An applied orientation model in a community college setting

1986

Ivan Ronald Applebaum

University of Central Florida

Find similar works at: https://stars.library.ucf.edu/rtd

University of Central Florida Libraries http://library.ucf.edu

Part of the Curriculum and Instruction Commons

STARS Citation

https://stars.library.ucf.edu/rtd/4888

This Doctoral Dissertation (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of STARS. For more information, please contact lee.dotson@ucf.edu.
AN APPLIED ORIENTATION MODEL IN A COMMUNITY COLLEGE SETTING

by

IVAN RONALD APPLEBAUM

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education in the College of Education at the University of Central Florida Orlando, Florida

August, 1986

Major Professor: Dr. Charles Dziuban
Copyright 1986
by
Ivan Ronald Applebaum
ABSTRACT

A study was conducted at Valencia Community College to determine whether an improved orientation program would contribute to improved student performance and retention. An orientation, based on the expressed needs of students, was provided to first-time, full-time students. The orientation consisted of an introduction to the institution and its resources, academic skill training, and personal resource management training. There were 22 students who participated for one day, 25 students who participated for two days of orientation, and a control group of 72 students.

Although the behavioral outcomes were not generally statistically significant, the trends of all of the dependent measures, i.e., enrollment and withdrawal, were in a positive direction, favoring greater amounts of orientation.

The orientation treatment was substantially more effective for students who had a 2.0 GPA or less, than those who had a GPA above 2.0. All of the dependent measures improved for the lower GPA students as the amount of
orientation increased, but remained relatively constant for the higher GPA students. Apparently, the orientation is most effective for those students most in need of the improvement.
This dissertation is dedicated to my late beloved parents, Sara and Simon Applebaum.
There are many people who supported me while working on this project and I wish to acknowledge their contributions. First is my wife, Sandy Applebaum, who has been a marvelous partner in all of my endeavors and without whose support and tolerance this project would not have been completed. My sons, Howard and Steven, have provided great moral support. Dr. Chuck Dziuban, my chairman, carried me through many of the bleak times and was always helpful, supportive and required me to work to high standards. My committee—Drs. Wayne Burroughs, Robert Rothberg, and Richard Tucker—were very helpful in all phases of the project. Their review and critique of the written document materially contributed to the quality of the content and its clarity.

I received much support, help and guidance from many of my colleagues at Valencia Community College. The first acknowledgement here should be to the school administration for financially and academically supporting this project. Dr. Ron Nelson is the person most responsible for my completing this dissertation. He provided a lot of
stimulation at times when I was close to abandoning the project and he materially assisted in turning random thoughts into readable text.

Many others contributed directly to this project, including Glenn Hayden, Judy DeLisle, Laura Thomas, Bill Snider, Dr. Emil Wasniewski and the students who volunteered for the experiment. My friends and relatives who contributed moral support over the course of the project are too numerous to name.
# TABLE OF CONTENTS

| LIST OF TABLES | xi |
| LIST OF FIGURES | xiii |
| LIST OF HANDOUTS | xiv |

## CHAPTER ONE INTRODUCTION
- General Goals of Orientation Research .................................................. 1
- Goals of This Research ........................................................................ 4
- Statement of the Problem ........................................................................ 5
- Limitations ............................................................................................... 5
- Definitions ............................................................................................... 7
- Importance of This Study ........................................................................ 8

## CHAPTER TWO REVIEW OF RELATED LITERATURE
- Prediction of Attrition ........................................................................ 12
  - Grade Point Average ........................................................................ 12
  - Motivation ......................................................................................... 13
  - Study and Academic Skills .................................................................. 14
  - Student Characteristics ...................................................................... 15
- Orientation Intervention Techniques ...................................................... 16
  - Informational Content ......................................................................... 17
  - Skill Development Content .................................................................. 18
  - Orientation Program Formats ............................................................. 20
  - Small Groups ..................................................................................... 21
- General .................................................................................................. 22
- Orientation Program Outcomes ................................................................. 22
- Summary ............................................................................................... 25

## CHAPTER THREE METHODOLOGY
- Design .................................................................................................... 27
- Control Group ......................................................................................... 29
- Experimental Group ................................................................................. 29
- Experimental Program Design ................................................................. 30
- Population ............................................................................................... 32
- Motivational Considerations .................................................................... 33
- Selection .................................................................................................. 34
- Treatment ............................................................................................... 38
Appendix H  Reasons for Withdrawal ........... 205
Appendix I  Grade Point Average T-tests........... 207
Appendix J  Multiple Regression Statistics ....... 209
Appendix K  Co-variance Statistics ................. 216

REFERENCES ............................................. 220
# LIST OF TABLES

1. Response Rate of Students to Participation in A Research Orientation Program ............... 37

2. PAGSS Subtest Information ...................... 40

3. Summary of the Sex, Race and Marital Status of Experimental and Control Group Subjects .............. 54

4. A Compilation of the Mean, Standard Deviation and Number of Cases for the Demographic Factors and Dependent Variables of the Control Group ............ 55

5. A Compilation of the Mean, Standard Deviation and Number of Cases for the Demographic Factors and Dependent Variables of the One-Day Experimental Group .................. 56

6. A Compilation of the Mean, Standard Deviation and Number of Cases for the Demographic Factors and Dependent Variables of the Two-Day Experimental Group .................. 57

7. A Comparison of Significant Demographics and Dependent Variables Between the Control and One-Day Experimental Group .................. 59

8. A Comparison of Significant Demographics and Dependent Behaviors Between the Control and Two-Day Experimental Group .................. 60

9. A Summary of the GPA of Control and Experimental Groups .................. 61

10. A Comparison of Dependent Behaviors for Subjects Above and Below 2.0 GPA for Experimental and Control Groups .................. 62

11. A Post-Semester Survey Measuring School Activities Goal Clarification, and Overall Learning Experience .................. 64
12. A Comparison of the Significant Demographics and Dependent Variables Between the One- and Two-Day Experimental Groups ........................................... 65

13. A Summary of Responses by Experimental and Control Groups to Self-Report Questionnaire ............................................................. 68

14. The General Impressions of Two-Day Experimental Group Subjects to the Orientation Program ......................................................... 70

15. Responses of the Two-Day Experimental Subjects to the Question of Whether the Specific Elements of the Orientation need to be Redesigned................................. 71

16. A Summary of the Means of the Dependent Variable Trends ....................................................................................................................... 72

17. A Summary of the Cost Factors of Orientation ........................................................................................................................................... 77
LIST OF FIGURES

1. Data Analysis Flow Chart .......................... 52
2. Trends ............................................. 73
3. Trends of Two Sub-Groups .......................... 76
4. Systematic View of Education ....................... 108
5. Common Fallacies .................................. 109
6. Map of the Campus ................................ 112
7. College Resources ................................ 113
8. Goal Setting ....................................... 120
9. Word List .......................................... 121
10. Short Term vs. Long Term Memory .................. 126
11. Listening vs. Note Taking ........................... 127
12. Attention Span .................................... 128
13. Rule for Success ................................... 133
14. Stress Model ...................................... 135
15. Personal Management of Stress ..................... 139
16. Destructive Treatments .............................. 140
17. Grade Getting ..................................... 142
18. Underlining by Experts ............................ 151
19. Clue Word Exercise ................................ 163
20. Surviving with Low Writing Skills ................. 167
21. Surviving with Low Reading Skills. ....... 168
22. Time Management Hints. ................. 170
23. Assertiveness Program. ................. 174
LIST OF HANDOUTS

1. Orientation Syllabus ........................................... 107
2. Valencia Community College West Campus Student Support Services Directory ........................................... 114
3. Tour of the Campus ........................................... 116
4. Goal Worksheet ........................................... 119
5. Decision-Making Strategies ........................................... 122
6. Goal Evaluation Sheet ........................................... 123
7. Strategies for Dealing with Instructors ........................................... 129
8. Strategies for Dealing with Lab-Type Course ........................................... 132
9. Registration Process ........................................... 136
10. Taking Lecture Notes ........................................... 143
11. The SQ3R Study Method ........................................... 149
12. Underlining a Textbook ........................................... 149
13. Suggestions for Study Habit Improvement ........................................... 153
14. Some General Remarks About Exams ........................................... 156
15. Procedure for Objective Tests ........................................... 160
16. Scheduling or Organizing Work on Essay Exams ........................................... 161
17. Anxiety Reduction ........................................... 162
18. Reading in College with Poor Reading Skills ........................................... 165
19. Schedule ........................................... 169
20. Assertiveness Inventory ........................................... 171
CHAPTER ONE
INTRODUCTION

The community college serves an unusually diverse group of students including many who have no clear understanding of their own abilities, the requirements of the institution, or the general academic survival skills that ensure persistence and good grades. The students' misunderstandings are reflected in high attrition rates for the institution and in the students' own acknowledgement of personal failure. The literature, institutional experience and naive optimism all underscore the conviction that these losses can be reduced.

Open-door policies of the community colleges have attracted numerous students who are less adequately prepared than those attending the universities. While there is little question that open-door policies will attract a more heterogeneous distribution of students, the open door also poses unique problems for the institution. One of these is getting people "on-board" as soon as possible. This implies that there is a strong need to get students acclimated to the environment of the institution. There exists a surprising paradox in that while the university
traditionally selects the most talented students, it also appears, based on the literature survey in Chapter Two, to do the most in-depth job of orienting its students to its institutional environment. The literature survey contained in Chapter Two shows a wide diversity of university efforts to provide orientation to lessen student anxiety and to improve retention of students. Examples of these university efforts include a week of summer orientation, semester-long courses of orientation, and small group activities during the semester. Typically, the community colleges, which deal with the most non-traditional students, provide the least amount of orientation, and consequently the least encouragement of good performance and the least attention to the problems of attrition.

Fiscal prudence on the part of the universities, particularly the private ones, may have been the motivation for them to use orientation programs to help with the problems of retention. The typical community college may have been less interested in the fiscal impact of student attrition when student population figures were growing and governmental funds flowed freely. With baby booms and VA programs behind them, this fiscal issue may loom larger in the future for the community colleges. With student numbers decreasing and high-school standards increasing, the
community college may discover that its greatest source of new students is within its own walls. Decreasing the rate of attrition could add significant numbers of additional students to the community college campuses.

The damage to the college enrollment done by attrition is well documented. In their paper, "Exploring New Directions in Community College Research," Guskey, Barhis and Easton (1982) stated, "in large urban community college systems, only about a third of first-year students enrolled in two-year programs make it to the second year, and only about one-fifth complete the two-year program" (p. 2). This is similar to the situation that exists at Valencia Community College, Orlando, Florida, where graduation is approximately 11 to 13 percent of enrollment for degree-seeking students (Florida State Report AA-1A). Clearly, this is both a local and national problem. The problems with high attrition include legislative concern for monies spent with inadequate results, the undesirable effects of poor self-concept of those who fail or drop out, and the societal loss of less than adequately trained citizens. When the student enters an academic institution he or she should be provided with the best opportunity to succeed. Flunking out of college is certainly an immoral act if it occurred because the
institution had not done everything it could have to help the students avoid failure.

Guskey et al. (1982) go on to state, "Research on student attrition indicates that a major reason students leave higher education is that they do not have successful learning experiences during the critical first year, and, as a result, are discouraged from seeking further learning opportunities" (p. 2). If the first year of learning experiences is critical to one's total education, then it follows that the orientation to that first year is also of major importance. Students can be conditioned to success if that orientation is designed to help the student acquire a successful learning experience.

General Goals of Orientation Research

A survey of research literature indicates that goals of orientation have varied widely. Opitz (1973) and Hammons (1975) emphasized the importance of maturity and skill development, while Moore (1981) and Sagaria, Higginson and White (1980) identified institutional and academic information as critical orientation needs. Butts (1971) found student assessment, counseling and placement were the critical factors for orientation. All of the aforementioned
goals influenced the selection of the elements of the orientation program undertaken in this research project.

Goals of This Research

The general goal of this research project was to improve survivability of students in one specific community college by helping them have a successful learning experience. Specifically, goals of the research project were:

1. To develop an orientation program based on needs identified by students and research literature;
2. To show a cost ratio between FTE (Full Time Equivalent student) saved and cost of orientation;
3. To determine whether an expanded orientation (Two days vs. One-half day) could improve long term behaviors;
4. To determine which demographic groups were most responsive to this orientation model.

Statement of the Problem

It was the purpose of this study to develop, apply and evaluate an orientation model in a specific community college setting that would assist the students in improving their academic behaviors. The model was one designed to
meet the specific needs of students at the local college. The outcome measures of the program were whether significant reduction in attrition, improvement in grades, and goal clarification were achieved.

Following are the null hypotheses that deal with this research problem.

H1--A two day orientation program based on the needs of entering first-time, full-time college freshmen will not have a significant effect on the students' Grade Point Average.

H2--A two day orientation program based on the needs of entering first-time, full-time college freshmen will not have a significant effect on the students' retention.

H3--A two day orientation program based on the needs of entering first-time, full-time college freshmen will not have a significant effect on student withdrawal rates.

