranges from .42 to .96, with a mean of .73. Studies investigating internal consistency yielded coefficients ranging from .88 to .93 on the total scale. In another study using the scores from the original norm group, the internal consistency coefficient for the total scale was .90, with the cluster scale ranging from .73 to .81. Thus the Piers-Harris Self-Control Scale/Instrument

appears to be highly reliable in terms of temporal stability and internal consistency.

One of the strengths of the Piers-Harris is the 1984 revision of the manual. In addition to clear administration and scoring guidelines and discussion concerning the development of the scale, it contains extensive reviews of research on the psychometric properties of the scale and its actual uses. The authors are candid about the limitations inherent in the scale and offer specific caution regarding interpretation and use throughout the manual. Tables summarizing research data are provided as well as extensive lists of references.

In summary, the Piers-Harris is a norm-referenced, self-referenced, self-report measure designed to assess self-concept in children and adolescents. Standardization procedures are appropriate, and although norms are several decades old, subsequent research has generally provided continuing support for use of the instrument as it was originally intended. The authors appear to have anticipated most of the serious concerns that users might have, and have either addressed them via reports of research or encouraged cautious interpretation and further research. In the realm of inventories of this nature, the Piers-Harris is a psychometrically adequate instrument whose usefulness in research has been documented. Research on the instrument itself indicates that it may also be

clinically relevant when the results are integrated with other data regarding the individual. Additionally, because of its brevity, ease of administration and scoring, and favorable psychometric properties, it can be used with a fairly high degree of confidence as a screening instrument or as a possible introductory and structuring activity for future counseling/therapy sessions.

The Piers-Harris is a psychometrically sound scale and its authors have written about it in an appropriately cautious and straightforward manner. Even though caution should be exercised in interpreting specific cluster scales for individual children, the Piers-Harris appears to be the best children's self-concept measure currently available. It is highly recommended for use as a classroom screening device, as an aid to clinical assessment, and as a research tool.

A number of studies have investigated the test-retest stability of the Piers-Harris with both normal and special samples. The reliability coefficients ranged from .42 (with an interval of 8 months) to .96 (with an interval of 3 to 4 weeks). The median test-retest reliability was .73. In reviewing these studies, it should be remembered that reliability estimates which are based on more heterogeneous samples are expected to be higher due to less constrictions in range. If a small standard deviation is obtained in a given sample for any reason, the test-retest is expected to

be lower. In addition, shorter test-retest intervals are generally associated with higher reliability estimates.

Hypothesis

Given the importance of career planning as an input to an effective dropout prevention/intervention program, the objective of this experimental research was to construct a six-week career planning dropout prevention program (independent variable) and determine its effects on two dependent variables (self-concept and academic-achievement).

The research hypotheses were:

1. Null Hypothesis

There is no significant difference between academic achievement of at-risk middle school students who do participate in a six week Career Planning Drop-out Intervention Program and those who do not.

2. Null Hypothesis

There is no significant difference between pre- and post self-concept scores of at-risk middle school students who do participate in a six week Career Planning Dropout Intervention Program.

Data Collection Procedure and Schedule

The data collection procedure was organized into two sequential procedures; pre-treatment and post-treatment.

Data collection focused on two dependent variables; 1.0) Self-Concept and 2.0) Academic Achievement.

- 1.0) The **Self-Concept** of individual subjects in the experimental group was assessed with the Piers-Harris Children's Self-Concept Scale. Pre-treatment measures of self-concept were collected during the fourth week of the first semester and the post-treatment measures of self-concept were collected during the eighteenth week of the first semester. [A LAUSD/BETHUNE semester was 20 weeks in duration, e.g. September 06, 1993 through January 14, 1994.]
- 2.0) The **Academic achievement** score, e.g. cumulative grade point average [GPA] of subjects of the experimental and control groups were collected at three distinct intervals; Pre-treatment, Post-treatment A, and Post-treatment B. Pre-treatment data were collected during week six of the first semester; Post-treatment data A were collected during week 20 of the first semester, and Post-treatment data B were collected during week 20 of the second semester, academic school year 1993-94.

For more details on data collection; variables and sequences, see Tables 10 and 11.

Data Collection

The Data Collection process spans from September 1993 through June 1994. The school year curriculum was structured on a two semester basis, and within a semester there were 20 weeks. The Pre- and Post treatment data were on the control and experimental groups' academic achievement was collected in September 1993, and June 1994, respectively. The semester report cards were used to determine each subject's cumulative grade point average (GPA), at the Pre- and Post- treatment intervals -- September 1993, January 1994 and June 1994. The grade point average for each student was calculated and reported on each report card and at each intermediate reporting period during the academic semester at the school site during the 1993-94 school year.

Data on self-concept was collected from subjects in the experimental group in two instances; Pre- September 1993 and Post- January 1994. The Piers-Harris Childrens' Self Concept Scale was Administered as the clinical assessment instrument. For additional details see Table 12, Data Collection Schedule.

Methods of Data Analysis

The data analysis methods employed in this study were: Chi-Squared, Student's "t" Test and the "F" test. The Chi-Squared test was used to test for equal variance between

Table 12.
Data Collection Schedule

Dates	Data Collection Tasks/Event
09/01- 09/03	Collect Pre-treatment GPA Scores for individual subjects of control and experimental groups.
09/13- 09/14/93	Administer Piers-Harris Children's Self-Concept Scale to determine Pre-treatment Scores for subjects in the experimental group.
01/05- 01/06/94	Administer Pier-Harris Children's Self-Concept Scale to determine Post-treatment Score for subjects in the experimental group.
01/10- 01/14/94	Collect post-treatment Post-treatment GPA-1 for control and experimental groups.
06/13- 06/14/94	Collect post-treatment GPA-2 for control and experimental groups.

control and experimental groups' Pre- GPA and Post-GPA. The Student's "t" test was used to test for equal means between control experimental group's Pre- and Post-GPA. Also, the Student's "t" test was used to test for equal means between Pre- and Post- treatment score of self-concept. Finally, the "F" test was used to test for equal variances between Pre- and Post- treatment scores of self-concept. See Table 13 for results of the data analysis.

Table 13.

Method of Data Analysis

Dates	Data Collection Tasks/Event
09/01- 09/03/93	Calculate Pre-treatment GPA Scores for individual subjects in the control and experimental groups.
09/06- 09/08/93	Calculate individual Pre-treatment Self-Concept Scores for subjects in the experimental group. Apply Piers-Harris scoring procedure/resource to determine self-concept score.
01/10- 01/11/94	Calculate individual Post-treatment Self-Concept Scores for subjects in the experimental group. Apply Piers-Harris scoring procedure/resource to determine self-concept score.
01/12- 01/14/94	Calculate Post-treatment GPA-1 Scores for individual subjects of the control and experimental groups.
06/15- 06/17/94	Calculate Post-treatment GPA-2 Scores for individual subjects in the control and experimental groups.
07/10- 07/14/95	Apply statistical/regression analysis to Academic Achievement and Self-Concept data to test the research hypothesis.
12/04- 12/08/95	Apply statistical techniques (the SAS system) to Academic Achievement and Self-Concept data to test research hypothesis.

Chapter IV

RESULTS OF THE STUDY

The purpose of this study was to determine the effects of a six week career planning dropout prevention program on self-concept and academic achievement of at-risk, middle school students in an inner-city junior high school, located in Los Angeles, California.

The data were collected during the academic year 1993-94 (September 6, 1993 - June 20, 1994). The subjects in the experimental group (treatment) were compared with those control group to determine the effects of a career planning dropout prevention program on Student Academic Achievement and Self-Concept Scores.

At-Risk Student Descriptive Information

The study investigated whether participation in a six dropout prevention program effected at-risk students' academic achievement, as measured by GPA; and self-concept, as measured by the Piers-Harris Scale.

The experimental and control groups were selected at random for the study. The tables of descriptive information (Tables 14, 15, 16, 17 and 18) which follow represent statistical tables for the experimental and the control groups.

Sample Size

The number of participants in the study is listed in Table 14. The percentages of experimental and control samples involved in the study are also listed.

Table 14.
Sample Size

Group	Number	Percent of at-risk students
Experimental	85	5.93
Control	85	5.93
At-Risk Students	1,434	100.00

Summary: The experimental and control samples constituted 11.86 percent of the At-Risk student population.

Gender

At-risk student records were used to tabulate the percentages of males and females in the control and experimental groups listed in Table 15.

Mean Age

The mean and median ages of experimental and control group members were calculated and compared. These figures are shown in Table 16.

Table 15.

Gender

Group	Female	%	Male	%
Experimental				
Seventh	20	23.53	12	14.12
Eighth	6	7.06	15	17.65
Ninth	4	4.71	28	32.94
Total	30	35.29	55	64.71
Control				
Seventh	20	23.53	12	14.12
Eighth	6	7.06	15	17.65
Ninth	4	4.71	28	32.94
Total	30	35.29	55	64.71

Summary: The percentage of males and females in the experimental and control groups were approximately equal.

Table 16.

Mean Age

Group	Boys	Per- cent	Girls	Per- cent	Total Boys & Girls	Mean Age
Experimental						
Seventh	12	37.5	20	62.5	32	12.186
Eighth	15	71.4	6	28.5	21	13.286
Ninth	28	87.5	4	12.5	32	14.281
Control						
Seventh	12	37.5	20	62.5	32	12.563
Eighth	15	71.4	6	28.5	21	13.286
Ninth	28	87.5	4	12.5	32	14.281

Summary: The mean age of experimental and control groups were similar. The experimental group had one at-risk student, age 11, whereas the control group had no at-risk students, age 11.

Class Standing

Table 17 shows the division of experimental and control groups by class standing.

Table 17.

Class Standing

Groups	Class					
	No.	Seventh	No.	Eighth	No.	Ninth
Experimental		32		21		32
Control		32		21		32

Summary: The class standing of the experimental and control groups were the same.

Ethnic Groups

The records of At-Risk students were used to tabulate the percentages of ethnic groups represented by the experimental and control groups. This information is detailed in Table 18.

Demographic Data Summary

The information in this study reveals a profile of at-risk students who were likely to drop out. Much of the information indicated that the experimental and control groups were similar.

Table 18.

Ethnic Groups

Group	Hispanic				African America			
	Girls	%	Boys	%	Girls	%	Boys	%
Experimental								
Seventh	10	31.25	11	34.37	8	25.00	3	3.94
Eighth	2	9.53	10	47.62	4	19.04	5	23.80
Ninth	1	3.13	18	56.25	3	9.37	10	31.25
Control								
Seventh	10	31.25	11	34.37	8	25.00	3	3.94
Eighth	2	9.53	10	47.62	4	19.04	5	23.80
Ninth	1	3.13	18	56.25	3	9.37	10	31.25

Summary: The experimental and control groups were similarly matched. Both groups were selected at random.

Hypotheses Testing

The second objective of this study was to determine the effect of the six-week Career Planning Dropout Intervention Program upon at-risk students' academic achievement and self-concept.

Academic Achievement

Is there a significant difference between academic achievement of at-risk middle school students who do participate in a six week Career Planning Dropout Intervention Program and students who do not?

Table 19.

Frequency Distribution of Pre-GPA for Control
and Experimental Groups

Pre-GPA	Control	Experimental	Pre-GPA	Control	Experimental
0.57	0	1	2.11	0	1
1.00	2	3	2.12	2	1
1.02	1	1	2.14	2	1
1.05	0	1	2.16	1	0
1.10	1	0	2.18	0	1
1.14	1	3	2.19	0	1
1.20	0	1	2.20	1	1
1.27	1	1	2.24	0	1
1.29	2	3	2.26	1	0
1.30	0	1	2.29	2	5
1.37	0	1	2.30	2	0
1.42	0	1	2.31	1	0
1.43	1	1	2.32	0	1
1.57	2	2	2.33	0	1
1.58	1	0	2.38	0	1
1.69	1	0	2.39	0	1
1.71	1	2	2.40	1	0
1.77	0	1	2.42	1	0
1.79	0	1	2.43	2	2
1.80	0	1	2.44	0	1
1.82	1	0	2.50	2	1
1.85	0	2	2.52	1	0
1.86	3	1	2.56	0	1
1.87	1	0	2.57	2	1
1.89	1	0	2.59	0	1
1.91	1	1	2.60	1	0
1.92	1	0	2.61	0	1
1.93	1	0	2.71	3	2
1.95	0	1	2.81	0	1
1.97	1	1	2.86	3	2
1.98	2	0	2.90	0	1
1.99	0	1	3.00	6	2
2.00	13	13	3.02	0	1
2.01	2	1	3.10	1	0
2.02	0	2	3.12	1	0
2.05	1	1	3.14	1	0
2.06	1	1	3.26	0	1
2.09	1	0	3.29	1	0
2.10	3	0	3.58	0	1

Summary: Table 19 reports the distribution of Pre-GPA for the Control and Experimental Groups.