H4--A two day orientation program based on the needs of entering first-time, full-time college freshmen will not have a significant effect on the number of incomplete grades.
H5--A two day orientation program based on the needs of entering first-time, full-time college freshmen will not have a significant effect on the goals that the student clarifies.

H6--There will be no demographic factors that determine which students are most responsive to the quasi-experimental treatment.

H7--A two day orientation program will not be seen as a desirable activity by the experimental subjects.

Limitations

This study was limited to day students who were attending the West campus of Valencia Community College in Orlando, Florida. These students were attending college for the first time and were planning to enroll for nine or more credit hours. The population from which subjects were selected were the students meeting the first-time, full-time requirements who enrolled during the six-week period preceding registration for the fall semester of 1984. The research orientation was conducted in the summer of 1984.
The findings of the study would be applicable to students with similar demographics at the same community college.

Definitions

First-time student is a student who is attending college for the first time. Students were purged from the experiment who had any previous college experience.

Full-time students are those students enrolled in nine or more credit hours of courses.

Retention and Persistence refer to the students return to college following their first semester and enrollment in the subsequent semester.

Motivation is the phenomenon that deals with the student expending energy toward the accomplishment of a task such as completing a course. Sources of motivation can come from the students internal drives and needs or can be externally provided from such sources as parents.

Non-traditional student is the student who in times past would not have been coming to college, such as economically disadvantaged students, students with academic difficulties, older learners, and minority students.

Grade Point Average (GPA) is the total of a student's quality points earned in each course divided by the total
number of semester hours in which the student enrolled and did not withdraw.

*Income* is the amount of income earned by the student's parents.

*Career Decided* is whether or not the student has decided upon their career.

*Academic Goals* is the amount of college training the student expects to complete.

*Goals* are those activities which the student expects to accomplish in his career.

*Parental Encouragement* is the degree to which the parents are encouraging the student to go to college.

*Importance of College to Self* is the degree to which the student is self motivated to go to college.

*Personal Assessment and Goal Setting System (PAGSS)* is the group of assessment instruments given to entering students to determine their appropriate placement in developmental classes. *PAGSS* measures algebra, math, reading, and writing skill levels.

*Enrollment-Sl* is the number of credit hours that the student actually enrolled for in the first semester following orientation.

*Withdrawals-Sl* are the number of credit hours that the student withdrew from in the first semester.
Incompletes-S1 is the number of courses that a student took an incomplete for in the first semester.

Enrollment-S2 is the number of courses that the student enrolled for in the second semester following orientation.

2.0 and Under GPA refers to the number of students who achieved this level of GPA during their first semester.

Over 2.0 GPA refers to the number of students who achieved this level of GPA during their first semester in college.

Attrition is the percentage of students who do not return to the institution.

Full Time Equivalent Student is the equivalent of one student who attends the college and takes 30 semester hours per year.

Intervention is a treatment applied to a student attempting to lessen a potential problem.

Importance of This Study

This study was designed to demonstrate that an orientation program which meets the informational and academic skill needs of students will have a positive effect on student behaviors, particularly retention. There are savings in human terms as students avoid being conditioned to fail, as both the students and the institution learn to
identify problems earlier. Improvement in retention also
enhances the fiscal performance of the institution.

This study provided empirical evidence regarding whether
an orientation program which meets students needs is viable
in a specific institution. A model was developed from which
future orientation programs at this institution may be
patterned.

The future gains from orientation programs at this
specific college are expected to be:
1. improved retention;
2. better student preparation for their ensuing college
   program;
3. more realistic student goal setting;
4. better student mental health;
5. fewer students on probation;
6. increased number of credit hours completed.
CHAPTER TWO
REVIEW OF RELATED LITERATURE

The literature dealing with techniques for preventing student attrition reveals many points of view. However, the body of literature relevant to the topic can be considered in three areas: prediction of attrition, intervention techniques, and orientation program outcomes.

Prediction of Attrition

There are numerous variables that predict the attrition and retention of college students. The research generally considers GPA, motivation, study and academic skills, student characteristics, and student's goal clarification as factors that are predictive of retention.

Grade Point Average (GPA)

Pascearella and Terenzini (1978), and Astin (1975), concluded from their reviews of the literature that the most
consistent factor predicting persistence is student grade point average. Creamer (1980) concluded that while retention and grades were correlated, they were probably affected by a common suppressor variable: clear goals. This, according to Creamer, is probably the reason working students have had a greater persistence in college. The research of Kester (1980), reported in a study of 28 California Community Colleges, identified two global predictors of persistence, Sex/Ability and Motivation. GPA was identified as the measure of ability. More recently, Smith (1983) showed that the best predictor of persistence in a community college was high school GPA.

Motivation

Hart and Keller (1980), investigating the reasons for poor academic performance in a self-report study, identified these factors: the student's own lack of motivation, improper study habits and inattention to school. The second major global predictor from Kester's (1980) study, motivation, was measured by goals, parental encouragement and importance of college to self. Astin (1975) reported that degree plans at entrance (goals), concern about college
finances, study habits and educational attainment of the parents all predicted retention.

Study and Academic Skills

Astin (1975), Hart and Keller (1980), and Kester (1980) all report the lack of study skills as a predictor of poor performance, and the presence of those skills as a potential predictor of persistence. Crandall's (1984) survey of the literature reported that students most likely to drop out of college were those with poor academic records, study habits, skills and low aspirations.

Smith (1983) reported that 73.5% of non-persisting students at her school were correctly classified by using the following variables as ordered in a regression equation: high school grade point average, hours completed in the fall quarter, age, mathematical placement score, time chosen to take classes, English placement score, and marital status.

The studies quoted above demonstrate that grade point average, motivation and academic skills contribute directly to a student's persistence and performance in college. Additionally, demographics influence a student's persistence in college.
Student Characteristics

The students who make up the target sample of this study were far different than students a generation earlier. Crawford, McFarland and Rhatigam (1978) summarized the characteristics of the "open admission" students. They are first generation college students, they are non-traditional and they are older. They have lower family incomes, they work more off-campus hours and they reside in urban centers. This population is composed of a large percentage of students from racial minorities, veterans and women returning from homemaking. A substantial percentage of these students have had less than a highly successful academic career and are in need of some remedial intervention.

Waterhouse (1978) described several of the social/psychological characteristics of these "new" students. They have low self-concepts, limited experiential backgrounds, poor attitude toward formal schooling, and low levels of persistence, self-reliance and responsibility.

The predictable causes of attrition enumerated above represent the most productive of those studied over the years. In addition, the following were listed in a review of the literature by MacMillan (1969): high school
performance, scholastic aptitude, college grades, age, sex, socio-economic status, family values (encouragement, discussions at home, parental presence), college importance, finances, individual attitudinal factors (opinions, expectations, attitudes, self reliance, seriousness of purpose, individualist, optimism, future orientation, gratification delay, self concept, higher aspirations and autonomy), peer pressure, college environment, race, parents' educational level.

Orientation Intervention Techniques

One of the techniques used to stimulate higher retention is the orientation program for the entering student. Orientation programs designed to minimize student attrition show diversity in both content and format.

In a college survey, Drake (1966) reported that the content of orientation programs was informational (41%), social (41%), and intellectual (18%) activities. The following literature review describes the range of content of orientation programs that have been used in colleges and universities in the United States.
Many orientation activities are conducted to acquaint the student with the institution. Among these reported in the literature are a freshman orientation with lecture, campus tours and meetings with the faculty (Donk and Hinkel, 1971); a packaged program with take-home exams which asked questions about school policies, probations, and withdrawal (Opitz, 1973); floor meetings with roommates, campus tours, and the like (Krall, 1981); familiarization with the school via work-study program (Quesada-Fulgardo, 1978); and a step-by-step trial run of the registration process (McCoy, 1973).

Some programs emphasized that more mature behavior was expected of college students. Hammons (1975) described a program in which the primary goal was to inform the student regarding the differences between a high school and a college student. The one-half day course dealt with teaching techniques, grading and goals. Dorfman and Christensen (1976) discussed a freshman orientation program in which the goal was to modify the students' perceptions of the college environment.

Many college orientation efforts consist of programs designed to master the college administrative processes. McCoy (1973), Brody (1974), Quesada-Fulgardo (1978), Higgins
(1979), Santee and Davis (1980), and Brown (1981) all report that some element of their college orientation included familiarization with college handbook and catalog, college calendar, policies, facilities, campus life, library processes, step-by-step run through of class registration, and graduation requirements.

Skill Development Content

Some orientation programs have gone beyond preparing the student for tasks necessary to cope with college life to providing remedial developmental programs. Duke University (1973) conducted summer transitional programs which provided preliminary development programs for English, math, and social studies. Bergman (1978) reported a program which provided library familiarity and counseling through a remedial reading class. Askounis (1978) described a program that provided study skill instruction for students undergoing academic difficulty. Romano (1978) ran a stress-reduction workshop where students acquired skills that they could use in academic stress situations.

A number of colleges, including Valencia Community College, conduct needs assessment which judge the disparity between goals (needs) and skills so that personal
developmental tasks can be recommended (or mandated) and initiated. Prince, Miller and Winston (1974) reported that attrition rates were reduced as a result of a program which assessed each student's level of development and used that assessment to help the student formulate goals. Glennen (1976) described an intrusive counseling technique at the University of Nevada, Las Vegas, which developed class schedules that reflected the students' needs, abilities and goals. The Glennen program also provided intervention for the student during the semester.

Numerous programs have multi-leveled characteristics. This means that there was more than one intervention with the students; the interventions occur at several steps during the academic process. The Glennen (1976) research was an outstanding example of such a multi-tiered program. Each student saw faculty counselors during pre-admission. Any special problems that might interfere with the students' learning were identified. Class schedules reflected individual student learning needs. During the semester, intrusive counseling was done to deal with admission and program options. Students who received low grades and those on probation were seen by faculty counselors and were guided to tutoring, developmental and study skill programs.
Orientation Program Formats

The literature survey that has been conducted here shows that every conceivable form of orientation format regarding duration and content has been used. These formats vary in length from Wigent's (1971) one and one-half hour, very brief orientation, to Litwin's (1976) full semester orientation course for credit. Drake (1966), in a study of 135 randomly selected colleges, learned that 95% have a college-week format, 13% use a summer pre-college program, 5% use a formal course for freshman orientation, and 90% do registration and testing during orientation.

In addition to differences in duration of programs, formats within courses and programs were very diverse. This diversity included a packaged course with take-home tests (Opitz, 1973); one-on-one counseling (Brown, 1981); interaction between peers, advisors, faculty, counselors, students (Brown, 1981); structured vs. unstructured counseling (Myers, 1976); combined work study and orientation programs (Quesada-Fulgardo, 1978); three-day, seven-session program (Higgins 1979); skill development workshops of one-half to three days (Romano, 1978, Askounis, 1978); weekly rap sessions with counselors and peers (Davenport, 1978, Brody 1974); orientation as part of a remedial reading class.
(Bergman, 1978); and intrusive counseling (Glennen, 1976).

Many of the programs cited included lectures, audio-visual presentations, discussion formats and video feedback.

**Small Groups**

Butts (1971) concluded that there was almost universal agreement that small groups were the right design in orientation. Large information sessions at the beginning were acceptable to introduce the students to the college, but small groups were where the orientation really needed to take place. Butts' position was supported by the following studies.

At Kingsborough Community College of the University of New York (Wilner, 1974), 83% of students participated when invited to a small-group informal briefing with a counselor. There were three to four people in the office. Discussions at these meetings were related to all forms of administrative processes, course-related material, options, policies, pre-requisites, descriptions of remedial courses, etc. This informal session was held prior to the formal counseling and registration program and was conducted in a large group setting. Over 90% of the students expressed pleasure with that form of orientation.
Kopecek (1971) did a comparison study of three orientation design models and reported, based on a sample size of 180, that Grade Point Average (GPA), at the end of one semester, was highest (2.44) in a discussion oriented small group, lower (2.33) in a large group authoritarian presentation, and lowest (2.22) in an orientation that consisted of a mailout presentation where all of the information was presented in a packet.

General

A number of studies, including Hammons (1975) and Wigent (1971), used a criteria-based model for selecting intervention techniques. In part, these techniques are based on information acquired from students currently enrolled in the college. Gomersall and Myers (1966) also used a similar model in an industrial application.

Orientation Program Outcomes

The effect of orientation programs has been mixed. While this study assessed orientation from a retention perspective, literature also indicates that GPA and attitudinal factors may also be affected by orientation.
A number of studies have shown a one-semester advantage to students undergoing some form of orientation program, but this advantage tends to erode after a semester or one year. Myers (1976) showed that GPA and the number of hours completed increased for an orientation group as compared to a control group, but this advantage disappeared after seven months.

Hammons's (1975) findings at Burlington Community College showed that attrition decreased from 25% before systems orientation to 7.6% afterward. Beck (1980) reported that while GPA did not differ, attrition was reduced from 14 to 9% for Human Potential Seminar groups. Santee and Davis (1980) similarly found no effect on GPA but a decrease of 4% in dropout rates and an increase in the number of courses taken. Duke University (McCollough, Peterson and Wallace, 1973) also reported no effect on GPA but a significant effect on persistence three semesters later. Rosenblatt and Vinson (1981) at the University of Hartford, were able to decrease probation from 20% to 9% and appreciably increase retention.

In one of the most positive outcomes, Glennen (1976) reported the following results from his multi-leveled
program: 74% of the students who were in danger of failure and saw their counselors passed their courses; attrition was reduced from 45% to 6%; honor rolls increased 9%; there was a 25% increase average in grade; there were 326 fewer students on academic probation; 46 fewer students were suspended for poor academic performance; students took more hours and heavier course loads; fewer students dropped courses; more students continued from semester to semester; there was a reduction in need for the psychological clinic.

Litwin (1976) reported that orientation programs were most effective in introducing students to school-related information, and least effective in career decision-making. Donk and Hinkel (1971) reported that attendance at orientation programs made no difference in student attitudes or persistance in school, but was more beneficial to males than to females in terms of GPA.

Recent research supports the argument that orientation programs can have substantial effect on student behaviors. Jones (1984) reported that in an eight-week orientation class, retention and GPA were better for an experimental group than a control group that did not receive the orientation.
Johnson (1979) argued that, "A 3 to 5 percent increase in retention can provide a measurable return to both the student and the college in a short period of time" (p. 30). Creamer (1980) evaluated all types of advisement and orientation programs and noted that, regardless of method, they all worked in some degree to increase retention when compared to untreated control groups.

Summary

The variables that appear to be the most consistent predictors of persistence in college are Grade Point Average, academic goals and academic skills. Current students vary considerably from previous college students, particularly in the areas of self-concept and family background (Crawford, McFarland and Rhatigam, 1978; Waterhouse, 1978). These factors provide the clues for designing orientation techniques that will assist today's students.

Orientation programs have been concerned with such diverse activities as acquainting the student with the institution, understanding the differences between high school and college, mastering the administration procedures of the college and training the student in academic skills. These programs have been presented in brief seminars, formal
courses and in week-long periods preceding the first semester. The effect of orientation has been mixed. Some programs have reported an effect on GPA while other researchers report no effect. Generally, however, attrition reduction has been reported for all orientation programs.

From the research evidence we can draw the following conclusions relative to orientation research:

1. the size of the treatment group should be relatively small;
2. the content of the orientation must include the elements of familiarity with the college, skill development, and goal setting;
3. GPA, motivation, family background and attitudinal factors may influence persistence;
4. orientation should include an assessment of academic skills and appropriate placement for students in need of remediation.
CHAPTER THREE

METHODOLOGY

This chapter describes the research activities that were conducted to determine the effect of orientation on student behavior. This chapter includes the quasi-experimental design, information about the population, the manner in which subjects were selected, the interventions that were applied to the subjects and the measures and statistical methods used in this research.

Design

The experimental design and the hypothesis of this study seek to answer the following principal research questions:

1. Will the orientation have a positive effect on the academic behaviors of the experimental group subjects? (reference hypotheses H1 through H4)
2. Are there demographic factors which are most responsive to the experimental treatment? (reference Hypothesis H6)
3. Will the new orientation help students to improve their ability to set academic goals? (reference Hypothesis H5)

A 1 X 2 multivariate design was used to test differences between the experimental group and a no treatment control group. Subjects were randomly assigned to each condition.

The independent variable consisted of the experimental orientation. The dependent measures were the behavioral and attitudinal measures derived from the experimental and control groups. Differences between the means of the behavioral and attitudinal data were analyzed by a series of t-tests, correlations, and multiple regressions. The .05 level was used to determine statistical significance.

It was originally intended that there be 100 subjects in each of the experimental and control groups. The experimental subjects were to have been treated in groups of 25 each.

This project was designed to be a comparison of the behaviors of experimental group subjects with those of control group subjects. Subjects were to be selected randomly so that no critical variables differentiated the two groups other than the experimental treatment. An
analysis was performed to determine whether there were any significant differences between the groups. The subjects were not identified by group until after the traditional orientation and advising had been completed.

Control Group

The randomly selected control group underwent the same traditional forms of orientation and advisement currently in place in the institution: a 30-minute orientation film, the PAGSS test (Personnel Assessment and Goal Setting System) which measures developmental skill levels (see Table 2), a 45-minute group interpretation of test scores, and a 15-60 minute personal advising session for scheduling of courses (see Appendix B for specific procedures).

Experimental Group

The experimental group was asked to report on a scheduled basis for the experimental orientation. The experimental group having previously received the college's traditional orientation, also received the two-day experimental
orientation (see appendixes B and C for specific procedures).

Experimental Program Design

The design of the orientation program was based on three major inputs. These inputs were from:

1. Published literature derived from the efforts of other institutions, almost exclusively limited to situations where the institution had put a program into place and had some experience with it;

2. A summary of data derived from non-returning students from the experimental institution and their comments on causes of academic or institutional problems;

3. A summary of data derived from several classes (a range of advanced through remedial classes) in which first-time students at the end of one semester were asked to respond to what types of academic and institutional problems that they had encountered in the institution.

The data from these three sources were prioritized based on the most frequently recurring inputs. Those items that occurred in highest proportion were considered primary
topics for inclusion in the orientation program. Those topics included:

1. Tour of the campus and college resources;
2. Goal setting;
3. Learning theory seminar;
4. Strategies for dealing with instructors;
5. Stress management;
6. Mock registration;
7. Grade getting seminar
   a. Note taking
   b. Studying
   c. Test taking;
8. Reading and writing with low skills;
9. Time management;
10. Assertiveness.

When the research orientation program design was completed, there was a preview of the program presented to a group composed of counselors, faculty and current students. The intent of the preview was to eliminate as many administrative problems as possible and to get feedback from the group as to the appropriateness of the material content and level.
The preview lasted approximately two hours, during which time the theme of each topic was discussed, along with handouts, overhead transparencies, exercises and the type of audiovisual aids to be used. The preview was conducted for the campus academic dean, counselors, faculty and students. The preview attendees were very free with their critique of materials and their critiques for the most part were incorporated into the program. All attendees were generous with their support of the program and its design.

Population

Valencia Community College is located in Orlando, Florida, a rapidly growing metropolitan community with significant agricultural, tourist and aerospace industries. The college has three campuses located at the eastern, western and central sections of Orange County, Florida. The students at Valencia are primarily single, white, recent high school graduates with a high C grade point average in high school. The college has little on-campus social life; fraternities and sororities are non-existent. A majority of students work at least part-time.
The population for the experiment included all of the applicants who were attending college for the first time, and were full-time (operationally defined as 9 hours), who had taken their entrance testing (PAGSS tests of basic skills), and who had been advised in their course selection for the fall. While it is recognized that the typical full-time criteria is 12 credit hours, the average hourly enrollment in this institution in less than 9 hours.

Motivational Considerations

A problem exists in analyzing the data, namely the question of how one deals with the motivational effect of self-selected subjects. It is possible that the students who returned questionnaires were more motivated to respond than others.

There may have been two similar groups of students compared in this experiment. Hypothetically, the experimental students and the control students are both people with the highest motivations to respond. Because of the nature of the candidate selection process, both experimental and control groups self-selected and thus both
may be high in motivation. There were two self-report questions, one which dealt with internal motivation and one which dealt with external motivation. These questions referenced the influence of the parents toward students coming to school and also the importance of school to self.

Certain racial and demographic characteristics of the sample should be considered. There were five black females in the first day of orientation with none returning for the second day. Two were eventually purged from the data as non first-time students. There were no black males in the experimental groups.

Selection

Students were selected to participate on a voluntary basis. All subjects were notified that they were being considered for participation in a test of an experimental orientation program. The notice was a consent form that requested permission to use the data from their records and to obtain additional demographic and personal information for analysis purposes. Individuals were placed in the experimental group on an alternating basis. Since all subjects were put on notice that they were participating in
an experiment, any Hawthorne effect interference between control and experimental groups would be minimized. The mailing continued until one month prior to the beginning of the semester. This allowed one week for return of the final mailing, two weeks for the first day of seminars and one week of second day seminars.

Approximately halfway through the mailing it was recognized that controls were responding at approximately two times the return rate of the experimental subjects; therefore, it was decided to conduct the second half (approximately) of the mailing by selecting two experimental subjects for each control. The selection of experimental or control placement was on a two-even, one-odd basis.

In order to take advantage of small group findings (Butts, 1971), students were to undergo treatment in groups of 25. It was anticipated that the intervention for each group would be conducted in four three-hour sessions over a two day period. Thus, the experimental treatment of all groups should have been completed in an eight working day period, four days in each of two weeks. The project experimenter conducted all experimental orientations. The subjects were not as responsive as anticipated. A lower-
than-expected response produced treatment group sizes of three to eight subjects per group. There were a total of seven first-day sessions and five second-day sessions. Telephone followups to solicit appointments were made and reminders given the evening prior to the orientation day.

Subjects who did not attend the second day of treatment were sent a letter over the academic dean's signature requesting that those subjects come in for a makeup orientation session. Three of 28 participated in the makeup session.

Table 1 contains a summary of the response rate of students to participation in the orientation program.
TABLE 1
RESPONSE RATE OF STUDENTS TO PARTICIPATION IN A RESEARCH ORIENTATION PROGRAM

<table>
<thead>
<tr>
<th></th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mailings</td>
<td>208</td>
<td>149</td>
</tr>
<tr>
<td>Returns</td>
<td>67</td>
<td>84</td>
</tr>
<tr>
<td>Signed up for experiment</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Experimental no-shows</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Participated for one day</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Participated for two days</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>No. of subjects after records purge</td>
<td></td>
<td>72</td>
</tr>
<tr>
<td>one day experimental</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>two day experimental</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

Students decreased their participation at each step of the orientation process. Of the 208 experimental subjects
who were sent letters, 67 returned them and subsequently 51 participated in the experiment. Of the 51 who participated the first day, 26 returned for the second day of treatment.

A second check of the records revealed several students who had previously attended college. These students were eliminated from the statistical analysis. Two additional students were not considered in the analysis since they left halfway through the first day of orientation.

Because of the response of students to the evaluation, a natural two group quasi-experimental model developed out of the process, those who were treated for one day of orientation and those who were treated for two days of orientation.

**Treatment**

There are two orientation programs discussed herein: the traditional orientation currently in place in the institution, and the research orientation program.
Traditional Orientation

The traditional orientation at Valencia Community College consists of a half-hour movie or verbal presentation orienting the student to the college, entrance testing for academic placement, group interpretation of test scores, and individual course advising. This process takes approximately five hours, with the test component using the majority of the time (four hours).

The commercial instruments used in the traditional orientation program consisted of the PAGSS subtests which are identified as to source in Table 2.
### Table 2

#### PAGSS Subtest Information

<table>
<thead>
<tr>
<th>PAGSS Subtest</th>
<th>Source</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>Iowa Silent Reading Test, level 3*</td>
<td>.92</td>
</tr>
<tr>
<td>Writing</td>
<td>Missouri College English Test**</td>
<td>.93</td>
</tr>
<tr>
<td>Arithmetic</td>
<td>ETS Cooperative Arithmetic Test***</td>
<td>.86</td>
</tr>
<tr>
<td>Algebra</td>
<td>ETS Cooperative Algebra Test***</td>
<td>.85</td>
</tr>
</tbody>
</table>


Content validation was conducted by the test designers. There is no criterion based validation available for the PAGSS subtests. These subtests are used for placement, with
students directed to a variety of courses based on their subtest grade.

Experimental Orientation Interventions

The following summarizes the orientation program that was conducted. Appendix C contains details on the specific seminars and their administration, including principal topics, overhead transparencies, handouts and other audiovisual aids.

First Day of Orientation

An overview of the orientation program was presented along with a review of the school's catalog and class schedule. The college testing program was discussed along with the value of goal setting improving grade getting behavior.

The students toured all buildings on the campus, with an explanation of all major functions occurring in each area and were given handouts identifying location of resource personnel.
Students were introduced to the process of goal-setting and worked on a personal goal-setting activity. The students were exposed to a systematic method of decision making.

Theories of learning were presented as an introduction to the subsequent topic on grade getting. If students understand technically how people learn they would be more willing to accept the logic of study and test-taking techniques.

Strategies for dealing with instructors were presented to the students. Discussion centered on the social and communication skills of students that influenced instructors to favor or disfavor students. The importance of doing work completely and on time was explained to the student.

A stress management element was provided during this first day of orientation. The lecture presented discussed the causes of stress and their relative effect on the body.

The students selected their courses and sections, filled out course request forms and went through a simulated registration process. The students were exposed to problems that are typical of the registration process.
Second Day of Orientation

The second day of interventions took place approximately one week following the first day of orientation presentations. The students discussed the problems that they had encountered in the real registration process and worked on an exercise for the subsequent note-taking seminar.