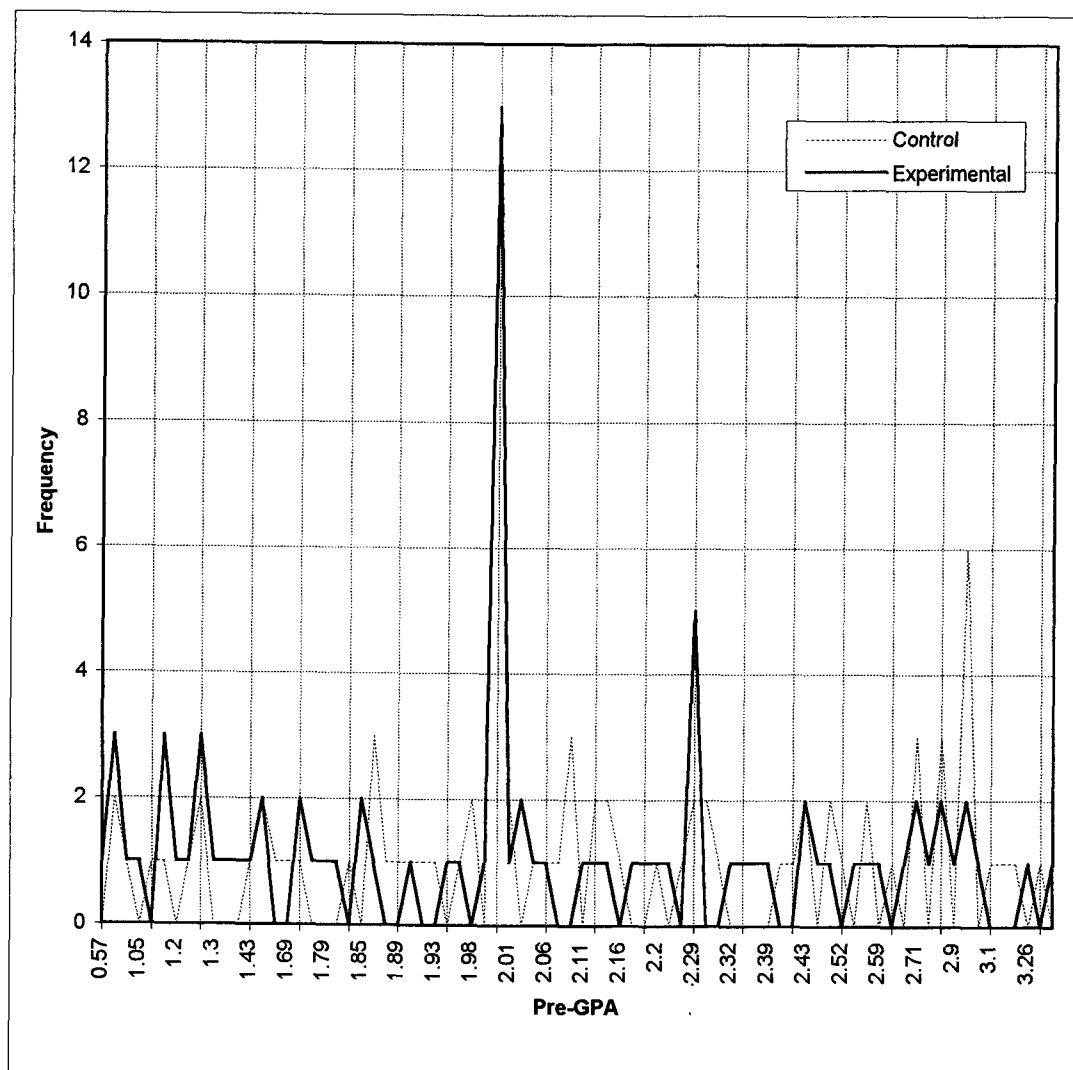


Figure 8. Frequency Histogram of Pre-GPA for the Control and Experimental Groups.

Summary: Table 19 reports the frequency histogram of Pre-GPA for Control and Experimental Groups. Control Group: Mean = 2.15, Standard Deviation = 0.53, Median = 2.06, mode = 2.00, and Span = 3.01. Experimental Group: Mean = 2.01, Standard Deviation = 0.58, Median = 2.00, mode = 2.00, and Span = 3.01.

Table 20.

Test of Equal Variances between Control
and Experimental Groups' Pre-GPA

Hypothesis Tested: Null H_0 : Variance of Control Group equals Variance of Experimental Group ($\sigma_C = \sigma_E$) for Pre-GPA. Alt H_1 : The two variances are not equal ($\sigma_C \neq \sigma_E$).		
Method of Testing: Chi-Squared Test Type I error = 5%		
Degree of Freedom	Chi-Squared χ^2 Calculated Value	Chi-Squared χ^2 Critical Values
77	67.086	< 52.677 or > 101.323
Conclusion: Accept the Null hypothesis H_0 that the variances for the Control and Experimental Groups of the Pre-GPA are equal ($\sigma_C = \sigma_E$).		

Summary: Table 20 reports results of the Chi-Squared test
of the data and conclusion reached.

Table 21.

Test of Equal Means between Control
and Experimental Groups' Pre-GPA

Hypothesis Tested: Null H_0 : Mean of Control Group equals Mean of Experimental Group ($\mu_C = \mu_E$) for Pre-GPA Alt H_1 : The two means are not equal ($\mu_C \neq \mu_E$).		
Method of Testing: Student's "t" Test Type I error = 5%		
Degree of Freedom	Calculated "t" Value	Critical "t" Values
168	1.6101	< -1.960 or > 1.96
Conclusion: Accept the Null hypothesis H_0 that the means for the Control and Experimental Groups of the Pre-GPA are equal ($\mu_C = \mu_E$).		

Summary: Table 21 reports results of testing for equal
means between the Control and Experimental
Groups.

Table 22.

Frequency Distribution of Post-GPA for Control
and Experimental Groups

Post-GPA	Control	Experimental	Post-GPA	Control	Experimental
0.57	0	1	2.28	0	2
1.00	3	0	2.29	1	1
1.04	0	1	2.30	1	0
1.14	1	1	2.35	0	1
1.22	1	1	2.36	0	2
1.33	1	0	2.39	0	1
1.40	0	1	2.40	1	0
1.42	0	2	2.42	0	1
1.43	1	1	2.43	0	3
1.49	0	1	2.44	0	1
1.56	1	0	2.45	0	1
1.57	1	2	2.50	2	2
1.58	1	0	2.51	0	1
1.60	0	2	2.52	0	1
1.71	3	0	2.56	0	1
1.72	0	1	2.57	3	1
1.75	0	3	2.58	0	1
1.76	1	0	2.60	1	2
1.80	1	1	2.64	1	0
1.82	1	0	2.69	0	1
1.83	0	1	2.70	0	1
1.86	4	0	2.71	2	2
1.91	0	1	2.82	1	0
1.92	2	0	2.86	1	2
1.95	1	0	2.90	0	1
1.99	0	1	2.91	1	0
2.00	17	10	2.92	0	1
2.01	4	3	2.93	1	0
2.05	1	2	2.95	1	0
2.10	2	1	2.98	1	0
2.11	2	0	3.00	4	3
2.12	2	0	3.02	0	1
2.13	0	1	3.10	2	0
2.14	1	2	3.14	0	3
2.15	0	1	3.27	0	1
2.20	3	1	3.29	2	1
2.21	2	0	3.33	0	1
2.25	2	1	4.00	0	1
2.26	0	2			

Summary: Table 22 reports the frequency histogram of Post-GPA for the Control and Experimental Groups.

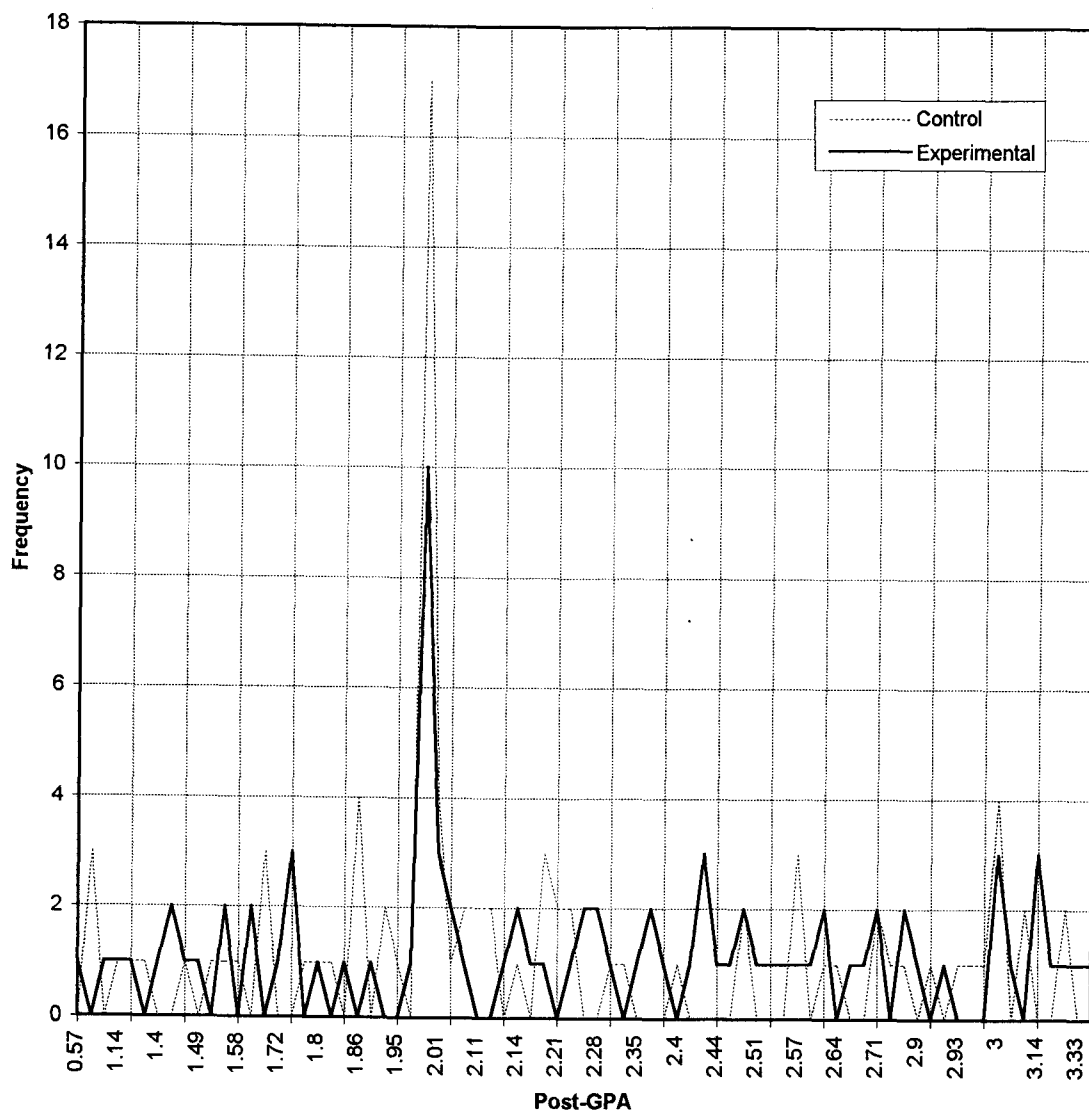


Figure 9. Frequency Histogram of Post-GPA for Control and Experimental Groups.

Summary: Table 22 reports the frequency histogram of Post-GPA for Control and Experimental Groups. Control Group: Mean 2.16, Standard Deviation = 0.52, Median = 2.01, Mode = 2.00, and Span = 3.43. Experimental Group: Mean 2.25, Standard Deviation = 0.58, Median = 2.26, Mode = 2.00, and Span = 3.43.

Table 23.

Test of Equal Variances between Control
and Experimental Groups' Post-GPA

Hypothesis Tested:		
Null H_0 : Variance of Control Group equals Variance of Experimental Group ($\sigma_C = \sigma_E$) for Post-GPA.		
Alt H_1 : The two variances are not equal ($\sigma_C \neq \sigma_E$).		
Method of Testing: Chi-Squared Test Type I error = 5%		
Degree of Freedom	Chi-Squared χ^2 Calculated Value	Chi-Squared χ^2 Critical Values
76	88.767	< 51.835 or > 100.164
Conclusion: Accept the Null hypothesis H_0 that the variances for the Control and Experimental Groups of the Post-GPA are equal ($\sigma_C = \sigma_E$).		

Summary: Table 23 reports the results of the test of equal variances between the Control and Experimental Groups Post-GPA.

Table 24.

Test of Equal Means between Control
and Experimental Groups' Post-GPA

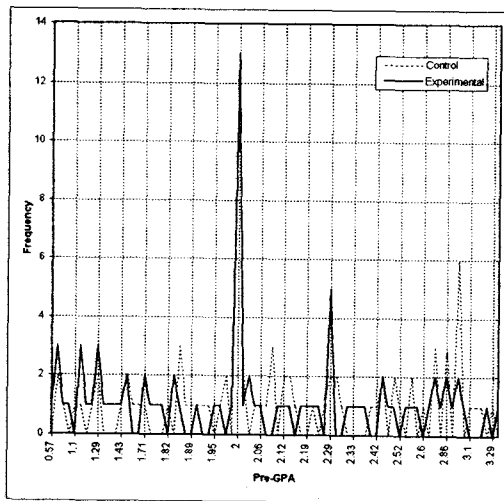
Hypothesis Tested:		
Null H_0 : Mean of Control Group equals Mean of Experimental Group ($\mu_C = \mu_E$) for Post-GPA.		
Alt H_1 : The two means are not equal ($\mu_C \neq \mu_E$).		
Method of Testing: Student's "t" Test Type I error = 5%		
Degree of Freedom	Calculated "t" Value	Critical "t" Values
168	-1.0378	< -1.960 or > 1.96
Conclusion: Accept the Null hypothesis H_0 that the means for the Control and Experimental Groups of the Post-GPA are equal ($\mu_C = \mu_E$).		

Summary: Table 24 reports the results of testing equal means for the Control and Experimental Groups.

Table 25.