The stress management material was completed with the presentation of a movie, "Managing Stress," and discussion about the variety of methods available for stress relief.

A "grade getting" presentation was conducted which included:

1. Note Taking: A note taking exercise was conducted in which students took notes from a film strip and compared them to the notes of the instructor also taken during the film strip.

2. Studying: A lecture was presented on formal study techniques following which students did an underlining exercise.

3. Test Taking: Discussions centered around the techniques successful students have used to improve their test performance.
Three brief topics were included at the end of the second orientation day; reading and writing with low skill, time management and assertiveness. Hints were provided on how to read and write in college even though one might have relatively poor skills in these areas. Students planned two days of their schedule and discussion then centered on the amount of time necessary for work, school, studying and recreation. Priorities of time were discussed. A brief assertiveness presentation was conducted on improving one's assertiveness, specifically as it applied to dealing with the college.

As a summary device the students were shown a movie on test anxiety, "Test Anxiety and How To Beat It," and how to overcome those anxieties. A discussion followed on how numerous anxieties and lack of skills can be overcome. Students did an evaluation of the two-day orientation.

There were few deviations, or problems with the planned orientation procedures. Discrepancies in the presentation to differing groups were minimized.

All of the first-day seminars were run prior to registration so that the the students would have the experience of the mock registration element prior to registration. It was intended that the seminars occur as
close as possible to the beginning of the semester in order to maximize the recency effect.

The orientation program conducted on the first day required approximately six hours. The second day of treatment lasted approximately five hours.

Measures

The effect of treatment on the two experimental groups (N=25,22) was compared with the behavior of the control group (N=72). Effects measured were primarily behavioral: GPA, hours completed, hours signed up for in subsequent semester, and other factors deemed pertinent. In addition to general treatment effect the data were analyzed to show effects associated with the demographic factors of the students.

The following demographic measures were collected for analysis in this experiment:

1. age;
2. sex;
3. race;
4. parental income;
5. parental schooling;
6. marital status;
7. career determination;
8. academic goals;
9. parental encouragement;
10. importance of college to self;
11. pre-test scores of writing, reading, math, algebra (obtained from institutional records);
12. high school GPA.

Except for item 11, all of the measures were obtained by self-report from the experimental and control subjects. These measures were taken to determine whether any of these could be used as eventual predictors of retention to generate a profile for selecting candidates who might best be served by this type of treatment.

Upon completion of the second day of seminars, students were asked to evaluate the quality of nine of the individual seminars and whether they felt redesign was necessary. At the end of one semester an attitude survey was sent to both experimental and control subjects in an attempt to determine longer term attitudes and effects of the orientation program.
Student demographics, social and institutional activities and goal setting were gathered on the self-report instruments seen in Appendix D. Data on Grade Point Average, Incompletes, Withdrawals and Second Semester registration were gathered from institutional records.

After treatment of the experimental group, both groups were monitored through their first semester to determine the following dependent measures:

1- **Grade Point Average.** The average of the students' final grades from the first semester in college.

2- **Enrollment.** The number of courses the student registered for in the second contiguous semester, including those who did not return and thus signed up for zero courses.

3- **Withdrawal.** The number of courses that the student withdrew from during the first semester.

4- **Incompletes.** The number of courses that the student received an Incomplete grade in during the first semester.

5- **Social and Institutional Activities.** The number of social and institutional activities that the student participated in during the first semester.

6- **Goal Setting.** The degree to which the student clarified his/her occupational and academic goals during the first semester.
An attempt was made to interview and/or survey all students who have participated in this study and subsequently dropped out of class or school. These interviews and surveys were designed to accumulate data that would help identify weaknesses of the orientation program and identify necessary support services.

An important aspect of this research project is that there were behaviors measured which indicated the quantitative effects of the experimental orientation program. Thus, the behavioral effects of the institution's traditional orientation can be contrasted with the behavioral effects of the research orientation program.

Statistics

The following statistical methods were used to evaluate the data and determine the generalizability of the sample data to the larger population.

1. The descriptive statistics of mean and standard deviation were computed for the demographic factors and dependent variables of the control and experimental groups.
T-tests of significance were computed to determine if any significant differences existed between the experimental and control groups that were at the 0.05 level.

Trends of dependent variables were examined to determine any consistency in the behavioral effects of the orientation.

When the experiment developed a natural two experimental model format, t-tests of significance between the two groups and control group were performed on all measures.

2. Pearson Product-moment Correlations were performed to develop a correlational matrix between all demographic and dependent variables. Correlational matrices were developed from the data for each of the experimental and control groups.

It is recognized that when computing many correlations, one can get erroneous false positives. However, it was felt that if a variable was identified that was a consistent predictor across the groups that that measure would be useful for selecting future candidates for an upgraded orientation.

Multiple regression analyses were conducted to determine if there were any demographic measures that either singly or in combination, had a high ability to predict the dependent
measures. A review of the multiple regression results indicated a need to conduct a co-variance analysis to determine whether PAGSSMATH was a useful predictor of GPA. This analysis was performed using the semester one GPA data for experimental and control groups.

3. A series of t-tests were computed to determine if any statistical difference at the .05 level existed between high and low GPA performers and their controls in retention behaviors. The t-tests were computed for experimental and control groups to determine whether there was a differential effect on students with a lower GPA.
CHAPTER FOUR

RESULTS

This chapter provides the results of the quasi-experimental orientation study. The data and analysis are grouped as general information including sample statistics, information pertaining to specific hypotheses including comparative statistics and analysis of trends and cost.

General Information

Statistical analyses were produced on the Statistical Programs for Social Sciences (SPSS) for DOS/360, Version H, Release 9.0, Oct 22, 1981, SPSS, 2nd Edition, McGraw-Hill. This information includes the Means, Standard Deviations, and number of subjects for experimental and control groups. Comparative analyses were also performed using the SPSS programs. Figure 1 is a flow chart of the data analysis that was conducted during this research project.
Figure 1. Data Analysis Flow Chart.
The sample statistics pertaining to each of the control and experimental groups are contained in the subsequent tables 3 through 5.

Table 3 describes the sex, race and marital status of the experimental and control groups, together with racial data from the college's total population.
<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Exp 1 day</th>
<th>Exp 2 day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>no.</td>
<td>%</td>
<td>no.</td>
</tr>
<tr>
<td>No. of subjects</td>
<td>72</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>16</td>
<td>22.2</td>
<td>6</td>
</tr>
<tr>
<td>Female</td>
<td>56</td>
<td>77.8</td>
<td>16</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>6</td>
<td>8.3</td>
<td>3</td>
</tr>
<tr>
<td>White</td>
<td>58</td>
<td>80.6</td>
<td>17</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>9.7</td>
<td>2</td>
</tr>
<tr>
<td>Not reported</td>
<td>1</td>
<td>1.4</td>
<td>0</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>2</td>
<td>2.8</td>
<td>1</td>
</tr>
<tr>
<td>Single</td>
<td>63</td>
<td>87.5</td>
<td>21</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>6.9</td>
<td>0</td>
</tr>
<tr>
<td>Not reported</td>
<td>2</td>
<td>2.8</td>
<td>0</td>
</tr>
</tbody>
</table>

College racial demographic data for school year 1983-1984:
black=8.6%
white=83.1%
other=8.3%
Table 4 shows the mean, standard deviation and number of valid cases for the demographic, attitudinal, skill and behavioral information acquired for the Control Group of this experiment.

**TABLE 4**
A COMPILATION OF THE MEAN, STANDARD DEVIATION AND NUMBER OF CASES FOR THE DEMOGRAPHIC FACTORS AND DEPENDENT VARIABLES OF THE CONTROL GROUP

<table>
<thead>
<tr>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Valid Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>19.5</td>
<td>4.8</td>
</tr>
<tr>
<td>Income</td>
<td>29829</td>
<td>18162</td>
</tr>
<tr>
<td>HS GPA</td>
<td>2.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Fathers School</td>
<td>12.4</td>
<td>3.1</td>
</tr>
<tr>
<td>Mothers School</td>
<td>12.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Marital Status</td>
<td>2.1</td>
<td>0.5</td>
</tr>
<tr>
<td>Career decided</td>
<td>2.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Academic Goals</td>
<td>2.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Parental Encour.</td>
<td>3.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Importance of Coll. to Self</td>
<td>4.1</td>
<td>0.5</td>
</tr>
<tr>
<td>PAGSS Writing</td>
<td>42.2</td>
<td>15.4</td>
</tr>
<tr>
<td>PAGSS Mathematics</td>
<td>31.3</td>
<td>8.9</td>
</tr>
<tr>
<td>PAGSS Reading</td>
<td>50.4</td>
<td>17.5</td>
</tr>
<tr>
<td>PAGSS Algebra</td>
<td>18.1</td>
<td>9.8</td>
</tr>
<tr>
<td>Enrollment-S1</td>
<td>12.3</td>
<td>2.5</td>
</tr>
<tr>
<td>Withdrawals-S1</td>
<td>3.2</td>
<td>4.6</td>
</tr>
<tr>
<td>GPA-S1</td>
<td>2.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Incompletes-S1</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Enrollment-S2</td>
<td>2.9</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Key:  
S1=Semester 1 (Fall 1984)  
S2=Semester 2 (Spring 1985)  
The keys for the factors in this chart are contained in Appendix F.  
Enrollment-S1 is reported in hours, the remainder of dependent variables are reported in courses.
Table 5 shows the mean, standard deviation and number of valid cases for the demographic, attitudinal, skill and behavioral information acquired for the one-day experimental group.

TABLE 5
A COMPILATION OF THE MEAN, STANDARD DEVIATION AND NUMBER OF CASES FOR THE DEMOGRAPHIC FACTORS AND DEPENDENT VARIABLES OF THE ONE-DAY EXPERIMENTAL GROUP

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Valid Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>17.7</td>
<td>0.8</td>
<td>21</td>
</tr>
<tr>
<td>Income</td>
<td>28245</td>
<td>11524</td>
<td>19</td>
</tr>
<tr>
<td>HS GPA</td>
<td>2.7</td>
<td>0.6</td>
<td>20</td>
</tr>
<tr>
<td>Fathers School</td>
<td>13.2</td>
<td>2.5</td>
<td>18</td>
</tr>
<tr>
<td>Mothers School</td>
<td>12.6</td>
<td>1.5</td>
<td>21</td>
</tr>
<tr>
<td>Marital Status</td>
<td>2.0</td>
<td>0.0</td>
<td>21</td>
</tr>
<tr>
<td>Career decided</td>
<td>2.3</td>
<td>0.8</td>
<td>21</td>
</tr>
<tr>
<td>Academic Goals</td>
<td>2.6</td>
<td>0.7</td>
<td>18</td>
</tr>
<tr>
<td>Parental Encour.</td>
<td>3.8</td>
<td>0.4</td>
<td>20</td>
</tr>
<tr>
<td>Importance of Coll. to Self</td>
<td>4.1</td>
<td>0.4</td>
<td>21</td>
</tr>
<tr>
<td>PAGSS Writing</td>
<td>34.4</td>
<td>15.2</td>
<td>19</td>
</tr>
<tr>
<td>PAGSS Mathematics</td>
<td>32.1</td>
<td>9.1</td>
<td>19</td>
</tr>
<tr>
<td>PAGSS Reading</td>
<td>44.2</td>
<td>15.5</td>
<td>19</td>
</tr>
<tr>
<td>PAGSS Algebra</td>
<td>20.1</td>
<td>9.9</td>
<td>19</td>
</tr>
<tr>
<td>Enrollment-S1</td>
<td>12.2</td>
<td>1.9</td>
<td>21</td>
</tr>
<tr>
<td>Withdrawals-S1</td>
<td>3.0</td>
<td>3.9</td>
<td>21</td>
</tr>
<tr>
<td>GPA-S1</td>
<td>2.5</td>
<td>0.6</td>
<td>18</td>
</tr>
<tr>
<td>Incompletes-S1</td>
<td>0.0</td>
<td>0.2</td>
<td>21</td>
</tr>
<tr>
<td>Enrollment-S2</td>
<td>3.0</td>
<td>1.9</td>
<td>22</td>
</tr>
</tbody>
</table>

Key:  
S1=Semester 1 (Fall 1984)  
S2=Semester 2 (Spring 1985)  
The keys for the factors in this chart are contained in Appendix F.  
Enrollment-S1 is reported in hours, the remainder of dependent variables are reported in hours.
Table 6 shows the mean, standard deviation and number of valid cases for the demographic, attitudinal, skill and behavioral information acquired for the subjects who participated for two days in the experiment.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Valid Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>19.3</td>
<td>4.0</td>
<td>24</td>
</tr>
<tr>
<td>Income</td>
<td>40333</td>
<td>26222</td>
<td>15</td>
</tr>
<tr>
<td>HS GPA</td>
<td>2.8</td>
<td>0.6</td>
<td>23</td>
</tr>
<tr>
<td>Fathers School</td>
<td>12.3</td>
<td>2.8</td>
<td>23</td>
</tr>
<tr>
<td>Mothers School</td>
<td>12.1</td>
<td>2.8</td>
<td>23</td>
</tr>
<tr>
<td>Marital Status</td>
<td>1.9</td>
<td>0.3</td>
<td>24</td>
</tr>
<tr>
<td>Career decided</td>
<td>2.5</td>
<td>0.7</td>
<td>21</td>
</tr>
<tr>
<td>Academic Goals</td>
<td>2.4</td>
<td>0.6</td>
<td>23</td>
</tr>
<tr>
<td>Parental Encour.</td>
<td>3.7</td>
<td>0.9</td>
<td>23</td>
</tr>
<tr>
<td>Importance of Coll.</td>
<td>4.0</td>
<td>0.6</td>
<td>24</td>
</tr>
<tr>
<td>to Self</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAGSS Writing</td>
<td>42.2</td>
<td>12.8</td>
<td>22</td>
</tr>
<tr>
<td>PAGSS Mathematics</td>
<td>34.5</td>
<td>6.0</td>
<td>22</td>
</tr>
<tr>
<td>PAGSS Reading</td>
<td>54.8</td>
<td>12.7</td>
<td>22</td>
</tr>
<tr>
<td>PAGSS Algebra</td>
<td>20.3</td>
<td>8.4</td>
<td>22</td>
</tr>
<tr>
<td>Enrollment-S1</td>
<td>12.6</td>
<td>1.9</td>
<td>24</td>
</tr>
<tr>
<td>Withdrawals-S1</td>
<td>1.2</td>
<td>2.2</td>
<td>24</td>
</tr>
<tr>
<td>GPA-S1</td>
<td>2.7</td>
<td>1.0</td>
<td>24</td>
</tr>
<tr>
<td>Incompletes-S1</td>
<td>0.2</td>
<td>0.8</td>
<td>24</td>
</tr>
<tr>
<td>Enrollment-S2</td>
<td>3.5</td>
<td>1.5</td>
<td>25</td>
</tr>
</tbody>
</table>

Key: S1=Semester 1 (Fall 1984)
S2=Semester 2 (Spring 1985)
The keys for the factors in this chart are contained in Appendix F.
Enrollment-S1 is reported in hours, the remainder of dependent variables are reported in courses.
Information Related to Hypotheses

The data analyses presented in subsequent paragraphs tested the specific hypotheses enumerated in chapter one.

Hypotheses One Through Four

H1-H4 A two day orientation program based on the needs of entering first-time, full-time college freshman will not have a significant effect on the students' Grade Point Average, retention, withdrawal rate, or number of incompletes.

Table 7 shows a comparison between experimental group day-1 and the control group for the demographic factors that were statistically significant and the dependent variables measured in this experiment. Significance was determined by a series of t-tests.

Table 7 demonstrates that the variables of Parental Encouragement and PAGGS Writing were significantly different between the two groups, but that there were no statistically significant differences when comparing the two groups' dependent behaviors.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Control Gp.</th>
<th>One-day Exp. Gp.</th>
<th>df</th>
<th>t-val</th>
<th>Signif. 2-tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Par.Enc.</td>
<td>3.3(70)</td>
<td>3.8(20)</td>
<td>88</td>
<td>2.2</td>
<td>0.05</td>
</tr>
<tr>
<td>PAGSS Wr</td>
<td>42.2(71)</td>
<td>34.4(19)</td>
<td>88</td>
<td>2.0</td>
<td>0.05</td>
</tr>
<tr>
<td>GPA-S1</td>
<td>2.7(72)</td>
<td>2.5(22)</td>
<td>92</td>
<td>0.1</td>
<td>NS</td>
</tr>
<tr>
<td>Hrs W-S1</td>
<td>3.2(72)</td>
<td>3.0(21)</td>
<td>91</td>
<td>0.2</td>
<td>NS</td>
</tr>
<tr>
<td>Crs Enr-S2</td>
<td>2.9(72)</td>
<td>3.0(22)</td>
<td>92</td>
<td>0.2</td>
<td>NS</td>
</tr>
<tr>
<td>Hrs Enr-S1</td>
<td>12.3(72)</td>
<td>12.2(21)</td>
<td>91</td>
<td>0.2</td>
<td>NS</td>
</tr>
<tr>
<td>Crs I's-S1</td>
<td>0.0(72)</td>
<td>0.0(21)</td>
<td>91</td>
<td>0.4</td>
<td>NS</td>
</tr>
</tbody>
</table>
Table 8 shows a comparison between the experimental group day-2 and the control group for the significant demographic factors and dependent behaviors measured in this experiment.

Table 8 reveals that marital status and hours withdrawn in semester one were significantly different between the two groups. The remainder of the demographic and dependent variables showed no statistically significant difference between the two groups.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Control Gp.</th>
<th>Two-day Exp. Gp.</th>
<th>df</th>
<th>t-val</th>
<th>Signif. 2-tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Sta.</td>
<td>2.1(70)</td>
<td>1.9(24)</td>
<td>92</td>
<td>2.0</td>
<td>0.05</td>
</tr>
<tr>
<td>GPA-S1</td>
<td>2.7(72)</td>
<td>2.7(24)</td>
<td>94</td>
<td>0.1</td>
<td>NS</td>
</tr>
<tr>
<td>Hrs W-S1</td>
<td>3.2(72)</td>
<td>1.2(24)</td>
<td>94</td>
<td>2.1</td>
<td>0.05</td>
</tr>
<tr>
<td>Crs Enr-S2</td>
<td>2.9(72)</td>
<td>3.4(24)</td>
<td>94</td>
<td>1.2</td>
<td>NS</td>
</tr>
<tr>
<td>Hrs Enr-S1</td>
<td>12.3(72)</td>
<td>12.6(24)</td>
<td>94</td>
<td>0.5</td>
<td>NS</td>
</tr>
<tr>
<td>I's-S1</td>
<td>0.0(72)</td>
<td>0.2(24)</td>
<td>94</td>
<td>1.8</td>
<td>NS</td>
</tr>
</tbody>
</table>
Table 9 compares the GPA of experimental and control subjects for high school and college.

**TABLE 9**

A SUMMARY OF THE GPA OF CONTROL AND EXPERIMENTAL GROUPS

<table>
<thead>
<tr>
<th></th>
<th>Semester 1</th>
<th>High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>2.7</td>
<td>2.8</td>
</tr>
<tr>
<td>Day-1</td>
<td>2.5</td>
<td>2.7</td>
</tr>
<tr>
<td>Day-2</td>
<td>2.7</td>
<td>2.8</td>
</tr>
<tr>
<td>College-wide*</td>
<td>2.8</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*(includes all students--not limited to entering freshmen)*

Table 9 shows that there was no change in the ranking of GPA from high school to college. The control group and the experimental group day-2 were similar in high school and college: the day-1 experimental group was lower than the others in both cases.

A co-variance analysis was performed to determine whether PAGSSMATH (entry level math ability) was a useful predictor of GPA. Appendix K shows that PAGSSMATH is a significant co-variant along with GPA for the control group, but not for the experimental groups.

The following information (Table 10) is derived from a series of t-tests which assessed the differences in
dependent variables as a function of whether the students were performing at above or below first-semester 2.00 GPA levels.

**TABLE 10**
A COMPARISON OF DEPENDENT BEHAVIORS FOR SUBJECTS ABOVE AND BELOW 2.0 GPA FOR EXPERIMENTAL AND CONTROL GROUPS

<table>
<thead>
<tr>
<th></th>
<th>below 2.0 GPA</th>
<th>above 2.0 GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Day 1</td>
<td>Day 2</td>
</tr>
<tr>
<td>HrsEnrol-S1</td>
<td>12.1</td>
<td>13.8</td>
</tr>
<tr>
<td>Hrs W-S1</td>
<td>6.4</td>
<td>2.2</td>
</tr>
<tr>
<td>CrsEnrol-S2</td>
<td>2.1</td>
<td>3.5*</td>
</tr>
<tr>
<td>Incompletes-S1</td>
<td>0.1</td>
<td>1.0*</td>
</tr>
<tr>
<td>N(No. of subjects)</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

*Significance at 0.5 level based on comparison of the experimental group with its respective control group. The t-test data from which Table 10 were derived are located in Appendix I.

Hypotheses one through four are only rejected in the following circumstances: there is a significant difference in the number of hours withdrawn by the 2-day experimental group, and there is a significant difference in the courses enrolled for the second semester and the number of
incompletes for the 2-day experimental group that had under 2.0 GPA.

Hypothesis Five

H5- A two day orientation program based on the needs of entering first-time, full-time college freshman will not have a significant effect on the goals that the student clarifies.

Table 11 presents the information derived from a mailing (Appendix D) to experimental and control subjects after they had completed one semester at the community college. Note: Because of an oversight there was no differentiation made for one or two-day experimental subjects. Also, since the survey was anonymous, it was not possible to correlate dependent measures with survey results.
Table 11 contains the response of the two groups relative to participation in school activities and their learning experiences. There is a significant difference in the amount of goal clarification experimental subjects accomplished.
Hypothesis Six

H6- There will be no demographic factors that determine which students are most responsive to the quasi-experimental treatment.

Table 12 shows a comparison between the one and two day experimental groups for the demographic factors that were statistically significant and the dependent variables measured in this experiment.

TABLE 12

A COMPARISON OF THE SIGNIFICANT DEMOGRAPHICS AND DEPENDENT VARIABLES BETWEEN THE ONE- AND TWO-DAY EXPERIMENTAL GROUPS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean(N)</td>
<td>St. Dev.</td>
</tr>
<tr>
<td>PAGS$^*$ Read</td>
<td>44.3(19)</td>
<td>15.5</td>
</tr>
<tr>
<td>GPA-S1</td>
<td>2.5(22)</td>
<td>0.6</td>
</tr>
<tr>
<td>Hrs W-S1</td>
<td>3.0(21)</td>
<td>3.9</td>
</tr>
<tr>
<td>Crs Enr-S2</td>
<td>3.0(22)</td>
<td>1.9</td>
</tr>
<tr>
<td>Hrs Enr-S1</td>
<td>12.2(21)</td>
<td>1.9</td>
</tr>
<tr>
<td>Crs I's-S1</td>
<td>0.0(21)</td>
<td>0.2</td>
</tr>
</tbody>
</table>
Table 12 shows that PAGSS Reading differentiated between the two experimental groups.

Pearson Product-moment Correlation matrices were developed for each experimental and control group (see Appendix G) in which all of the cross-correlations of the demographic and dependent variables were computed. From those cross-correlations we find:

1. The most consistent demographic variable predicting the dependent variables is high school GPA.
   a. There is a negative correlation between high school GPA and courses withdrawn for both the experimental and control groups.
   b. High school GPA is significantly positively correlated with the PAGSS entrance exams for the control and one-day experimental groups.

2. PAGSS scores in both experimental and control groups correlate positively with the Semester One GPA.

Multiple regression analysis shows the potential grouping of demographic factors that might predict the variance of the dependent variables. The tables in Appendix J show the multiple regressions for each of the control and experimental groups' dependent variables. Demographic
factors were not included when they contributed less than .02 to the prediction. As with all other data from this research, one must be cautious in drawing too great an inference given the small sample size of the experimental groups.

"Importance of College to Self" occurs frequently as a multiple regression predictor in the 2-day experimental group and less often in the control group (Appendix J). PAGSS Math and Academic Goals occur as frequent predictors of the dependent variables in the experimental and control group. Apparently the multiple regression data for the 1-day experimental group is faulty because of too many variables and too few subjects.

Motivation

There were two self-report questions, one which deals with internal motivation and one which deals with external motivation. These questions presented in Table 13 asked about the influence of the parents in students coming to school and also the importance of school to self.
TABLE 13
A SUMMARY OF RESPONSES BY EXPERIMENTAL AND CONTROL GROUPS TO SELF-REPORT QUESTIONNAIRE

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>1-day</th>
<th>2-day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of College to Self</td>
<td>4.1</td>
<td>4.1</td>
<td>4.0</td>
</tr>
<tr>
<td>Parental Encouragement</td>
<td>3.3</td>
<td>3.8*</td>
<td>3.7</td>
</tr>
</tbody>
</table>

(5=high, 1=low) *p < 0.05, t=2.20, df=91

From Table 13 it is seen that "Importance of College to Self" is relatively equal for the experimental and control groups, while "Parental Encouragement" is significantly higher for the one-day experimental group.

Hypothesis six is substantiated except for the following conditions: PAGSS Reading significantly differentiates between subjects in the two experimental groups; PAGSS Math is a significant predictor of dependent behavior for control subjects but not for experimental group subjects; and Parental encouragement is generally higher for the experimental groups than the control group.
Hypothesis Seven

H7- The quasi-experimental orientation will not be seen as a desirable activity by the experimental subjects.

Students' opinions regarding the orientation were gathered following the second day of orientations. The three pieces of information acquired from that evaluation were; written comments about how the participants felt about the orientation (Table 14), whether redesign of specific seminars was required (Table 15), and the usefulness of the seminars.