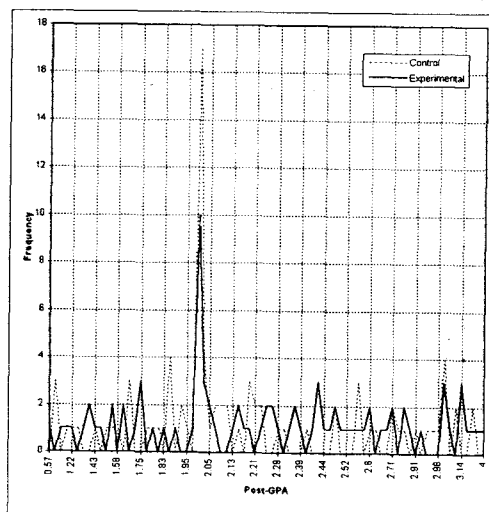
Grade Point Average Profile

Pre-Grade Point Average (GPA)



	Control	Exper.
Mean	2.15	2.01
S.D.	0.53	0.58
Median	2.06	2.00
Mode	2.00	2.00
Span	3.01	3.01

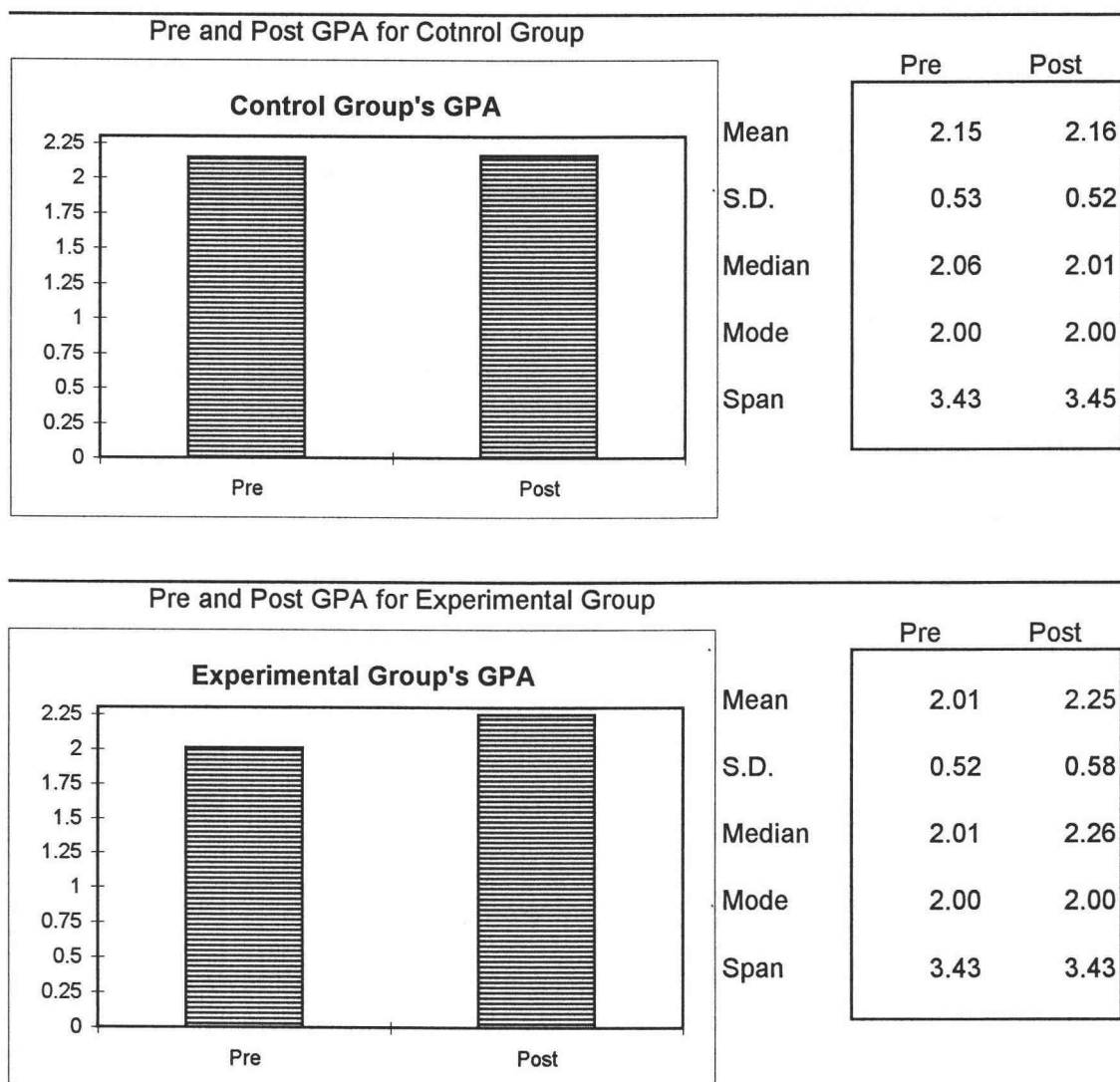
Post-Grade Point Average (GPA)



	Control	Exper.
Mean	2.16	2.25
S.D.	0.52	0.58
Median	2.01	2.26
Mode	2.00	2.00
Span	3.43	3.43

Table 26.

Pre and Post Grade Point Average Profile



Summary: Table 26 contrasts Pre and Post treatment GPA mean and profile for both control and experimental groups.

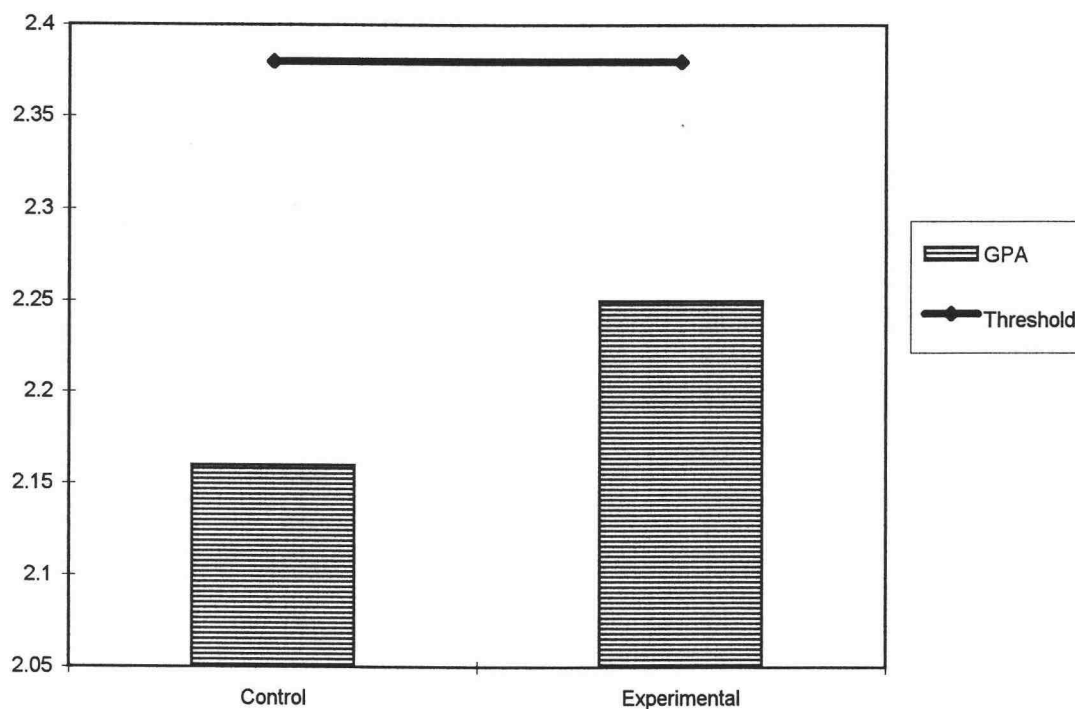


Figure 10. "Threshold of Significant" for the Difference Between the Means of the Post-Treatment GPA.

Summary: Table 26 reports the frequency histogram of the Pre and Post GPA for Control and Experimental Groups. Control Group: Mean 2.16, Standard Deviation = 0.52, Median = 2.01, Mode = 2.00, and Span = 3.43. Experimental Group: Mean 2.25, Standard Deviation = 0.58, Median = 2.26, Mode = 2.00, and Span = 3.43. Calculated Experimental GPA Mean Threshold = 2.38

Self-Concept

Is there a significant difference between Pre- and Post-Treatment Self-Concept scores of at-risk middle school students who participated in a six week Career Planning Dropout Intervention Program?

Table 27.

Frequency Distribution of Piers-Harris Self-Concept Scores for Pre- and Post-Treatment Students

Piers-Harris Scale Score	Pre- Treatment	Post- Treatment	Piers-Harris Scale Score	Pre- Treatment	Post- Treatment
19	0	1	55	3	3
21	0	1	56	0	1
26	0	1	57	2	3
32	1	1	58	3	3
34	3	2	59	4	4
35	2	1	60	3	4
37	2	0	61	3	2
38	0	1	62	1	0
39	1	0	63	1	3
40	1	1	64	4	1
42	3	2	65	6	4
43	1	2	66	0	4
44	1	0	67	5	2
45	1	2	68	1	2
46	1	0	69	1	4
47	6	2	70	2	3
48	0	2	71	2	2
49	4	2	72	3	2
50	1	3	73	1	1
51	4	3	75	0	3
52	2	1	76	0	2
53	3	3	77	0	1
54	2	1			

Summary: Table 27 reports the frequency distribution of Piers-Harris Self-Concept Scores for Pre- and Post Treatment Students.

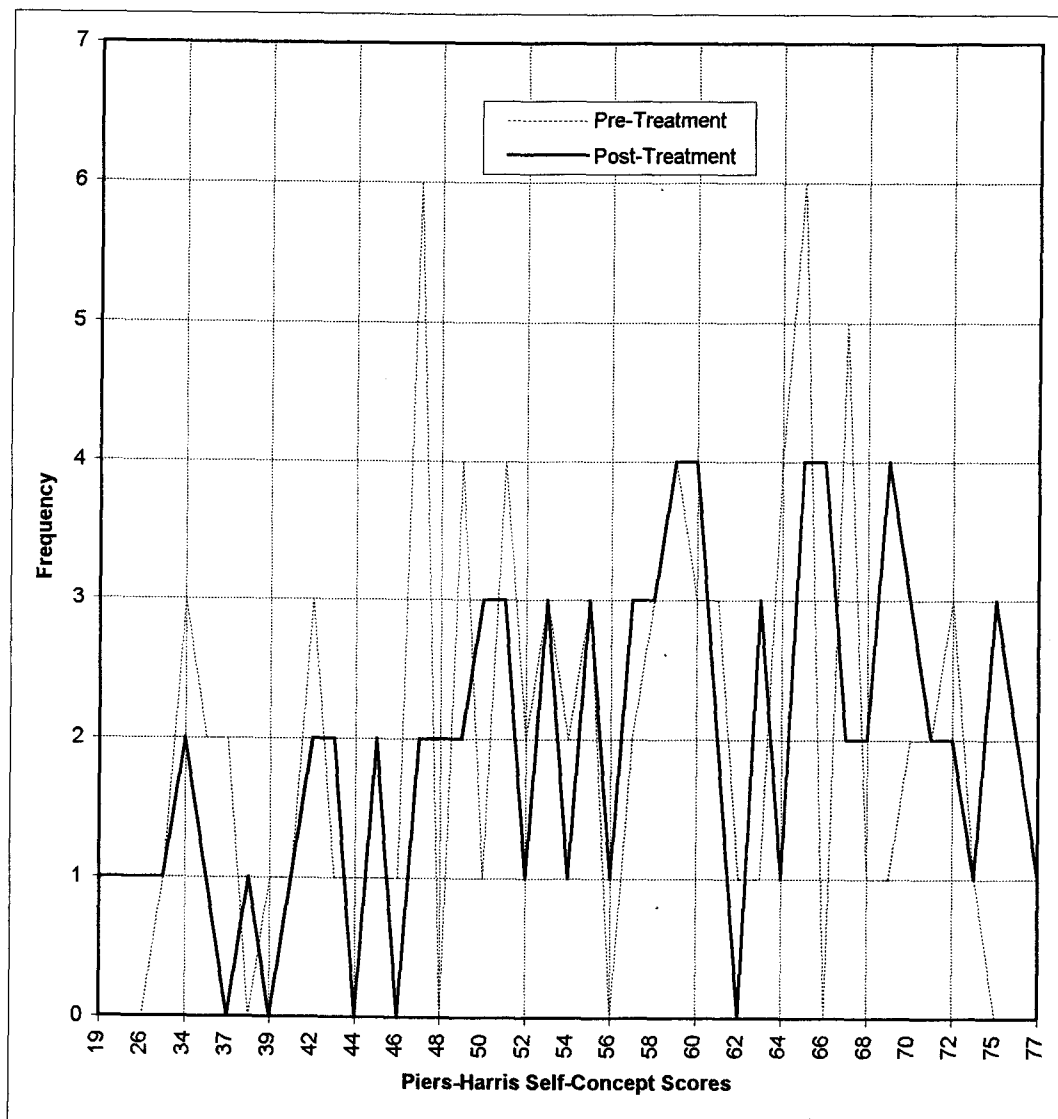


Figure 11. Frequency Histogram of Piers-Harris Self-Concept Scores for Pre- and Post-Treatment Students.

Summary: Table 27 reports the frequency histogram of Piers-Harris Self-Concept Scores for Pre- and Post-Treatment (Experimental Group). Pre-test scores: Mean 53.84, Standard Deviation = 13.81, Median = 57, Mode = 17 & 65, and Span = 41. Post-test scores: Mean 57.03, Standard Deviation = 12.85, Median = 59, Mode = 29, 30, 35, 36 & 39, and Span = 58.

Table 28

Test of Equal Variances between Pre- and
Post-Treatment Scores for Self-Concept

Hypothesis Tested:			
Null H_0 : Variance of Pre-Treatment equals Variance of Post-Treatment Scores ($\sigma_C = \sigma_E$) for Self-Concept.			
Alt H_1 : The two variances are not equal ($\sigma_C \neq \sigma_E$).			
Method of Testing: "F" Test Type I error = 5%			
Degree of Freedom	Sampled Variances	Calculated "F" Value	Critical "F" Value
Numerator 84 Denominator 84	11.561 12.230	0.945	> 1.458
Conclusion: Accept the Null hypothesis H_0 that the variances for the Pre- and Post-Treatment scores for Self-Concept are equal ($\sigma_C = \sigma_E$)			

Summary: Table 28 reports the results of testing for equal variances between Pre- and Post-Treatment Scores of Self-Concept.

Table 29

Test of Equal Means between Pre- and
Post-Treatment Scores for Self-Concept

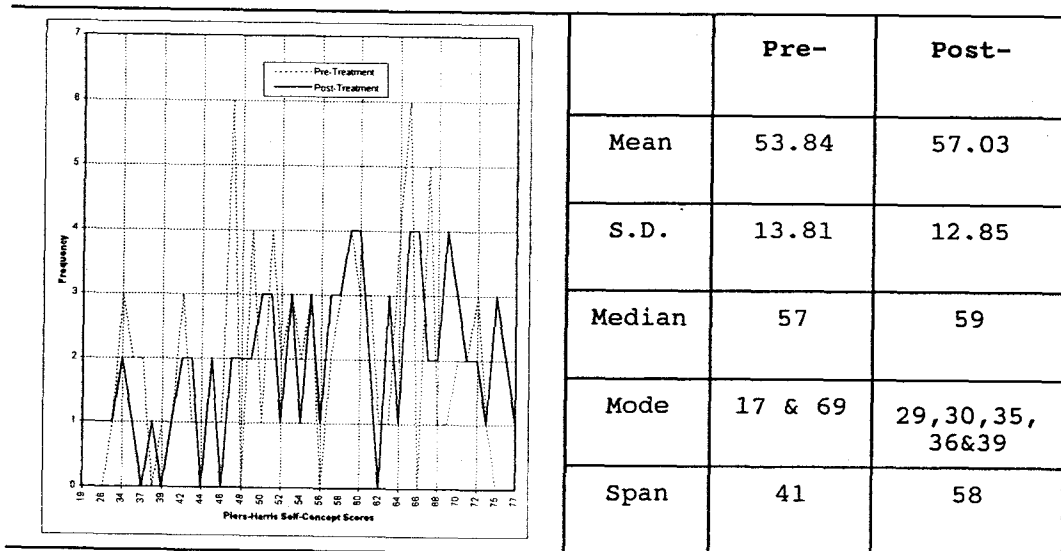
Hypothesis Tested:		
Null H_0 : Mean of Pre-Treatment equals Mean of Post-Treatment Scores ($\mu_C = \mu_E$) for Self-Concept.		
Alt H_1 : The two means are not equal ($\mu_C \neq \mu_E$).		
Method of Testing: Student's "t" Test Type I error = 5%		
Degree of Freedom	Calculated "t" Value	Critical "t" Values
168	-1.622	< -1.960 or > 1.96
Conclusion: Accept the Null hypothesis H_0 that the means for the Pre- and Post-Treatment Scores for Self-Concept are equal ($\mu_C = \mu_E$).		

Summary: Table 29 reports results of testing for equal means between Pre- and Post-Treatment Scores for Self-Concept.

Table 30.

Piers-Harris Self-Concept Score Profile

Piers-Harris Self-Concept Scores



Summary: Table 30 reports the Piers-Harris Pre- and Post-Test Scores of Self-Concept.

CHAPTER V

SUMMARY, CONCLUSION, AND
RECOMMENDATIONSSummary

The primary purpose of this study was to determine the effects of a six-week career planning dropout prevention program on the self-concept and academic achievement of at-risk middle school students in an inner-city public school environment. Experimental and control groups of at-risk students attending middle school were assessed during the academic year 1993-1994 (September 6, 1993 -- June 20, 1994).

The study was conducted with an experimental group which consisted of at-risk students in grades seven, eight and nine, who were enrolled in five woodworking classes. Students in the experimental and control groups reflected characteristics of at-risk students from low-income and/or single parent families. They had low achievement scores in reading and mathematics, and exhibited a high incidence of truancy, absenteeism and teenage pregnancy.

The data analysis methods employed in this study were Chi-Squared, Student "t" Test and the "F" Test. The Chi-Squared Test was used to test for equal variances between control and experimental groups' Pre-GPA and Post-GPA. The Student's "t" Test was used to test for equal means between the control and experimental groups' Pre- and Post-GPA.

Also, the student's "t" Test was used to test for equal means between Pre- and Post-treatment scores of self-concept. Finally, the "F" Test was used to test for equal variances between Pre- and Post-treatment scores of self-concept.

This was an experimental research study in which the independent variable was the Career Planning Dropout Prevention Program, and the dependent variables were academic achievement and self-concept. The research population was composed of Junior High School (grades seven, eight and nine) students from low-income families, and the research site was located in south-central Los Angeles, California. The student population at the research site underwent an ethnic shift between 1985 and 1993 -- from 75% African-American and 25% Hispanic-American to 75% Hispanic-American and 25% African-American. During the 1993-94 academic year, the total number of students enrolled at the research site was 1,434 in grades seven, eight, and nine.

The data was collected from September 1993 through June 1994. The school-year curriculum was structured within two-semesters of 20 weeks each. The pre- and post-treatment data was collected on the control and experimental groups' academic achievement in September 1993, and June 1994, respectively. Semester report cards were used to determine each subject's cumulative grade

point average (GPA) at Pre- and Post-treatment intervals -- September 1993, January 1994 and June 1994. The grade point average for each student was calculated and reported on each report card at each intermediate reporting period during the academic semester at the school site during the 1993-94 school year.

Data on Self-Concept were collected for subjects in the experimental group prior to September, 1993 and after January, 1994. The Piers-Harris Childrens' Self-Concept Scale was administered as the clinical assessment instrument (see Table 8, Data Collection Method).

A pre- and post-treatment measure of self-concept were determined with the administration of the Piers-Harris Children's Self-concept Scale (Piers-Harris). The pre- and post-treatment self-concept scores were collected on September 6, 7, 8, 1993; and June 20 and 24, 1994, respectively. The self-concept treatment was limited to the experimental group.

The data analysis methods employed in this study were the Chi-Squared, Student's "t" and "F" Tests. The Chi-Squared Test was used to test for equal variances between the control and experimental groups' Pre-GPA and Post-GPA. The Student "t" Test was used to test for equal means between the control and experimental groups' Pre- and Post-treatment self-concept scores. Finally, the "F" Test

tested for equal variances between Pre- and Post-treatment self-concept scores of the experimental group.

The Treatment Program consisted of a series of seven career planning and/or career education elements, delivered in a two week workshop format. When completed, they constituted a Personal Career Planning/Management Portfolio (Career Portfolio). The Career Portfolio elements were:

- Career Aspiration/Global Economy Statement
- Career Options and Goal Statement
- Career Advisory Network/Mentor
- Employment Search Model/Plan
- Employment Interview Model/Plan
- Career Resume Resource/Instrument
- Employment Cover-Letter Resource/Instrument

Each element of the portfolio was developed over a period of six weeks, structured as a career planning workshop and infused into the five woodworking classes during the sixth through twelfth week of a twenty-week semester. Subjects in the experimental group participated in the production, binding and distribution of their personal career management Portfolios.

Conclusion

Academic Achievement

Hypothesis Statement: There was no significant difference between the academic achievement of at-risk middle school students who participated in a six-week Career Planning Dropout Prevention Program and the academic achievement of those who did not. In addition, there was a

substantial increase in the mean academic achievement scores of the experimental group, but this increase did not equal or exceed the alpha value.

Analysis Procedure: The Chi-Squared Test was used to test for equal variances between control and experimental groups' Pre- and Post-Grade Point Average Scores (GPA). The Student's "t" test was used to test for equal means between control and experimental groups' Pre- and Post-GPA scores.

Results of Analysis: Accept the Null Hypothesis (H_0) that the variances for the control and experimental groups of the Pre-GPA are equal; and accept the Null Hypothesis (H_0) that the means for the control and experimental groups of the Pre-GPA are equal.

Accept the Null Hypothesis (H_0) that the variances for the control and experimental groups of the Post-GPA are equal; and accept the Null Hypothesis (H_0) that the means for the control and experimental groups of the Post-GPA are equal.

Self-Concept

Hypothesis Statement: There was no significant difference between Pre- and Post-Self-Concept Scores of at-risk middle school students who participated in a six-week Career Planning Dropout Intervention Program.

Analysis Procedure: The Student's "t" Test was used to test for equal means between Pre- and Post-treatment scores of self-concept.

Results of Analysis: Accept the Null Hypothesis (H_0) that the variance for the Pre- and Post-treatment score of self-concept are equal; and accept the Null Hypothesis (H_0) that the means for the Pre- and Post-treatment scores for self-concept are equal.

Recommendations

Recommendation #1

Future researchers should simplify their research design by limiting the study to one independent and one dependent variable, e.g., career planning and academic achievement or career planning and self-concept.

The rationale upon which this recommendation is based is this: A valid research study will require the harmonious management and coordination of numerous inputs, to include but not be limited to, project funding and budget, time-frame and task management, data collection and analysis procedures, validity of results, primary audience and reporting criteria, replication of study and related concerns.

Researchers who have had the challenge of managing a thesis research study from start to successful completion will eagerly admit that there are numerous unseen

challenges to be encountered during the process. Each unseen development and subsequent decision contribute to the complexity of the venture and affect the manageability of the study. Simply stated, the more dependent variables included in the study, the greater the frequency and complexity of project management tasks are needed for a successful completion of the study, maintaining predetermined parameters established by the graduate college or budget constraints.

Also, the researcher should consider the likely audience that will review and benefit from the findings and results of this study. Moreover, future researchers must endeavor to ensure that findings are reported in a manner that is clear, comprehensible and applicable by the primary audience and not diluted by attempts to speak to multiply audiences. Finally, researchers must be concerned about the extent to which the study can be replicated and evaluated.

Therefore it is with these concerns, observation and recommendation that we encourage future scholars to simplify their research design by limiting the study to one independent variable and one dependent variable, thereby enhancing the manageability of the study within the context of pre-determined parameters.

Recommendation #2

Future researchers should collaborate on a longitudinal study to examine the effects of career planning on self-concept or academic achievement of secondary students in an inner-city public school environment. This longitudinal study should include elementary, middle and senior high school students as participant in the research population. This longitudinal collaboration should consist of a diverse team; for example, the project might be co-sponsored by a CSUDH, involve a post-doctorate researcher, a statistician, a computer research specialist in internet publishing, and a local professor from either USC or UCLA with interest in the economics of at-risk youth and the U.S dropout problem.

The rationale or justification for this recommendation is based upon the following interdependent structural elements of an effective research management design and would include but not be limited to:

- a) In order to determine the effects of career planning on academic achievement and self-concept of secondary students, the treatment must be expanded to a semester elective class or trimester in the case of year-round scheduling. The post-treatment research design should include periodic career management institute visits which would provide opportunities for career research

exploration and development. The duration of this longitudinal study would be seven years and provide significant qualitative and quantitative details on variables such as, truancy and absentee rates, grade point averages per semester, extent to which students completed or dropped out of high school, entered a community college or pursued a vocational trade at a post-secondary institution.

In addition, taking into consideration the limited treatment time-frame of six weeks in the current study, it is unlikely that the treatment would produce a significant and verifiable influence on academic achievement and self-concept.

Therefore, it is felt that a longitudinal study should be conducted as a means of examining the effects of career planning on self-concept and/or academic achievement in at-risk students in an inner-city public school setting. Such a scholarly venture would provide enlightening insight into the dynamics of the at-risk student experience and add to the small but growing body of knowledge.

Recommendation #3

Future researchers should utilize computerized assessment, administration, scoring and interpretation of the Piers-Harris Children's Self-concept Scale, subtitled, "The Way I Feel About Myself."

This recommendation is based on two inter-related factors: 1) the need to automate certain research management function and 2) assign tasks to independent subcontractors in a manner that is consistent with ethical and effective management strategies. For example, The Pier-Harris Children's Self-Concept Scale is a product of Western Psychological Services, a leader in computerized assessment.

Although the Piers-Harris can be easily administered and scored by hand, the researcher has the option of using computer administration, scoring and interpretation. The WPS TEST REPORT and prepaid, mail-in Answer Sheets or the Piers-Harris Microcomputer Disk may be used. With either method, the researcher will obtain a complete computer interpretation, including three separate reports: individual, School and Group. The individual report provides: a) A description of the child's self-concept and self-evaluative attitudes; b) raw scores, stanines and percentile for the total scale for each of the six subscales; c) a Profile of the child's strengths and weaknesses, and d) a comparison of the child's item responses to school and clinical sample items.

The School Report summarizes the Individual Report, using simpler wording and avoiding the use of numbers. It provides clear feedback to professionals who lack technical expertise. The Group Report, available only in mail-in

scoring and interpretation, is generated if the user-specific cases are to be used as a group. The report provides individual raw scores, mean scores, and standard deviations for groups of five or more.

The second of two factors involves the standardization of research management procedures. To incorporate computerized assessment constructs, such as the Piers-Harris Children's Self-Concept Scale, into the research design is an example of standardized research options.

In summary, future researchers are encouraged to subcontract certain management functions and related tasks to consulting specialists. Based on the experience of the current study, subcontracting of self-concept Assessment, computer administration, scoring and interpretation is recommended. Also, it is felt that steps should be taken to introduce measures to standardize certain research management methods where appropriate and cost-effective.