Table 14 is a compilation of the written comments made by the 2-day experimental group subjects (see Appendix E-Students Post Seminar Comments for specific comments). Students were asked to provide, in an open-ended manner, their impressions of the orientation program. These comments were then judged on the basis of the three point scale seen in Table 14.
TABLE 14
THE GENERAL IMPRESSIONS OF TWO-DAY EXPERIMENTAL GROUP SUBJECTS TO THE ORIENTATION PROGRAM

<table>
<thead>
<tr>
<th></th>
<th>Very Favorable</th>
<th>Favorable</th>
<th>Unfavorable</th>
<th>No Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>13</td>
<td>50</td>
<td>11</td>
<td>42.3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


TABLE 15
RESPONSES OF THE TWO-DAY EXPERIMENTAL SUBJECTS
TO THE QUESTION OF WHETHER THE SPECIFIC ELEMENTS
OF THE ORIENTATION NEED TO BE REDESIGNED

<table>
<thead>
<tr>
<th>Seminars</th>
<th>Needs Redesign</th>
<th>None Required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Introduction</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tour</td>
<td>1</td>
<td>3.8</td>
</tr>
<tr>
<td>Goal Setting</td>
<td>1</td>
<td>3.8</td>
</tr>
<tr>
<td>Learning Theory</td>
<td>1</td>
<td>3.8</td>
</tr>
<tr>
<td>Stress Management</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Registration</td>
<td>1</td>
<td>3.8</td>
</tr>
<tr>
<td>Grade Getting</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Time Management</td>
<td>1</td>
<td>3.8</td>
</tr>
<tr>
<td>Instructor Strategies</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Based on a Likert scale with 1 being "definitely will be useful" to 5 being "the information was of no value" the Seminar Evaluation (Appendix D) given at the end of the second day of orientations produced a mean response of 1.5.
Hypothesis seven is rejected based on the information provided in tables 14 and 15 and written comments contained in Appendix E which reveal that the seminars were perceived primarily as favorable and there is little need for redesign of individual seminars.

Trends

Table 16 and Figure 2 review the trends of the behavioral data accumulated from the experimental and control groups.

### TABLE 16
A SUMMARY OF THE MEANS OF THE DEPENDENT VARIABLE TRENDS

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Experimental Groups</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group(N)</td>
<td>1-day(N)</td>
<td>2-day(N)</td>
</tr>
<tr>
<td>Hrs. Enrolled-S1</td>
<td>12.3(72)</td>
<td>12.2(21)</td>
<td>12.6(24)</td>
</tr>
<tr>
<td>Hrs. Withdrawn-S1</td>
<td>3.2(72)</td>
<td>3.0(21)</td>
<td>1.2*(24)</td>
</tr>
<tr>
<td>Inc. Courses-S1</td>
<td>.0(72)</td>
<td>0.0(21)</td>
<td>0.2(24)</td>
</tr>
<tr>
<td>Courseload-S2</td>
<td>2.9(72)</td>
<td>3.0(22)</td>
<td>3.4(25)</td>
</tr>
<tr>
<td>Session I GPA</td>
<td>2.7(64)</td>
<td>2.5(18)</td>
<td>2.7(24)</td>
</tr>
</tbody>
</table>

*p< 0.05, 94df, when compared to Control Group
Figure 2. Trends.
The trends indicate that the students' behavior generally improved as the quasi-experimental treatment increased from one to two days. There was a decrease in withdrawals, an increase in incompletes, and an increase in hours enrolled for the subsequent semester.

The GPA's of the 2-day experimental group and the control group are very similar. The 2-day treatment group withdrew fewer hours from session one and enrolled in more courses for session two. This gives a 16% increase in courses enrolled for the 2-day treatment group over the control group, while the 1-day treatment produced only 2.9% additional growth in courses enrolled.

The trends of non-enrollment gathered from registration records show that 25% of the control group students did not enroll in session two, while 18.2% of the one-day experimental subjects did not enroll and 8% of the two-day experimental subjects did not enroll. A chi-square analysis (where $X^2 = 3.35$ with 2 degrees of freedom) showed that no statistical significance had been established, although, again the trends are in the direction favoring the increase in orientation exposure.

The trends of the data are consistently in the direction favoring the experimental group with the greatest amount of orientation.
Figure 3 is a derivation of the trend information shown in Figure 2 with the subjects divided into those who acquired a 2.0 or below GPA in semester 1 and those who had a GPA above 2.0 in semester 1. Figure 3 shows that there is no appreciable difference between the control and experimental groups when their GPA is high.

The subjects who received 2.0 or less GPA in semester 1 appear to respond very differently to the treatment. Figure 3 shows consistent trends in a favorable direction for students with low GPA. The specific data for Figure 3 is contained in Table 10 and Appendix I.

Cost of Orientation

Table 17 shows the relative cost factors associated with providing a skills development type of orientation versus the additional return of funds to the college as a result of improved retention.
<table>
<thead>
<tr>
<th>Hours Enrolled S-1</th>
<th>GPA (2.0 &amp; Under)</th>
<th>GPA (over 2.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours Withdrawn S-1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses Enrolled S-2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses Incomplete S-1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. of Subjects</th>
<th>Control</th>
<th>Exp. 1-day</th>
<th>Exp. 2-day</th>
<th>Exp. Control</th>
<th>Exp. 1-day</th>
<th>Exp. 2-day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25</td>
<td>7</td>
<td>4</td>
<td>46</td>
<td>14</td>
<td>20</td>
</tr>
</tbody>
</table>

--- --- --- --- --- Combined GPA's shown for reference

Figure 3. Trends of Two Sub-groups.
TABLE 17
A SUMMARY OF THE COST FACTORS OF ORIENTATION

Faculty expense

7 sessions X 6 hours = 42 hours
5 sessions X 5 hours = 25 hours

67 faculty hours X $17/hour = $1239

$1239/47 = $26 cost per student

Income from Orientation

a. 1.0 additional enrollment hour per student for session
   2 produces $54/student from state funding.

b. Tuition for 1.0 additional hour produces $21.
   TOTAL $21 + $54 = $75 income per student

From Table 17 it can be seen that there is a financial advantage to the college of the type of orientation presented herein.
Summary of Results

The data collected in this research have shown that the orientation program had a greater impact on students with a GPA that was 2.0 or lower.

When the demographic and dependent measures of the control and experimental groups were compared, hours withdrawn and marital status between control and the 2-day experimental group varied significantly, while the control group and 1-day experimental group varied significantly in parental encouragement and PAGSS writing. When the two experimental groups were compared PAGSS reading was significantly different.

The trends of the data, although not significant, show a consistent improvement in dependent measures as the amount of orientation increases.

Self-report data indicate a very positive response to the research orientation program by 2-day orientation subjects.
CHAPTER FIVE

SUMMARY, CONCLUSIONS, DISCUSSION AND RECOMMENDATIONS

Summary

There are many problems to face in order to adequately deal with the retention problems in community colleges. One of those problems is insuring that the student receives the best possible orientation to the college. This study was conducted to determine whether an orientation based on the needs of entering students would have an effect on their performance in college. An orientation for new students was designed, based on the needs of students, and implemented in the summer prior to their entry into college. The experimental groups received one to two days of orientation consisting of an introduction to the college and its resources, academic skill training and personal resource management. An analysis of the data gathered during and following the students' first semester indicates that the experimental groups had better retention and lower withdrawal rates than the control group. Based on the
research evidence it is concluded that orientation is important when attempting to improve student retention.

Findings

Hypotheses 1 through 4 concerned the effect of the orientation treatment on the students' Grade Point Average, retention, withdrawal rates and incompletes. Hypothesis 5 was an evaluation of whether the treatment would effect goal clarification. The purpose of Hypothesis 6 was to look for demographic factors that are most responsive to the treatment. Hypothesis 7 was designed to show students' opinion of the treatment.

Hypothesis 1

Hypothesis 1 stated, "A two day orientation program based on the needs of entering first-time, full-time college freshmen will not have a significant effect on the students' Grade Point Average."

Hypothesis 1 was accepted since there was not a significant difference between the GPAs of Control group and Experimental groups (tables 7 and 8), nor was there a difference in relative ranking of GPA from high school to college (Table 9).
Hypothesis 2

Hypothesis 2 stated, "A two day orientation program based on the needs of entering first-time, full-time college freshmen will not have a significant effect on the students' retention."

Hypothesis 2 was accepted since there were no significant differences shown between second semester enrollment of the experimental and control groups. There were non-significant trends that bore further investigation. The number of courses enrolled in during the subsequent semester increased from control group to experimental groups (Table 16 and Figure 2) and there was an increase in percentage of students who enrolled in the subsequent semester.

Hypothesis 3

Hypothesis 3 stated, "A two day orientation program based on the needs of entering first-time, full-time college freshmen will not have a significant effect on student withdrawal rates."
The two-day experimental group had a significantly lower (at the .05 level) amount of withdrawals than the control group, therefore, Hypothesis 3 was rejected.

**Hypothesis 4**

Hypothesis 4 stated, "A two day orientation program based on the needs of entering first-time, full-time college freshmen will not have a significant effect on the number of incomplete grades."

Hypothesis 4 was accepted since there were not any differences between experimental and control groups that were statistically significant. Figure 2 shows that there was an increase in the number of incomplete grades taken by the two-day experimental group, but these were not significant.

**Hypothesis 5**

Hypothesis 5 stated, "A two day orientation program based on the needs of entering first-time, full-time college freshmen will not have a significant effect on the goals that the student clarifies."
After the first semester students were sent a questionnaire in which they were asked, on a 4-point scale, whether their goals had clarified. The combined experimental group had clarified their goals more than the control group (at the .05 level of significance) thus requiring that Hypothesis 5 be rejected.

**Hypothesis 6**

Hypothesis 6 stated, "There will be no demographic factors that determine which students are most responsive to the quasi-experimental treatment."

When the experimental group data were analyzed based on students' GPA during semester one, it was found that only the students who were at the 2.0 and below GPA level performed differently in subsequent semester enrollment and incompletes (significant at the .05 level) when comparing the control group with the two-day experimental group. It appears that the lower GPA students or "high-risk" students are most responsive to the orientation. Thus the hypothesis was rejected.

There is additional information to support the rejection of Hypothesis 6. There was a significant difference in marital status between the control and the
two-day experimental group. There were significant differences in parental encouragement and writing skill between the control and one-day experimental group. There was a significant difference in reading skill between the two experimental groups.

Hypothesis 7

Hypothesis 7 stated, "The quasi-experimental orientation will not be seen as a desirable activity by the experimental group."

Hypothesis 7 was rejected based on the self-report questionnaire filled out by students after the two-day orientation. A high percentage (92.3%) of the students found the program to be favorable or very favorable (Table 14), 96.2 percent of the students felt that no redesign of the orientation program was necessary (Table 15).

A variant of this hypothesis is supportable. Black males did not participate in the experimental groups. The five black females who were at the first day of orientation did not return for the second day. Thus, it is apparent that blacks did not see this program as desirable and, from the perspective of a limited number of black students, the hypothesis was supported.
Conclusions

As a result of these findings it is concluded that a need-based orientation program which familiarizes students with the college's resources, provides training in basic academic skills and helps students learn to manage their own resources is a valuable process and can lead to significant human and financial gains.

There are two specific conclusions that can be drawn from this research. One is that "high-risk" students, those with relatively low GPA, are the principle benefactors of an orientation program such as this. Secondly, this program will not work satisfactorily on a voluntary basis. If this program is to have the greatest effect, those "high-risk" students will have to be identified and their attendance either made mandatory or more appropriate incentives provided to encourage students to enroll for the program.

Discussion

There were several major findings, derived from the statistical analysis, that are applicable to the hypotheses tested in this study. The trend of students' behaviors generally improved (non-significantly) as the amount of
treatment increased. There was a decrease in withdrawals (significant at the .05 level for the two-day experimental group), an increase in hours enrolled for the subsequent semester and an increase in the total number of students enrolling in the subsequent semester. When the experimental group data were analyzed on the basis of Grade Point Average, it was shown that, at the .05 level of significance, students below 2.0 GPA enrolled in more courses in the subsequent semester and took more incompletes in their first semester than their control group counterparts. The trends for the under 2.0 GPA subjects were that, as the amount of orientation increased, the academic behaviors improved. The students who were above a 2.0 GPA level did not appear to benefit from increasing amounts of orientation.

Demographic factors that differentiated between groups, at the .05 level of significance, were reading skill between experimental groups, parental encouragement between control and the one-day experimental group. Students' evaluation of the orientation program was predominantly favorable.

Black students, particularly males, were under-represented in the experimental group population. The methods used to entice students to volunteer for this program were inadequate for black students.
Limitations

It was intended to acquire several types of behavioral information from the entire population of the college's first-time, full-time students. The intention was to determine whether the research sample was representative of the total population. In that way, analysis of demographic factors would be more credible. Unfortunately, college-wide data on the specific behaviors of first-time, full-time students were not collected by the institution.