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APPENDICES

Appendix A

The Experimental Treatment Program

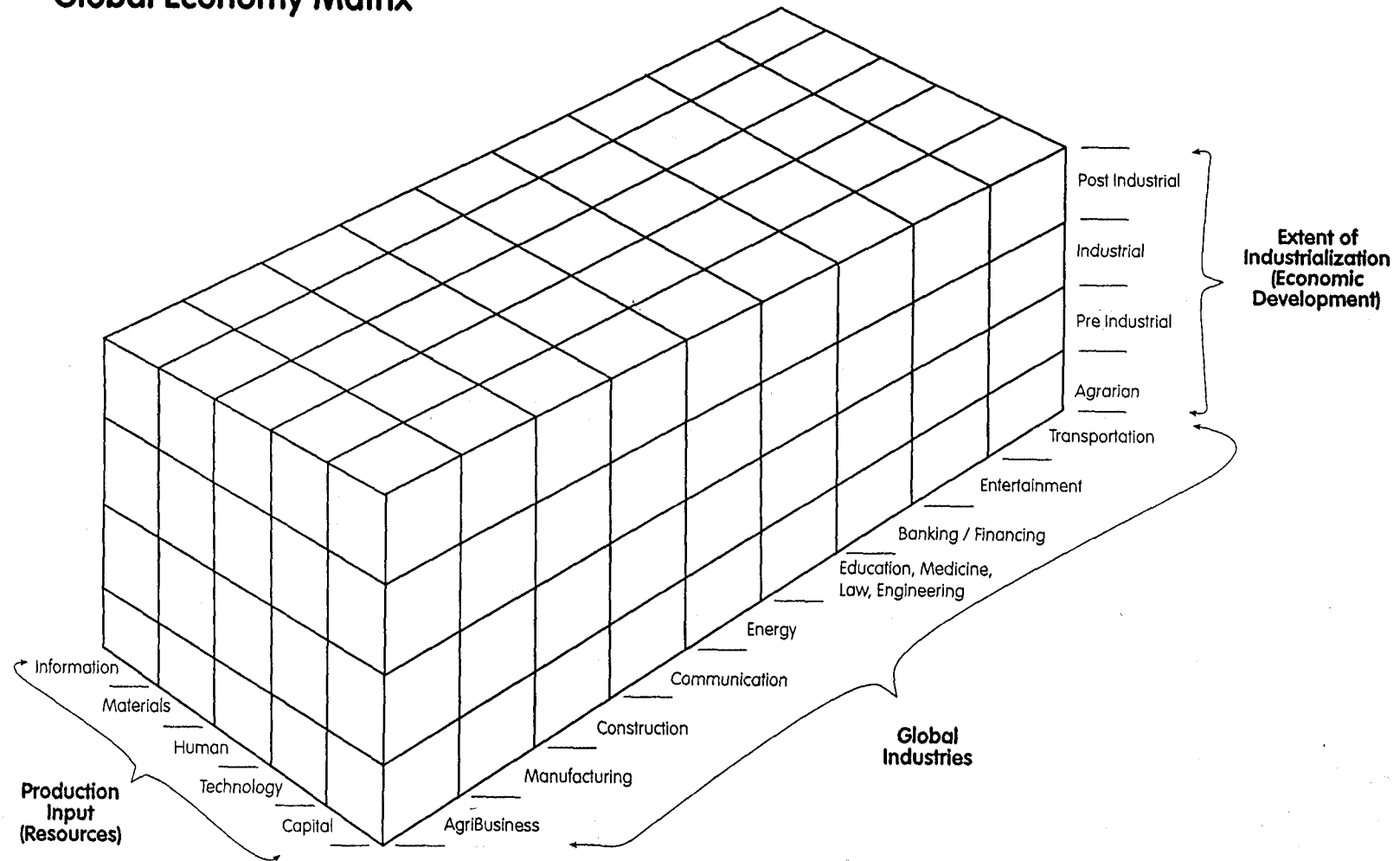
CAREER PLANNING WORKSHOP: LESSON PLAN 1

The Career Aspiration Statement is a compound sentence which describes a person's career interest and/or "FIELD" within the context of the GLOBAL ECONOMY.

- Title: Global Industry Career Aspiration Statement
- Duration: One week; Monday, 10/4 - Friday, 10/8/93.
- Setting: Wood-working periods; 2, 4, 5, 6, and 7.
- Instruction Goal: To assist subjects in the selection of a career industry that is consistent with their personal occupational interests within the Global Economy.
- Instruction Objective: Subjects will review the Career Aspiration Resource Worksheet, select a global industry from the model provided, and complete accompanying Career Aspiration Statement Worksheet.
- Instruction Resources:
- a) List of technical terms essential to understand the structure of the GLOBAL ECONOMY MODEL.
 - b) Merriam Webster's Collegiate dictionary.
 - c) Career Encyclopedia.
 - d) Career Aspiration Statement Worksheet.
- Instruction Procedure:
- a) Introduce topic, explore importance, explain rationale, relate topic to students' career success.
 - b) Assign, complete and submit dictionary research and one page essay on career aspiration.
 - c) Initiate, complete and submit Career Aspiration Statement to workshop facilitator.
- Cooperative Procedure:
- a) Student-to-Student discussion of career aspirations.
 - b) Have fellow students sign (witness) each other's Career Aspiration Statements.
-

Note: The Career Aspiration Statement is used to describe the at-risk student's career interest and/or "Field" within the context of the Global Economy."

Global Economy Matrix



CAREER ASPIRATION STATEMENT WORKSHEET

GLOBAL INDUSTRIES

GLOBAL ECONOMY MATRIX

9-TRANSPORTATION

8-ENTERTAINMENT

7-BANKING, FIN./INS.

6-EDUC., MED., LAW, ENGR.

5-ENERGY

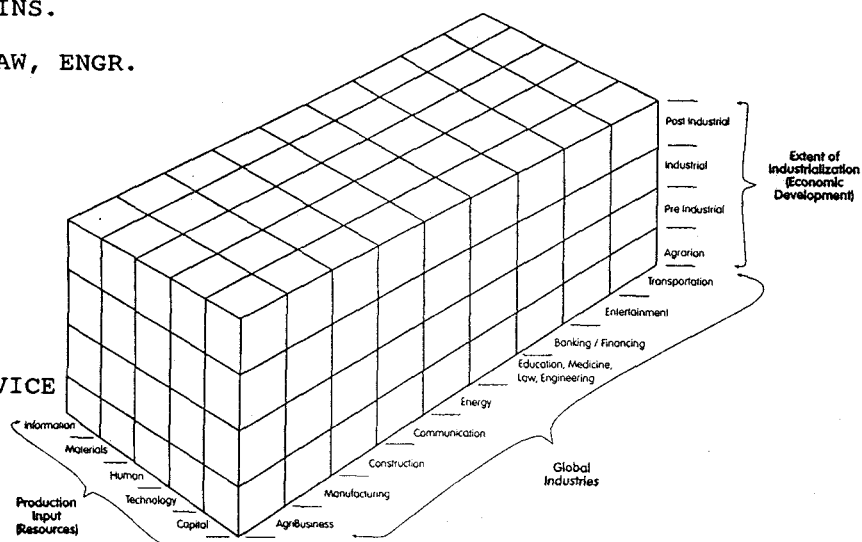
4-COMMUNICATION

3-CONSTRUCTION

2-MANUFACTURING

1-AGRIBUSINESS

0-GOVERNMENT SERVICE



DIRECTIONS:

- 1.0) Review Global Economy Matrix/Industries
- 2.0) Select appropriate Global Industry Options
- 3.0) Construct Career Aspiration Statement

EXAMPLE:

- A) I aspire to have a career in the CONSTRUCTION INDUSTRY.
- B) I aspire to have a career in the COMMUNICATION INDUSTRY.
- C) I aspire to have a career in the ENTERTAINMENT or CONSTRUCTION INDUSTRY.

OPTION A _____

OPTION B _____

NAME _____ DATE _____ WITNESS _____

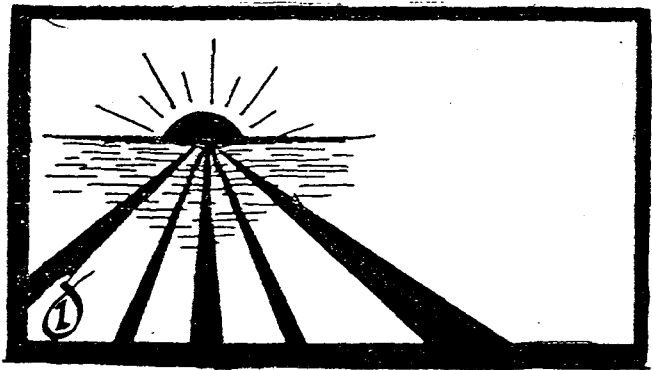
CAREER PLANNING WORKSHOP: LESSON PLAN 2

- Title: Career Goal Statement
- Duration: One week; Monday, 10/11 - Friday, 10/15/93.
- Setting: Wood-working periods; 2, 4, 5, 6, and 7.
- Instruction Goal: To assist subjects in the selection of an occupational title/or category that is consistent with their career interest, within the context of the Global Economy.
- Instruction Objective: Subjects will review the Career Goal Statement Worksheet, select a career category and/or occupational title from the model provided, and document their selection by completing the accompanying Career Goal Statement Worksheet.
- Instruction Resources:
- a) Career Planning Encyclopedia
 - b) An Educational Video (VHS) *Ready Set...Goals*
 - c) A Career Goal Statement Worksheet
- Instruction Sequence:
- a) Introduce topic, discuss/explore importance of career goals, relate topic to students' personal success and self-actualization.
 - b) View educational video (VHS) *Ready Set... Goals*, construct and submit report on educational video.
 - c) Initiate, complete and submit Career Goal Statement Worksheet to workshop facilitator.
- Cooperative Procedure:
- a) Student-to-Student discussion of their Career Goal Statement.
 - b) Encourage subjects to sign (witness) each other's Career Goal Statement.
-

Note: Workshop coordinator collects individual Career Goal Statements, reviews them for completeness, points out areas in need of additional development and assists subjects where needed.

CAREER GOAL STATEMENT WORKSHEET

The Career Goal Statement is a compound sentence which describes a person's desired career category and/or occupational title of choice.

Career Category and/or Occupational Title	
9-Director/Investor 8-Manager II/Investor 7-Manager II 6-Consultant/Manager I 5-Engineer/Consultant 4-Educator/Engineer 3-Technologist/Educator 2-Technician/Technologist 1-Semi-skilled/Technician 0-Laborer/Semi-skilled	
<p>DIRECTIONS</p> <ol style="list-style-type: none"> 1.0) Review the educational video (VHS) <i>Ready Set...Goals</i>. 2.0) Discuss your career goal with a workshop/participant. 3.0) Construct and submit a brief report on Educational Video. 4.0) Select a career category and/or occupational title that is consistent with your career aspiration. 5.0) Initiate, complete and submit CAREER GOAL STATEMENT WORKSHEET to Workshop Coordinator. <p>EXAMPLE: I desire to be an ENGINEER or a TECHNOLOGIST.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Name: _____ Date: _____ Witness: _____</p>	

Note: The Career Goal Statement was used to describe the at-risk student's desired career category and/or occupational title of choice.

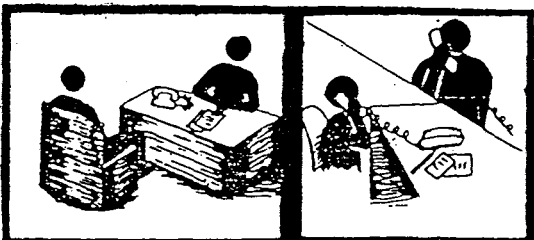
CAREER PLANNING WORKSHOP: LESSON PLAN 3

- Title: Career Advisory Network/Mentor
- Duration: One week; Monday, 10/18 - Friday, 10/22/93
- Setting: Woodworking periods; 2, 4, 5, 6 and 7
- Instruction Goal: To assist subjects in the selection and use of a group of people who will provide technical advice and assistance.
- Instruction Objective: Subjects will review literature on the role of an advisor, select five persons, construct and initiate a career advisory network.
- Instruction Resources:
- a) A journal article on the role of a career advisor and mentor. (Glass, 1991; How Mentors Can Help).
 - b) A Career Advisory Network/Mentor Worksheet.
 - c) A list of nine prospective advisors from diverse career fields including but not limited to the subjects' field of interest and/or career category.
 - d) A guest speaker and career mentor; (Dr. R. Adams).
- Instruction Sequence:
- a) Introduce topic; importance, rationale and guest speaker.
 - b) Guest discuss her career and mentor relationship, distribute journal articles on career advisement, then assist students in completing technical report on selected article.
- Cooperative procedure:
- a) Small group discussion of their career mentor and advisor(s).
 - b) Subjects were encouraged to become each other's witness and sign each other's career advisory worksheets.
-

Note: The workshop coordinator and guest speaker circulate among subjects during the completion of their worksheets, make constructive comments and collect Career Advisory/ Mentor Worksheets at the end of the session.

CAREER ADVISORY NETWORK/MENTOR WORKSHEET

The Career Advisory Network/Mentor is a special group of diverse people who support and facilitate the realization of each person's dream or vision of his or her adult career.

Advisor Type	
6-MENTOR	
5-SPONSOR	
4-BENEFACTOR	
3-GUIDE	
2-ASSOCIATE	

- DIRECTIONS: a) Review the accompanying article on career advisement.
 b) Select a career mentor from the list of nine advisor options.
 c) Consult with career mentor and select five additional persons based on their skills.
 d) Complete the Career Advisory Network Worksheet.

TYPE/ROLE	PRINT NAME	PHONE NO.	SIGNATURE
MENTOR			
SPONSOR			
BENEFACTOR			
ASSOCIATE			
GUIDE			
NAME _____ DATE _____ WITNESS _____			

Note: The at-risk student reviews the accompanying article on Career Advisement, consults with peers, quest and coordinator, then completes the Career Advisory Network/Mentoring Worksheet.

CAREER PLANNING WORKSHOP: LESSON PLAN 4

The Career Planning Workshop lesson was used to assist subjects in the construction of a practical plan of action to acquire competencies and credentials that are prerequisite to obtaining an entry level position in a career and to facilitate their career advancement in a global industry.

- Title: Career Development Plan/Strategy
- Duration: One week; Monday, 10/25 - Friday, 10/29/93
- Setting: Wood-working: periods; 2, 4, 5, 6, and 7
- Instruction Objective: Subjects will review a journal article on Career Development Plan, consult with career mentor, and complete the worksheet.
- Instruction Resources:
- a) Career Development Planning Worksheet.
 - b) List of local high schools and community colleges.
 - c) A journal article on Career Development Planning.
- Instruction Sequence:
- a) Introduce topic, discuss and explore importance of career development plan, relate topic to subjects' success and self-actualization.
 - b) Review journal article and complete technical report on article.
 - c) Initiate, complete and submit Career Development Plan Worksheet to workshop coordinator.
- Cooperative Procedure:
- a) Small group discussions of career development plans and practical strategies.
 - b) Subjects make arrangements for a career mentor to sign (witness) their Career Development Plan Worksheet.
-

Note: Career mentors examine the Career Development Worksheet, consult with the workshop coordinator, assist students as needed and complete and submit the Career Development Worksheet.

CAREER DEVELOPMENT PLANNING WORKSHEET

The Career Development Plan is a series of documented steps a person must take to obtain the training and credentials that are needed to qualify for an entry level position with a company in a pre-selected global industry.

CAREER ASPIRATION STATEMENT

CAREER GOAL STATEMENT

HIGH SCHOOL OPTIONS:

A)	Name_____	B)	Name_____
	City_____		City_____
	Phone_____		Phone_____

COMMUNITY COLLEGE OPTIONS

A)	Name_____	B)	Name_____
	City_____		City_____
	Phone_____		Phone_____

Note: The at-risk students stated their career aspirations and career goals, consulted with peers, mentors and coordinators, then completed and submitted their Career Development Planning Worksheets to the project coordinator.

CAREER PLANNING WORKSHOP: LESSON PLAN 5

The Career Planning Workshop was used to assist subjects in the development of a personalized Career Resumé Instrument for use in employment search and career advancement.

- Title: Career Resumé Instrument
- Duration: One week; Monday 11/01 - Friday 11/05/93
- Setting: Woodworking periods; 2, 4, 6, 5 and 7
- Instruction objective: Subjects will review magazine article and educational video, consult with workshop coordinator and mentors and complete Career Resumé Instrument Worksheet.
- Instruction Resources:
- a) Magazine article (Hirsch & Paris, 1990).
 - b) Educational Video (Cambridge Career Products, 1987).
 - c) A Career Resumé Statement Worksheet.
 - d) A sample career resumé model for each subject.
- Instruction Sequence:
- a) Introduce topic; discuss importance of career resumé and relate resumé to subjects' career success career success and self-actulaization.
 - b) View educational video; (Cambridge Career Products, 1987).
 - c) Initiate, complete and submit Career Resumé Instrument Worksheet to Workshop Coordinator.
- Cooperative Procedure:
- a) Subjects; discuss career resumé in small groups.
 - b) Distribute career resumé sample to subjects.
 - c) Coordinator; assist subjects in construction of personal career resumé.
-

Note: Workshop Coordinator assists subjects in the development of the Career Resumé, reviews Career Resumé, make suggestions as needed, then submits the completed Career Resumé worksheet to the coordinator.

CAREER RESUME INSTRUMENT WORKSHEET

The Career Resumé is a concise summary of a person's employment background, training and experience applicable to the job for which she or he wishes to be considered.

- DIRECTIONS a) Review the accompanying article and resume model provided.
 b) Consult with workshop coordinator and construct resume first draft.
 c) Complete Career Resume Planning Worksheet.

NAME _____

CURRENT ADDRESS

PERMANENT ADDRESS

CAREER ASPIRATION

EMPLOYMENT GOAL

EDUCATION AND TRAINING

A) _____

B) _____

EMPLOYMENT EXPERIENCE

A) _____

B) _____

HONORS AND AWARDS

A) _____

B) _____

REFERENCES:

PROVIDED

UPON

REQUEST.

Note: The at-risk students complete the Career Resume Planning Worksheet.

CAREER PLANNING WORKSHOP: LESSON PLAN 6

The goal of the Employment Search Cover Letter is to assist subjects in the development of a career search cover letter to introduce and personalize their career resumé.

- Title: Employment Search Cover Letter
- Duration: Two days; Thurs. 11/08 - Friday, 11/09/93
- Setting: Wood-working; Periods; 2, 4, 5, 6, and 7
- Instruction Objective: Subjects will review a report on the Employment Search Cover Letter, consult with fellow-subjects in small groups and construct and submit first draft of their personalized cover letters.
- Instruction Resources:
- a) Special report on cover letter, (Casey, 1991).
 - b) Educational Video (Cambridge Career Products, 1987).
 - c) Sample cover letter and Employment Search Cover Letter Worksheet.
 - d) Sample Classified Advertisement (Los Angeles Times Newspaper, Nov. 15, 1993).
- Instruction Sequence:
- a) Introduce topic, importance and relate cover letter to effective resumé plan and to successful Employment Search Plan.
 - b) Review educational video and Job Search Methods That Get Results.
 - c) Facilitate small group discussion.
 - d) Students initiate, complete and submit Employment Search Cover Letter Worksheet.
- Cooperative procedure:
- a) Subjects discuss cover letter in facilitated small groups.
 - b) Workshop Coordinator visits with subjects to provide informal advice.
-

Note: Workshop Coordinator collects, reviews, comments and requests additional work on employment search cover letter as needed.

This is an example of a cover letter for the at-risk students to follow.

EMPLOYMENT SEARCH COVER LETTER WORKSHEET-A

Chabelita Morgan
9016 Wilshire Blvd. Apt. 415
Beverly Hills, CA 90211

08 October 1993

Michaelle Winfi Casey
Human Resource Management Associates
2130 NW Fillmore Avenue, Suite D1
Corvallis, Oregon 97330

Dear Ms. Casey:

OPENING PARAGRAPH: State the reason for your letter with attention-getting self confidence. Be creative within the bounds of reason and good taste. Include the type or job title of the position you are seeking. If possible, mention how you became aware of the position and the organization.

MIDDLE PARAGRAPH: Refer to the enclosed resume and the facts within it that you want the employer to notice. Identify what you have that they want. Your resume should present facts to support this information.

CLOSING PARAGRAPH: Request an interview. State that you will call him soon ("Thursday of next week," or "this week,") to set up an appointment. Thank the person for his or her time and consideration.

Sincerely yours,

Chabelita Morgan

The at-risk students use this form to design their letters.

EMPLOYMENT SEARCH COVER LETTER WORKSHEET-B

_____:

OPENING PARAGRAPH: _____

MIDDLE PARAGRAPH: _____

CLOSING PARAGRAPH: _____

SINCERELY,

Name

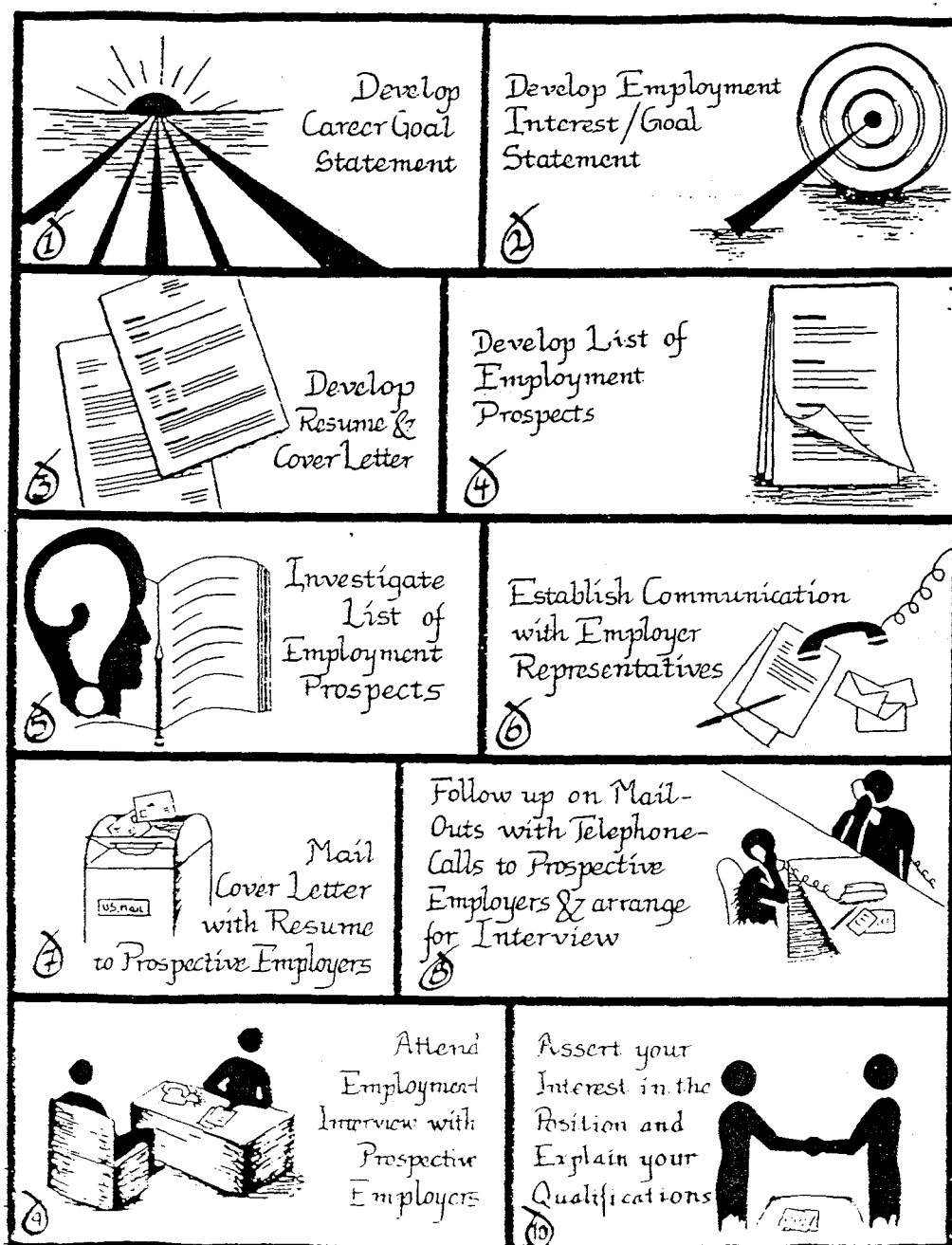
CAREER PLANNING WORKSHOP: LESSON PLAN 6

The employment search plan/strategy form is used to assist subjects in the development and pilot-testing of an employment search plan and strategy.

- Title: Employment Search Plan/Strategy
- Duration: Three Days, Wed., Thursday, Friday; 11/13 - 11/15.
- Setting: Wood-working periods; 2, 4, 5, 6, and 7
- Instruction Objective: Subjects will review an educational video (Jist, 1992), a sample classified advertisement from the L.A. Times newspaper, consult with the Project Coordinator, and complete the accompanying Employment Search Planning Worksheet.
- Instruction Resources:
- a) Educational video (VHS) *Job Search Methods That Get Results*.
 - b) Career Planning Encyclopedia.
 - c) Employment Search Planning Worksheets.
 - d) Informal advisement through small group consultation.
- Instruction Sequence:
- a) Introduce topic, importance, rationale and relate subjects' career success to effective employment search planning skills.
 - b) Review educational video; subjects submit report on educational video.
 - c) Subjects consult in small groups, facilitated by Workshop Coordinator.
 - d) Subjects initiate, complete and submit Employment Search Planning Worksheet to Workshop Coordinator.
- Cooperative procedure:
- a) Subjects participate in small group discussions.
 - b) Workshop Coordinator assists subjects as needed.
- Evaluation procedure: Workshop Coordinator will examine worksheet for completeness, advise and encourage subjects in the completion of their report on the educational video and the Employment Search Planning Worksheet.

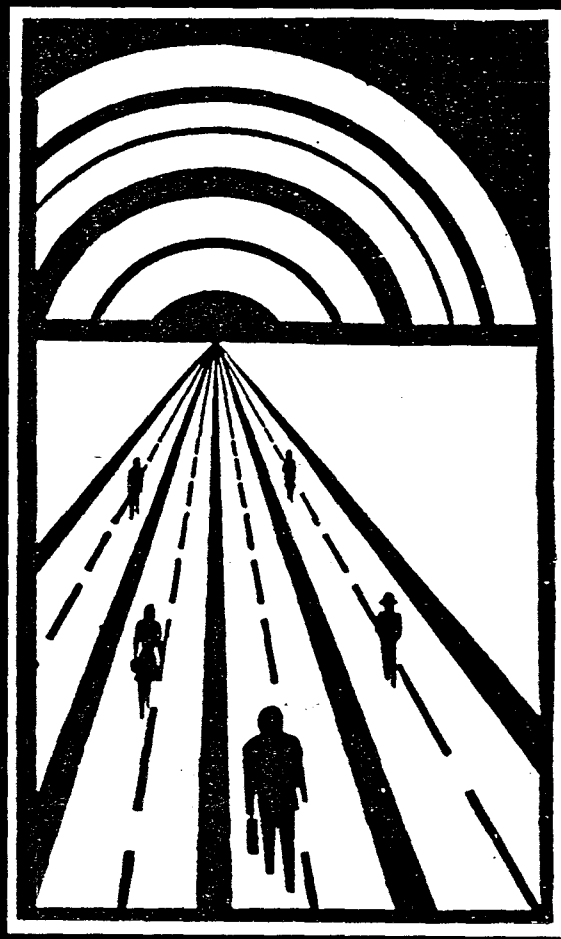
This employment search planning model is used as a guideline by the at-risk students.

EMPLOYMENT SEARCH PLANNING MODEL/WORKSHEET 6



Appendix B

A Personal Career Planning Portfolio

	<p>BETHUNE MIDDLE SCHOOL DROPOUT PREVENTION PROJECT</p> <p>... a personal Career Planning Portfolio:</p> <ul style="list-style-type: none">• Career Aspiration Statement• Career Goal Statement• Career Advisory Network• Career Development Plan• Career Résumé Instrument• Employment Cover-Letter Plan• Employment Search Plan <p>October 04 through November 12, 1993</p>
<p>Name _____ Date _____</p> <p>Address _____</p> <p>City _____ Zip _____</p>	

CAREER ASPIRATION STATEMENT WORKSHEET

GLOBAL INDUSTRIES

GLOBAL ECONOMY MATRIX

9-TRANSPORTATION

8-ENTERTAINMENT

7-BANKING, FIN./INS.