Originally there was to have been a measure of the number of visits to the school's psychological therapist. The hypothesis was that students who received higher levels of orientation would have fewer problems in the institution and would have less need for psychological counseling. An unforeseen ethical problem developed. It was the opinion of the school psychologist that the client-therapist relationship would be violated if the therapist provided an aggregate number of visits by experimental and control group subjects and he therefore rejected the request for this type of information.

No evening orientation sessions were conducted. The nine-hour requirement as a full-time student eliminated most of the night school students and therefore many "non-traditional" students. No subjects complained that
they could not come to orientation because they were working
days. Therefore, there was no reason to set up any evening
orientation sessions. However, the research findings are
not generalizable to the evening students.

Low sample size in the under and over 2.0 GPA analysis
may be the reason that statistical significance was not
shown and is suspect where significance is shown.

Sample size varied throughout the statistical analysis.
Because it is a field study, complete data were not
collectable from all subjects and some data were unusable
because of obvious errors in self-reports. In one unusual
case a student went through the orientation, did not enroll
in session one but did appear on the session two rolls. He
was purged from the analysis.

A limitation of the post orientation evaluation was
that there was no evaluation of the seminars by the students
who did not return after the first day of seminars. At the
time of the experiment there was no recognition that
students would not return for the second day in significant
numbers, and, therefore, no attempt was made to acquire
their evaluations. Once the recognition had been made, more
than two weeks later, the recency effect was lost and the
data would not have been comparable to that produced by the
two-day experimental group. Future research should include
an opportunity for evaluation at the end of each day. This would allow an inclusion in summary data of those people who were perhaps disenchanted with the orientation process.

Racial limitations of the sample should be considered. There were five black females in the first day of orientation, with none returning for the second day of orientation (two were eventually purged from the data as non first-time students). There were no black males in the experimental groups. The importance of appropriate racial distribution in the sample is emphasized since cross-correlational data (Appendix G) derived from the control group showed that race was a statistically significant predictor of both PAGSS scores and the dependent measures of session one withdrawals and session two enrollment.

Students enrolled for courses after the first day of orientation. The students in the 2.0 and below GPA group registered for more hours than their control group while the above 2.0 GPA group registered for less than their control group. While the differences are not significant they may indicate an undesirable effect of the orientation. Perhaps the less adequate students are overly influenced by the orientation and take more hours than they can handle. Orientations in the future might emphasize taking a course load that is within the capability of the student.
There were very few student activities engaged in by experimental or control subjects. Extracurricular activity was not one of the orientation topics. In the future, if it is seen as a desirable goal to improve student retention through extracurricular activities, then an orientation segment on activities available might be appropriate.

Motivation

Because of the nature of the candidate selection process, both experimental and control groups were self-selected and thus may be high in motivation. It is possible that the control and experimental subjects who returned questionnaires were more motivated to perform in school than other students, thus questioning the generalizability of the data.

It is possible that motivation is an intervening variable, since it is affecting the dependent variables in the experimental groups more than in the control groups. This argument is derived from the multiple regression (Appendix J) analysis where Importance of College to Self shows up more often as a predictor of experimental group behaviors and much less as a predictor of control behaviors. Also, the self-reported Parental Encouragement is
significantly higher in the experimental group than for the control group. It was previously mentioned that it is possible that both control and experimental groups may be higher in motivation and thus not representative of the student body, since they all chose to voluntarily respond to the questionnaires.

**Grade Point Average**

Surveys of the literature indicate that GPA is typically not affected by orientation programs. These findings were further corroborated in this study. There was no change in the ranking of GPA from high school to college when comparing experimental and control groups (Table 9). There was, however, an interesting phenomenon associated with GPA. The average GPA of the control group was higher than the experimental group's GPA, not only in high school, but also after one semester in college. While the GPA favored the control group, the withdrawal rates and semester two enrollment rates favored the experimental groups with the relatively lower GPAs. This would appear to strengthen the argument that the trends of behavior may reflect real experimental effects.

The proportion of students with GPA at 2.0 or below is lower for the experimental group than the control group.
(experimental=21.9% vs. control=35.2%). While this is based on a very small sample size, it might mean that although GPA is generally not affected by orientation, marginal GPA might be.

In the "above 2.0 GPA" category all three groups do not differ with regard to the variable "courses enrolled for session 2." This is interpreted to mean that there was no treatment effect on people who were average to above-average students. Therefore, in terms of retention, the research orientation was not particularly effective for the higher GPA students and could rationally be abandoned for them if there are economic limitations.

It is conclusive that students with higher GPA withdraw less frequently. This occurred in every group by a substantial margin. It is also clear that the number of withdrawals was lower for the experimental than the control group in both the GPA categories. This does indicate experimental effect occurring in the treatment groups. There was also a trend toward higher first semester enrollment in the under 2.0 GPA experimental groups, indicating the possibility of a treatment effect on higher risk students.
Recommendations

Based on the consistent trends of the dependent measures, and the financial advantages for doing so, Valencia Community College should upgrade the orientation program for new students. This upgraded orientation should, at a minimum, identify those students whose high school grade point averages were 2.0 or below and provide them with the two-day orientation program that was designed and implemented in this research. Cumulative and individual data should be collected so that comparisons can be made with the retention results of previous semesters. Individual students who go through orientation should be tracked to determine the long-term effects of orientation. This will identify further factors for additional intervention design.

Those students who have low parental encouragement, low math entrance test scores should be identified and provided with the appropriate motivational or math skill training necessary for them to survive in the institution.

Consideration should be made for subsequent intervention with these same students during and following their first semester in order to encourage them to seek support and use the institution's resources.
Black males need to be approached in a unique manner. It is felt that these students who potentially have the highest need for a skills development orientation were apparently the most reluctant to volunteer. A program conducted by minority counselors or minority sophomore students might be more desirable and achieve more than was accomplished in this program. Perhaps the program could start with the first day being conducted in a minority neighborhood and the second day brought onto the campus.

Volunteerism in general was poor. If the program is to achieve the maximum behavioral effect, those students who are in the greatest need, determined by GPA level, parental encouragement, and math entrance scores, should have a skills development orientation made a mandatory element in their application and registration process.

When additional research is conducted in orientation, the following recommendations, derived from this research project, should be considered:

1. Subject size should be larger to determine if trends identified in this research are significant in a larger population.

2. Black student orientation needs should be specifically identified along with the development of implementation
techniques that are appropriate for blacks and other minority students.

3. In a program that spans more than one day, evaluations of the program should be taken daily in order to gather the opinions of students who do not subsequently return.

4. In the orientation, there should be emphasis placed on responsible course loads, especially for high risk students.

5. If extra-curricular activities is deemed a retention-related element, an orientation segment covering extra-curricular activities should be included in future orientation programs.

6. If there are economic constraints, the best candidates for orientation appear to be students who have a relatively low grade point average, low parental encouragement or low math skills.
APPENDIX A

NEEDS PRIORITIZED
APPENDIX A
NEEDS PRIORITIZED

STUDENTS FROM THREE CLASSES AFTER ONE SEMESTER*
(Priority based on frequency of reporting)

1. Working while going to school
2. Lack of disciplined study habits
3. Getting used to reading a lot
4. Doing homework
5. Pressure to study
6. Getting advice on classes to take
7. Lack of counselor caring

NON-RETURNING STUDENTS
(Priority based on frequency of reporting)

Reasons for not returning

1. Transfer to another institution
2. Moved out of area
3. Financial reasons
4. Personal problems
5. Fulfilled personal goals
6. Lacking interest
7. Courses not available at VCC

Reasons for dissatisfaction

1. Course offerings
2. Registration procedure
3. Orientation and advising
4. Course content in major field
5. Instructor interest and accessibility
6. Instructor academic advising

RESEARCH-BASED NEEDS

1. Adjust to freedom
2. Responsibility of being a college student
3. How to study
4. Developmental skills
5. Surviving in community college
6. Career specialization
7. Values clarification
8. Course schedule and options
9. Academic progress
10. Understanding college differences
11. Academic information resources
12. Student assessment, counseling and advisement.

*The survey was taken in three different classes: an advanced, a developmental and a traditional class. The students were asked to identify from a checklist (developed from previous open-ended responses by a previous set of students) the critical problems that they had had in their first semester. Only first-semester students' data were used; the study was conducted on the last day of their first semester of college. The needs are identified in order of frequency of response.
APPENDIX B

ORIENTATION GUIDELINES
APPENDIX B
ORIENTATION GUIDELINES FOR PEER ADVISORS

INTRODUCTION
1. Smile and be pleasant.
2. Wear a name tag.
3. Greet students—Good Morning or Afternoon, Welcome to Valencia.
4. Introduce yourself and title (if appropriate, state that you are also a student at Valencia) and that you are working in the Counseling Dept.
5. Begin at the scheduled time and let latecomers enter. If there is an orientation session immediately following the one you are conducting and slide presentation has ended, ask latecomers to wait for the next session.

OVERVIEW OF ORIENTATION AND EXPLANATION OF SESSION
1. Registration appointments
2. Slide presentation (10 minutes)
3. General information about Valencia's history
   * Main points of the catalog
   * Define degree programs: A.A. and A.S.
   * Explain items on Fact Sheet
   * Services and publications: Counseling services, Handbook and Arena
4. Question/Answer period
5. Students will be escorted to waiting area to be seen by a Counselor/Advisor for interpretation of test scores and advisement session.

PAPERWORK
1. Handout material
2. Have student fill out registration card
   * Explain the appointment card's usage. On the indicated date and time this card must be taken to the registration area and he/she will be permitted
to complete his/her schedule, including the section numbers, days and times, and he/she will receive a printed schedule of classes for the next term.

*Define registration. Registration is a process used to schedule classes (days and times) and pay fees. A counselor or advisor will be on duty to help.

*Place appointment card in appropriate box for the semester.

3. Mention that fees must be paid on the date of registration, with Mastercard, Visa, cash, check or money order. If the student is receiving financial aid, please have him check with the Financial Aid office prior to receiving the forms needed for registration.

SUMMARY OF DUTIES

1. Show slide/tape presentation
2. Explain contents of packet
3. Give important information and pages from the college catalog (see following section)
4. Explain fact sheet front and back
5. Question/answer period
6. Escort students to waiting area for advisement session

DISCUSSION OF COLLEGE CATALOG

1. Maps and calendars (pp. 1-16)
   *Have students remove catalog from packet
   *pp. 2-5: campus maps
   *p. 9: calendar of important dates for next two fiscal years
   *pp. 10-16: detailed calendars by session

2. General Information (pp. 17-47)
   *pp. 31-38: policies consisting of academic standards, probation, suspension, dismissal, withdrawal policy, calculation of GPA, etc.
   *pp. 39-43: fees and financial aid information
   *pp. 44-50: student services information, e.g., advising and counseling, counseling appointment
scheduling, evening services, career development
*pp. 44-46: testing services information, e.g., earning college credit without attending regular classes, CLEP, Credit-by-Exam, Independent Study, Experiential Learning, assessment of prior learning and Cooperative Education (Please talk to a counselor-advisor for further information.)

3. Degree Information (pp. 52-122)
*pp. 52-57: Associate in Arts Degree requirements and non-credit College Prep. course information
*p. 57: Interdisciplinary Studies, which includes 4 semester programs offered for day students seeking an A.A. degree during Sessions I and II. IDS includes most of the same material covered in the five areas of General Education Requirements. The information is combined into one class per semester and is taught by a team of instructors. This program is for students who score well on the Entry Test. See counselor/advisor or the Humanities Department Chairman for more information.
*pp. 58-76: Associate in Science Degree requirements and non-credit College Prep. course information
*p. 76: Continuing Education and non-credit comprehensive course offerings (define Cont. Ed.)
*pp. 78-122: Course Descriptions of credit courses and information on pre- and co-requisites
APPENDIX C

SEMINARS AS RUN
The following material describes the seminars that were presented in the research orientation program. The seminars were all presented to first-time, full-timers (9 or more credit hours). All seminars were conducted by the exper­imenter, to provide as much consistency as possible in the treatment. The figures noted in the following descriptions are copies of the overhead transparencies used in the conduct of the program.

First Day of Seminars

Introduction

The researcher introduced himself and introduced the students to the idea that they were a select group that were participating in this experiment and that their behaviors would be monitored over the course of the semester to indicate the effect of the orientation.

The students were given an orientation syllabus (Handout 1) and a brief overview of the topics that were to be eventually presented in the seminars.

A slide (Figure 4) was presented, showing the systematic view of education and how goals were related to grade-getting behavior and when this seminar series would deal with goals, course selection and grade-getting behaviors.

Common fallacies (Figure 5) that students bring to the college were discussed. Attempts were made to give students the correct impressions to counter the potential fallacies.

The school catalog was handed out and several pages and topics reviewed. Emphasis was placed on the notion that, while policies seemed stringent, the school was interested in the students' success and was trying every way possible to interfere with the students' doing bad things to themselves. PAGSS entrance testing and CLAST exit testing were reviewed, including their purposes along with the purpose of the MPA (Mid-Program Assessment) test. The students' ability to grieve a final grade was discussed.