6-EDUC., MED., LAW, ENGR.

5-ENERGY

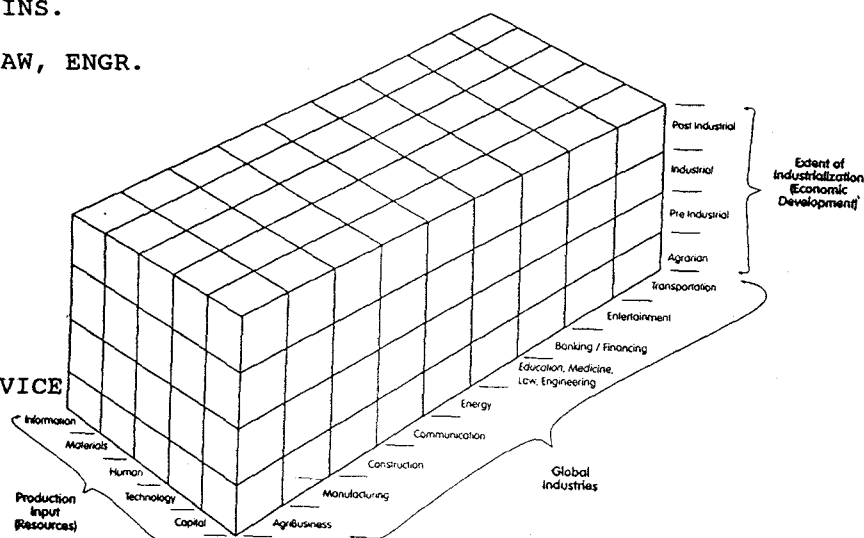
4-COMMUNICATION

3-CONSTRUCTION

2-MANUFACTURING

1-AGRIBUSINESS

0-GOVERNMENT SERVICE



DIRECTIONS:

- 1.0) Review Global Economy Matrix/Industries
- 2.0) Select appropriate Global Industry Options
- 3.0) Construct Career Aspiration Statement

EXAMPLE:

- A) I aspire to have a career in the CONSTRUCTION INDUSTRY.
- B) I aspire to have a career in the COMMUNICATION INDUSTRY.
- C) I aspire to have a career in the ENTERTAINMENT or CONSTRUCTION INDUSTRY.

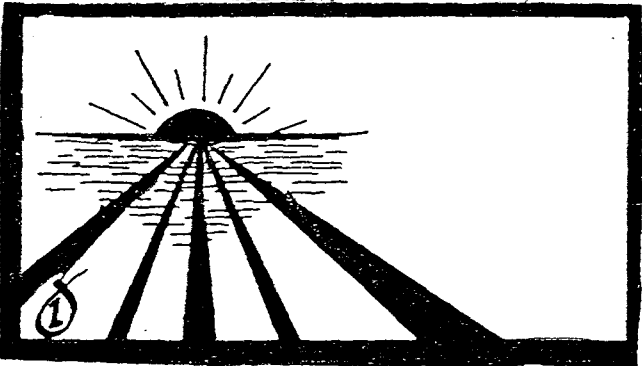
OPTION A _____

OPTION B _____

NAME _____ DATE _____ WITNESS _____

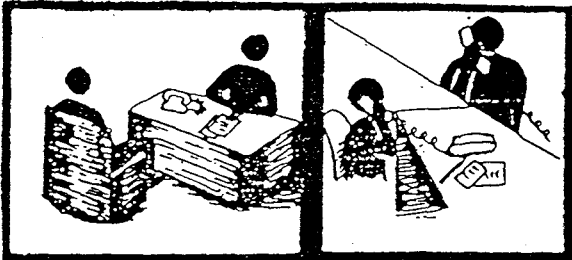
2.0) CAREER GOAL STATEMENT WORKSHEET

Definition: A Career Goal Statement is a sentence which describes a person's desired career category and/or occupational title of choice.

Career Category and/or Occupational Title	
9-Director/Investor 8-Manager II/Investor 7-Manager II 6-Consultant/Manager I 5-Engineer/Consultant 4-Educator/Engineer 3-Technologist/Educator 2-Technician/Technologist 1-Semi-skilled/Technician 0-Laborer/Semi-skilled	
<p>DIRECTIONS</p> <ol style="list-style-type: none"> 1.0) Review the educational video (VHS) <i>Ready Set...Goals</i>. 2.0) Discuss your career goal with a workshop/participant. 3.0) Construct and submit a brief report on the Educational Video. 4.0) Select a career category and/or occupational title that is consistent with your career aspiration. 5.0) Initiate, complete and submit CAREER GOAL STATEMENT WORKSHEET to Workshop Coordinator. <p>EXAMPLE: I desire to be an ENGINEER or a TECHNOLOGIST in the Entertainment, Communication or Construction Industry.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Name: _____ Date: _____ Witness: _____</p>	

3.0) CAREER ADVISORY NETWORK/MENTOR WORKSHEET

Definition: A Career Advisory Network/Mentor is a special group of diverse people who support the realization of the dream or vision each person has about the kind of work/life she/he wants as an adult career person.

Advisor Type	
6-MENTOR	
5-SPONSOR	
4-BENEFACITOR	
3-GUIDE	
2-ASSOCIATE	

- DIRECTIONS:
- Review the accompanying article on career advisement.
 - Select a career mentor from the list of nine advisor options.
 - Consult with career mentor and select five additional persons based on their skills.
 - Complete Career Advisory Network Worksheet

TYPE/ROLE	PRINT NAME	PHONE NO.	SIGNATURE
MENTOR			
SPONSOR			
BENEFACITOR			
ASSOCIATE			
GUIDE			
NAME _____ DATE _____ WITNESS _____			

4.0) CAREER DEVELOPMENT PLANNING WORKSHEET

Definition: A Career Development Plan is a series of documented steps that a person must take to obtain the training and credentials needed to qualify for an entry level position with a company in a pre-selected global industry.

CAREER ASPIRATION STATEMENT

CAREER GOAL STATEMENT

HIGH SCHOOL OPTIONS:

A)	Name_____	B)	Name_____
	City_____		City_____
	Phone_____		Phone_____

COMMUNITY COLLEGE OPTIONS

A)	Name_____	B)	Name_____
	City_____		City_____
	Phone_____		Phone_____

5.0) CAREER RESUME INSTRUMENT WORKSHEET

Definition: A Career Resumé is a concise summary of a person's employment background, training and experience applicable to the job for which she or he wishes to be considered.

 DIRECTIONS a) Review the accompanying article and resume model provided.
 b) Consult with workshop coordinator and struct resume first draft.
 c) Complete Career Resume Planning Worksheet.

NAME _____

CURRENT ADDRESS

PERMANENT ADDRESS

CAREER ASPIRATION

EMPLOYMENT GOAL

EDUCATION AND TRAINING

A) _____

B) _____

EMPLOYMENT EXPERIENCE

A) _____

B) _____

HONORS AND AWARDS

A) _____

B) _____

REFERENCES:

PROVIDED

UPON

REQUEST.

6.0) EMPLOYMENT SEARCH COVER LETTER WORKSHEET

_____ :

OPENING PARAGRAPH: _____

MIDDLE PARAGRAPH: _____

CLOSING PARAGRAPH: _____

SINCERELY,

Name

7.0) EMPLOYMENT SEARCH PLANNING WORKSHEET

Definition: An employment search plan is a series of steps and resources a person will utilize to be granted an employment interview with a prospective employer.

- DIRECTIONS:
- Review Educational Video and Job Search Methods.
 - Review Employment Search Planning Model.
 - Coordinator will Consult with subjects in small groups.
 - Write first draft of Employment Search Plan. Use the accompanying form.

STEP ONE: A

B

C

STEP TWO: A

STEP THREE: A

Appendix C

Informed Consent Statement

BETHUNE MIDDLE SCHOOL DROPOUT INTERVENTION PROJECT

Kenneth M. Ahrendt
Principal Investigator
Oregon State University
Corvallis, OR 97331
(503) 737-5981

Michael W. Casey
Project Coordinator
9016 Wilshire Blvd., Ste. 415
Beverly Hills, CA 90211-1891
(213) 739-6924

Informed Consent

Fall Semester - 1993-94

Dear Parents:

I am requesting your permission for your son or daughter to participate in the Bethune Middle School Dropout Intervention project, which provides students an opportunity to conduct individualized career planning while contributing to the success of a research project on the effects of career planning on middle school students.

Students participating in the project's experimental group will: 1) explore career planning, and 2) develop an individualized career portfolio that consists of:

- | | |
|--------------------------------|--|
| ■ Career Aspiration Statement | ■ Career Development Plan & Strategy |
| ■ Career Goal Plan & Statement | ■ Career résumé and interview plan |
| ■ Career Advisory Network | ■ Employment Search Plans and Strategy |

Students participating in the project control group will not: 1) explore career planning, and 2) develop an individualized career portfolio. However, each group will participate in pre- and post-treatment self-concept self-evaluations and a careful examination of academic achievement (GPA) scores.

In addition, the career exploration and planning content and activities will be infused into the 8th grade Wood A classes for six consecutive weeks by the project coordinator (Michael Winfield Casey). Students participating in the experimental group will be held accountable for all works and assignments required in connection with the 8th grade Wood A class.

In closing, please do not hesitate to contact either myself or the project director if you have any questions. If you agree to allow your son or daughter to participate in this project, and if your son or daughter agrees to do so, please sign and return the enclosed Parental Consent Form.

Sincerely,

Michael Winfield Casey,
Project Coordinator

Parental Consent Form

I give permission for my daughter/son to participate in the Middle School Dropout Intervention project held during the Fall Semester 1993-94 at Bethune Middle School. The career planning will be infused into Wood A classes, held on the campus of Bethune during school hours, and taught by Michael Winfield Casey.

Parent's Signature

Student's Signature

Parental Consent Form

I give permission for my daughter/son to participate in the Middle School Dropout Intervention project held during the Fall Semester 1993-94 at Bethune Middle School. The career planning will be infused into Wood A classes, held on the campus of Bethune during school hours, and taught by Michael W. Casey.

Parent's Signature

Student's Signature

Parental Consent Form

I give permission for my daughter/son to participate in the Middle School Dropout Intervention project held during the Fall Semester 1993-94 at Bethune Middle School. The career planning will be infused into Wood A classes, held on the campus of Bethune during school hours, and taught by Michael W. Casey.

Parent's Signature

Student's Signature

Informed Consent Procedure

This experimental research study is designed and initiated by Michael Winfield Casey in partial fulfillment of the requirements for the degree of Doctorate in Philosophy from Oregon State University. Mr. Casey is a tenured Industrial Education teacher in the Los Angeles Unified School District.

The purpose of this experimental study is to determine the effects of a career planning intervention program on the attitudes and achievement of middle school students in an urban public school environment. The objective of the study is to determine the effects of career planning on middle school students'

- A. Self Concept - measured by the PIERS-Harris Children's Self-Concept Scale, and
- B. Academic Achievement - measured by overall grade point average as reported via periodic report cards.

The actual duration of this research study is 12 months, with the experimental treatment component lasting about six weeks.

The risks and discomforts to research subjects are statistically insignificant. Subjects will receive two types of benefits from participating in this research study. First, subjects in the experimental group will receive career planning and industrial counsel, and each subject will develop a Personalized Career Portfolio which includes:

- Career Goal Plan and Statement ■ Career Résumé and Interview Plan
- Career Advisory Network ■ Employment Search Plan & Strategy
- Career Development Plan & Strategy

Subjects of the control group will not receive a Career Portfolio as a product of their participation in this study. Subjects in the experimental group will experience an increase in confidence about their individual prospects of career/life success after being exposed to the experimental treatment, and may witness an increase in academic achievement as a result of their increased awareness of their individual career interests and aspirations.

Subjects participating in the research study will be informed that this career planning - dropout intervention program is modeled after the "Career Beginning" program offered to middle school students by the University of California - Los Angeles (UCLA) or a similar "Pre-College Readiness" classroom training program - available at California State University, Los Angeles (CSULA). These alternative procedures are provided during the summer months, and are usually sponsored in conjunction with Los Angeles Summer Youth Employment Training programs, City of Los Angeles Community Development and Education Institutions, operating in Los Angeles County.

To assure the confidentiality of records, all documents will be stored under lock and key at the office of the project coordinator. Only the project coordinator will have access to records for this project. In addition, results of this study will not include names of participants in the experimental research project.

To get more information or clarification on this research study, or for answers to pertinent questions, please contact:

Michael Winfield Casey, Coordinator
Middle School Dropout Intervention Project
9016 Wilshire Blvd., Ste. 415
Beverly Hills, CA 90211-1891

24 hour messages [213] 878-6972
Office [213] 739-6924

Appendix D

Informed Consent Statement (Spanish)

PROYECTO DE INTERVENCION PARA LOS QUE SE RETIRAN DE LA ESCUELA LLEVADO ACABO POR LA ESCUELA MEDIA DE BETHUNE

Kenneth M. Ahrendt
Principal Investigator
Oregon State University
Corvallis, OR 97331
(503) 737-5981

Michael Winfield Casey
Project Coordinator
9016 Wilshire Blvd., Ste 415
Beverly Hills, CA 90211-1891
(213) 739-6924

CONSENTIMIENTO INFORMADO

Estimados padres:

El proposito de esta carta es para pedir permiso para que su hija o hijo participe en un proyecto de intervencion para los que se retiran de la escuela. Este proyecto es un tesis que provee a los estudiantes una oportunidad para conducir un planeamiento individualizado de carrera mientras esten contribuyendo al exito de un estudio investigativo (tesis) que trata sobre los esfuerzos del planeamiento de carreras hacia los estudiantes de la escuela media.

Todos los estudiantes que participan en el estudio recibiran un pre y post valoración de sus conceptos propios, y sus realizaciones academicas (El grado promedio - GPA) sera estructurado como un taller acerca del planeamiento de carrera y sera realizado durante la segunda y tercera semana de Diciembre (6 - 17 de Diciembre 1993). Los estudiantes matriculados en las clases de madera serviran como la poblacion experimental. Las clases de madera seran organizadas en dos agrupaciones - lo controlado y el experimental. Lo controlado no participaran en el taller de planeamiento de carreras, mientras tanto lo experimental si participaran en el taller de planeamiento de carreras.

A lo mas el objetivo del taller de planemiento de carreras es a explora opciones de carreras, y para conducir planeamiento de carreras individualizadas atravez de una consideración integrada. Video educacional, investigación individualizada, aconsejar a los pares <alumnos/as de la misma clase> consultas con el coordinador del proyecto, consejos informales dadas por la familia y los patrocinadores. Cada participante en el taller de planeamiento de carrera desarrollara un portafolio individualizado quienes incluire:

- La meta sobre la declaración y plan de carreras.
- Emisoras de consejeros de carreras
- Resumen instrumental y estrategico de carreras
- Entrevista sobre el plan y estrategia de carreras
- Busqueda de empleo - el plan y estrategia

En concluir, esta es una oportunidad para que su hija o hijo tenga una guia practica en planeamiento de carreras mientras que este contribuyendo a la existencia del estudio investigativo. Si usted esta de acuerdo a permitir que su hija o hijo participe en este proyect, y si su hija o hijo esten de acuerdo, por favor firme y regrese el papel de consentimiento remitido. Adjunto con esta carta Incluida encontrara un sobre con estampilla previamente puesta en ello para su conveniencia. Por favor, no vacilen o no tengan temor estar en contacto con la directora de esta escuela o yo aqui en Bethune si usted piensa en alguna pregunta o necesita mas información.

Sinceramente,

MICHAEL WINFIELD CASEY
Coordinador del proyecto

Aprovado por E. Morris, directora

Appendix E**Research Study Continuance, LAUSD****INTER-OFFICE CORRESPONDENCE
LOS ANGELES UNIFIED SCHOOL DISTRICT**

TO: Michael Casey, Teacher
Bethune Middle School

FROM: Louvonia S. Hall, Principal
Bethune Middle School

DATE: June 19, 1993

SUBJECT: RESEARCH STUDY AT BETHUNE MIDDLE SCHOOL

In response to your correspondence dated June 6, 1993, and numerous conferences, this memo authorizes you to conduct a research study at Bethune Junior high School during the 1993-94 school year.

I have contacted Mrs. Lola Hendricks, Adviser, Program Evaluation and Assessment Division and apprised her of my intentions with your research project.

Please feel free to speak with me regarding written correspondence to students and parents with your research study.

INTER-OFFICE CORRESPONDENCE
Los Angeles Unified School District
Bethune Middle School

November 1, 1993

To: Michael W. Casey, Teacher
From: Edith H. Morris, Principal
Subj: Research Study Continuance, Bethune Middle School

Based on your previous authorization to conduct a research study by Louvonia S. Hall, former principal of Bethune Middle School, and having reviewed your research study application, I duly authorize you to continue your research study under my administration.

Please keep me apprised of all documents to be used in your study, and have all communications to parents approved by me before disseminating same to students.

The best of success to you in your efforts.

Appendix F

Research Management Schedule

(September 01, 1993 through June 24, 1994)

WEEKS/DATES	RESEARCH ACTIVITY AND TASKS
09/01- 09/03/93	Satisfy Prerequisites; Beginning of the semester tasks. Collect and calculate Pre-treatment GPA Scores for subjects in the control and experimental groups.
09/06- 09/14/93	Administer Piers-Harris Children's Self-Concept Scale to subjects in the experimental group and calculate Pre-treatment Self-Concept Scores.
10/04- 11/12/93	Apply Experimental Treatment: Career Planning Dropout Prevention Program; <ul style="list-style-type: none"> * Global Industry/Career Aspiration Statement * Career Goal Statement * Career Advisory Network/Mentor * Career Development Plan/Strategy * Career Resume Instrument/Resource * Employment Cover-Letter/Resource * Employment Search Plan/Strategy
01/05- 01/06/94	Administer Piers-Harris Children's Self-Concept Scale to determine Post-treatment Self-Concept Scores for subjects in the experimental group.
01/10- 01/11/94	Calculate Pre-Self Concept Scores for subjects in the experimental group. Apply Piers-Harris scoring procedure and resources to determine Self-Concept Scores. Collect data and calculate Post-treatment GPA-1 Scores for subjects in the control and experimental group.
06/13- 06/17/94	Collect data and calculate Post-treatment GPA-2 Scores for subjects in control and experimental group.
07/10- 07/14/94	Apply statistical/regression analysis to Academic Achievement and Self-Concept data to test research hypothesis.
12/04- 12/08/95	Apply statistical techniques (the SAS system) to Academic Achievement and Self-Concept data to test research hypothesis.

Appendix G

Application for Approval of the OSU Human Subject Board

Application FOR APPROVAL OF THE OSU HUMAN SUBJECTS BOARD

Principal Investigator* Kenneth Ahrendt

Department Education Phone 757-5981

Project Title The Effects of Career Planning on Self-Concept and Academic Achievement of At-Risk Middle School Students in an Urban Environment

Proposed Source of Funding A.) Meyer Memorial Trust, Portland, OR, B.)
New Era Foundation, Inc., N.Y., N.Y.

Type of Project _____ Faculty Research Project
 _____ Student Project or Thesis*
 (Student's name Michael Winfield Casey)

1.0 Project Significance

The problem of declining academic achievement and increasing dropout rates at the secondary (8-i 2) school level, has been a serious concern among educators and public service agencies in the United States of America for at least 20 years. During the 1980's several studies were conducted to determine the effectiveness of various dropout intervention program on the At-Risk population. The results of these studies demonstrate substantial effectiveness of early intervention on At-Risk Students: Self-concept and Academic Achievement. A careful review of these programs revealed the consistent presence of career and/or employment counsel as an integral part in intervention curriculum. Therefore this project is significant because it will isolate career planning

as the only independent variable. Then construct and implement a 12 week dropout intervention program and determine its effect on:

- The self-concept score of subjects in the control and experimental group, and
- The academic achievement score of subjects in the control and experimental groups.

2.0 Research Method and Procedure

This experimental study will utilize two groups/classes of 8th grade English students: Group A - control, and Group B - experimental. Group B will be exposed to a structured i 2 week career planning (pre-employment skill training and/or job search assistance) intervention program. Group A will not participate in the career planning intervention program. A. [post less pre] treatment design will be utilized to measure and document the significance of differences between self-concept score and academic achievement of Group A and Group B.

3.0 Benefits

The primary benefit that will result from this study is: 1) empirical evidence describing the condition between the effects of career planning on the at-risk middle school; students' self-concept and academic achievement. In addition, the results of this study will be useful in: A) improving learning for selected groups of students, e.g., those at-risk of dropping out of school, and B) Improving direct service that promotes

learning, e.g. teacher training and student counseling.

4.0 Research Subject Population

The research population consists of 75 eighth grade students attending Aubudon Junior High School, Los Angeles, California. All subjects are between the ages of 14 and 15 years, all of whom are residents of South Central Los Angeles, where a significant percentage of students are from low-income families. The ethnic ratio of the research population is 55% Hispanic-American and 45 African-American. The gender ratio is 55% female and 45% male.

5.0 Informed Consent Procedure

See Exhibit C (under Development)

6.0 Anonymity Procedure

See Exhibit D (under Development)

7.0 Questionnaire. Testing Instrument

See Exhibit E (under Development)

8.0 Proposal to Outside Funding Agency

See Exhibit F (under Development)

Signed _____ Date _____
Principal Investigator*

*NOTE: Student projects and theses should be submitted by the major professor as Principal Investigator.

Appendix H

Adherence to APA Ethical Principle for Researchers

Measures Taken to Assure Adherence to APA Ethical Principles for Researchers

1.0 SCS Test Administration and Personnel

- C₁ The directions for administration will be available in the test manual with sufficient clarity and emphasis so that the test user can duplicate, and will be encouraged to duplicate, the administrative conditions under which the norms and the data on reliability and validity were obtained.

2.0 SCC Test Use)

- G₁ Test user (Testing Consultant) does have general knowledge of measurement principles and of the limitations of test interpretation.
- G₁ Test consultant will seek to avoid bias in test administration, and avoid the appearance of discriminatory practice.

3.0 SCS Test Scoring

- C₃ The procedures for scoring the test will be presented in the test manual with a maximum of detail and clarity to reduce the likelihood of scoring error. The Piers-Harris WPS Test Report answer includes computerized scoring. Please note, the PHSC is supplemented by the WPS Test Report Answer Sheet that provides computerized scoring for each subject.

4.0 Test Interpretation

- B₁ The SCS test, the manual, the record forms, and other accompanying materials provided will help the Test Consultant make correct interpretations of test results and will warn against common misuses of test results. The Piers-Harris WPS Test Report Answer Sheet includes a computerized multi-page interpretation report for each subject.

5.0 Test Selection

The Piers-Harris Children's Self-Concept Scale efficiently and economically assesses self-concept in children and adolescents. It is utilized in this experimental study as a research instrument to evaluate changes in self-concept over time. Integral components of this assessment procedure: A. Fundamental questions about children's self-evaluative attitudes, B. The relationship of self-concept to other behavioral traits, and C. Alternative intervention strategies.

6.0 Test Reliability

Internal consistency of the PHSCS indicates stable rank ordering of students on cumulative scores: A. Coefficients for 92 items used in a standardization study range from 0.78 to 0.93 for boys and girls in grades three, six and ten, B. Corrected split-half coefficients for the total scores were 0.90 and 0.87 for grades six and ten students, respectively.

Faculty Adviser Signature

My signature affirms that we have evaluated this proposal, that we consider it to be in compliance with my institution's standards and with LAUSD's guidelines for advanced degree research, and that I am supervising the students' work on this study.

Advisor's Name, Printed

Advisor's Signature Date (mo.-day)

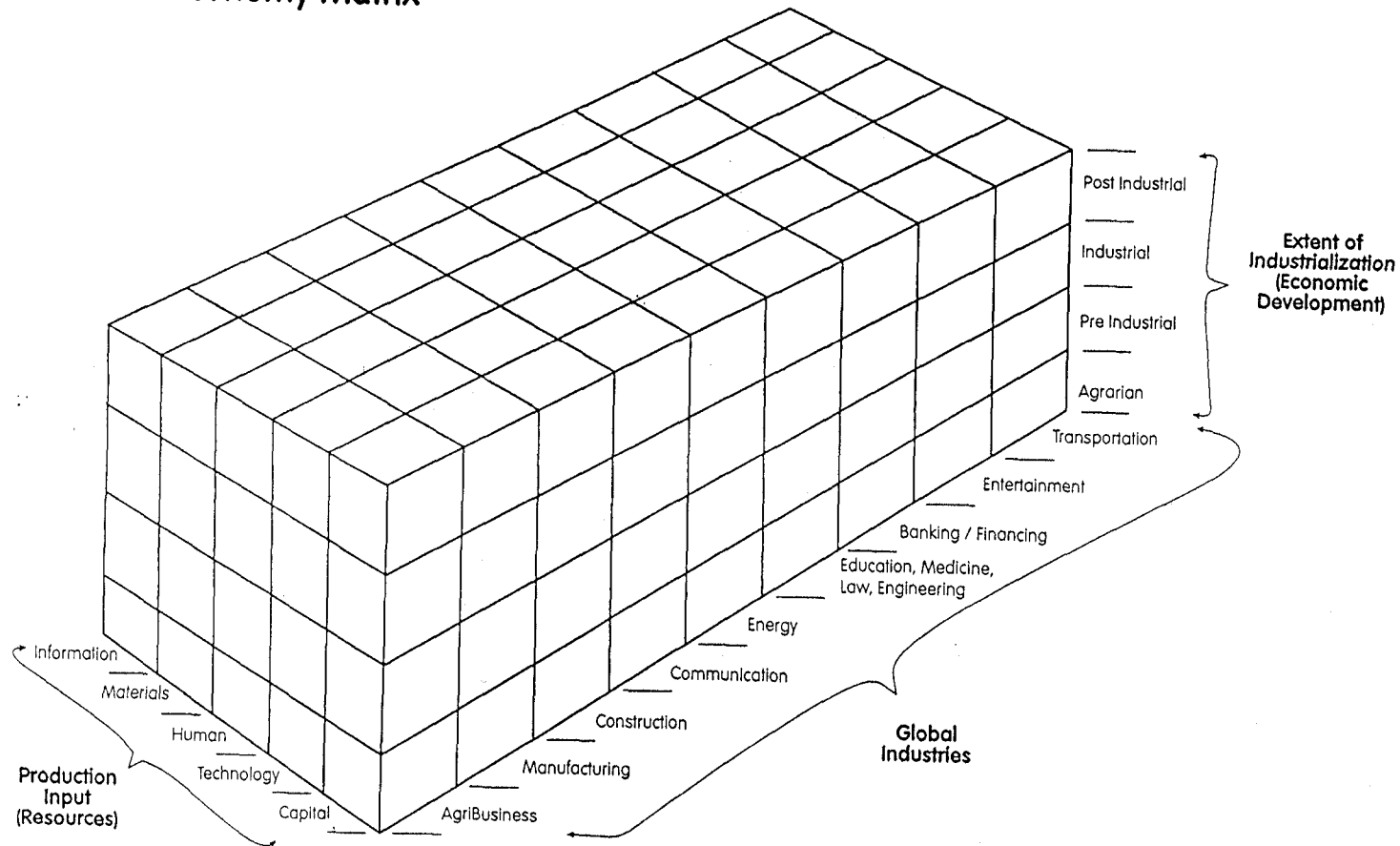
Appendix I

Research Management Schedule

(September 01, 1993 through June 24, 1994)

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Global Economy Matrix



Global Economy Matrix

Appendix J