The semester newspaper schedule was distributed to students. Students were taught what to do with labs, how to
get overrides for courses, and generally how to read schedule notes.

An expression was made that it was not neurological differences that separate students at VCC from Ivy League students. Rather, the differences are motivational, perhaps financial, and probably that Ivy League students have learned certain grade-getting behaviors earlier than their community college counterparts. It was hoped that this expression by a professional educator and a psychologist would have an impact on their attitude.

This session lasted approximately 1 1/4 hours. There was a ten-minute break following this session.
FIRST DAY

Introduction
Tour of the College and Its Resources
Break
Goal Setting
Learning Theory Seminar
Lunch
Strategies for Dealing with Instructors
Stress Management—Part One
Mock Registration

SECOND DAY

Introduction
Stress Management—Part Two
Grade-Getting Seminar
  Note Taking
  Studying
  Test Taking
Break
Reading and Writing with Low Skills
Time Management Seminar
Assertiveness Seminar
Summary
A SYSTEMATIC VIEW OF EDUCATION

Life Goals
  ↓  ↑
Career Goals
  ↓  ↑
Academic Program
  ↓  ↑
Courses Selected
  ↓  ↑
Grades
  ↓  ↑
Grade Getting Behaviors

Figure 4. Systematic View of Education.
COMMON FALLACIES

VCC is a 2-year college.

A H.S. graduate is ready for college.

The faculty is more concerned about you than you.

VCC is a high school.

Cost of college is prohibitive.

You can coast until mid-semester.

There is social passing.

Counselors will seek you out.

Instructors do not know b.s. when they hear it.

VCC is a very social college.

Nothing important happens the first day of class.

Figure 5. Common Fallacies.
Tour of the Campus and College Resources

A plan view map of the campus (Figure 6) was shown and a briefing was presented on where students could park and the direction of the upcoming tour. General information was also presented prior to the tour (i.e., room numbering, bathroom locations, telephone locations). A handout was given to the students (Handout 2) which identified key individuals in the school that have student involvement, and their school phone numbers. The students were also given Handout 3, a summary of activities in each of the campus buildings. An overview of college resources was presented (Figure 7).

In Building 3 of the west campus, the location of the seminar presentations, the counseling, and career counseling offices were viewed and their functions discussed.

At the Physical Education Building, the tour covered the classrooms on the second floor, the gym, the Nautilus room, the tennis courts, the baseball and golf fields. Courses that were conducted by the physical education department, along with intramural activities, were discussed, and students were shown how to sign up for them.

In Building 1, The Dean of the Campus's office was seen, along with a walk-through of the biology lab. Material was discussed along the way with regard to the fact that only full-time faculty members supervise the labs, and that the labs were fully outfitted with appropriate test equipment. The department chair offices were viewed on the first floor.

In Building 2, the finance, financial aid, veterans, and special services facilities were identified and their services discussed. Campus security and maintenance were pointed out, along with their functions that affect students (lost and found, starting stalled cars). Registrar and handicapped services offices were identified and functions discussed. The range of food options in the cafeteria was discussed and the student lounge, where registration is held, was identified.

Building 4 was passed on the tour, with discussion centering on this building as primarily nursing and health-related services, noting that it houses a minor first aid facility.

The computer classrooms and dental hygiene labs in Building 3 were identified, along with a walk-through of a
chemistry lab. A brief description of the physics lab was provided by a physics lab faculty member.

In Building 5, the department chair offices were identified, along with the technical program labs and the business program labs.

All three floors of the Learning Resource Center were seen. On the first floor the references were discussed, along with the names of the librarians and the function of the vertical files. On the second floor, the books were noted, along with the audio-visual storage areas and the student-centered learning labs, where material is kept on reserve, tapes are duplicated, and audiovisual materials and typewriters are available for student use. On the third floor the testing center was pointed out, along with showing and describing in some detail the math, reading, writing and computer open labs.

The students were left on their own to find their way back to the 3-131 classroom as an exercise in finding their way around the campus.

This tour lasted 1 1/2 hours. A five-minute break followed this tour.
Figure 6. Map of the Campus.
RESOURCES - FUNCTIONAL

Counseling: Academic Advising, Career,
            Personal Assessment, Career Dev.
            Registration, Testing, PAGSS

Student Government
Financial Aid - Variety of Loans & Scholarships
Veteran Services
Health Services
Handicapped Student Services
Psychological Therapy
Tutoring
Developmental Programs: Reading, Writing, Math
Open Labs: Math, Writing
Special Services
Minority Affairs
Jobs - Outside, College

Figure 7. College Resources.
### WEST CAMPUS STUDENT SUPPORT SERVICES DIRECTORY

For other services, contact Student Services in 3-135

<table>
<thead>
<tr>
<th>AREA</th>
<th>CONTACT</th>
<th>ROOM</th>
<th>EXT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Advisement</td>
<td>Educational Advisor</td>
<td>3-135</td>
<td>339</td>
</tr>
<tr>
<td>Academic Problem</td>
<td>Instructor, Counselor</td>
<td>3-135</td>
<td>339</td>
</tr>
<tr>
<td>Add, Drop, or Change of Course</td>
<td>Records Office</td>
<td>2-208</td>
<td>320</td>
</tr>
<tr>
<td>Admissions</td>
<td>Admissions Office</td>
<td>2-250</td>
<td>507</td>
</tr>
<tr>
<td>Athletics</td>
<td>Phyllis Shemelya</td>
<td>8-201</td>
<td>408</td>
</tr>
<tr>
<td>A-V Equipment</td>
<td>Learning Rec. Ctr.</td>
<td>6-201</td>
<td>488</td>
</tr>
<tr>
<td>Bills (Payment or Adjustment)</td>
<td>Finance Office</td>
<td>2-243</td>
<td>200</td>
</tr>
<tr>
<td>Books, Classroom Supplies</td>
<td>Bookstore</td>
<td>1-142</td>
<td>466</td>
</tr>
<tr>
<td>Campus Entertainment</td>
<td>Dr. Carole Trachy</td>
<td>Bldg. B</td>
<td>616</td>
</tr>
<tr>
<td>Career Development</td>
<td>Dolores McCord</td>
<td>3-118</td>
<td>351</td>
</tr>
<tr>
<td>Carpooling</td>
<td>Student Services</td>
<td>Bldg. B</td>
<td>616</td>
</tr>
<tr>
<td>Change of Address</td>
<td>Records Office</td>
<td>2-208</td>
<td>310</td>
</tr>
<tr>
<td>Check out Books</td>
<td>Learning Rec. Ctr.</td>
<td>6-100</td>
<td>574</td>
</tr>
<tr>
<td>College Transfer In/Out</td>
<td>Admissions Office</td>
<td>2-250</td>
<td>507</td>
</tr>
<tr>
<td>Debate</td>
<td>Records Office</td>
<td>2-208</td>
<td>310</td>
</tr>
<tr>
<td>Evaluation of Records for Graduation</td>
<td>Bill Snider</td>
<td>2-212</td>
<td>476</td>
</tr>
<tr>
<td>Evening Classes</td>
<td>Maxine Denny</td>
<td>2-250</td>
<td>554</td>
</tr>
<tr>
<td>Financial Aids</td>
<td>Esther Ferrell</td>
<td>2-250</td>
<td>553</td>
</tr>
<tr>
<td>Food Services</td>
<td>Preston Rosser</td>
<td>2-239</td>
<td>459</td>
</tr>
<tr>
<td>Grievances</td>
<td>Gary Wells</td>
<td>Bldg. 2</td>
<td>296</td>
</tr>
<tr>
<td>Academic Discipline</td>
<td>Maxine Denny</td>
<td>2-250</td>
<td>554</td>
</tr>
<tr>
<td>Grad. Application</td>
<td>Tyrone Johnson</td>
<td>3-135</td>
<td>343</td>
</tr>
<tr>
<td>Handicapped Serv.</td>
<td>Records Office</td>
<td>2-208</td>
<td>310</td>
</tr>
<tr>
<td>I.D. Cards</td>
<td>Freda Marion</td>
<td>2-245</td>
<td>523</td>
</tr>
<tr>
<td>International Relations</td>
<td>Finance Office</td>
<td>2-241</td>
<td>200</td>
</tr>
<tr>
<td>Intramurals</td>
<td>Julia Ribley</td>
<td>Bldg. B</td>
<td>616</td>
</tr>
<tr>
<td>Jobs</td>
<td>P. E. Department</td>
<td>8-201</td>
<td>408</td>
</tr>
<tr>
<td>Off Campus</td>
<td>Don Lippert</td>
<td>1-111</td>
<td>203</td>
</tr>
<tr>
<td>On Campus</td>
<td>Financial Aids</td>
<td>2-239</td>
<td>459</td>
</tr>
<tr>
<td>Loan, Scholarship</td>
<td>Financial Aids</td>
<td>2-239</td>
<td>459</td>
</tr>
<tr>
<td>Lost and Found</td>
<td>Security</td>
<td>2-125</td>
<td>448</td>
</tr>
<tr>
<td>Operation</td>
<td>Student Concern</td>
<td>John Stover</td>
<td>1-119</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------------</td>
<td>----------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Organizations</td>
<td>Dr. Carole Trachy</td>
<td>Bldg. B</td>
<td>616</td>
</tr>
<tr>
<td>Personal Problems</td>
<td>Counselor</td>
<td></td>
<td>3-135</td>
</tr>
<tr>
<td>Publications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspaper</td>
<td>Thomas Pierce</td>
<td></td>
<td>5-252</td>
</tr>
<tr>
<td>Magazine</td>
<td>Ruth Senterfitt</td>
<td></td>
<td>3-143</td>
</tr>
<tr>
<td>Registration</td>
<td>Chuck Drosin</td>
<td></td>
<td>2-250</td>
</tr>
<tr>
<td></td>
<td>Jo Ann Toner</td>
<td></td>
<td>2-208</td>
</tr>
<tr>
<td>Social Security</td>
<td>Financial Aids</td>
<td></td>
<td>2-239</td>
</tr>
<tr>
<td>Special Services</td>
<td>Hoyte Coleman</td>
<td></td>
<td>2-241</td>
</tr>
<tr>
<td>Student Government</td>
<td>Dr. Carole Trachy</td>
<td>Bldg. B</td>
<td>616</td>
</tr>
<tr>
<td>Student Newsletter</td>
<td>Student Services</td>
<td>Bldg. B</td>
<td>616</td>
</tr>
<tr>
<td>Testing Center</td>
<td>Carol Riles</td>
<td></td>
<td>6-308</td>
</tr>
<tr>
<td>Transcripts</td>
<td>Records Office</td>
<td></td>
<td>2-208</td>
</tr>
<tr>
<td>Tutorial Assistance</td>
<td>Tutorial Center</td>
<td></td>
<td>6-201</td>
</tr>
<tr>
<td>Vehicle Accidents</td>
<td>Security</td>
<td></td>
<td>2-125</td>
</tr>
<tr>
<td>Veterans Benefits</td>
<td>Veterans Affairs</td>
<td></td>
<td>2-231</td>
</tr>
<tr>
<td>Withdrawals’</td>
<td>Records Office</td>
<td></td>
<td>2-208</td>
</tr>
<tr>
<td>Other Questions</td>
<td>Student Government</td>
<td></td>
<td>2-108</td>
</tr>
<tr>
<td></td>
<td>Student Services</td>
<td>Bldg. B</td>
<td>616</td>
</tr>
</tbody>
</table>

If you have difficulty locating any of the offices or individuals listed on this sheet, feel free to drop by the Student Government Office (2-108) or Student Services Office (Bldg. B) for assistance.
<table>
<thead>
<tr>
<th>BUILDING 1</th>
<th>Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative offices</td>
<td>2</td>
</tr>
<tr>
<td>Dean of the Campus</td>
<td>2</td>
</tr>
<tr>
<td>EA/EO</td>
<td>2</td>
</tr>
<tr>
<td>Biology/Science labs</td>
<td>2</td>
</tr>
<tr>
<td>Word Processing</td>
<td>2</td>
</tr>
<tr>
<td>Bookstore</td>
<td>1</td>
</tr>
<tr>
<td>Department offices (Social Science, Business, Science)</td>
<td>1</td>
</tr>
<tr>
<td>Classrooms</td>
<td>1 &amp; 2</td>
</tr>
<tr>
<td>Faculty offices</td>
<td>1 &amp; 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUILDING 2</th>
<th>Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>2</td>
</tr>
<tr>
<td>Financial Aid (loans, grants, scholarships, work-study)</td>
<td>2</td>
</tr>
<tr>
<td>Handicapped Services</td>
<td>2</td>
</tr>
<tr>
<td>Special Services</td>
<td>2</td>
</tr>
<tr>
<td>Campus Police, Lost &amp; Found</td>
<td>1</td>
</tr>
<tr>
<td>Maintenance</td>
<td>1</td>
</tr>
<tr>
<td>Cafeteria &amp; Snack Bar</td>
<td>1</td>
</tr>
<tr>
<td>Mail Room</td>
<td>1</td>
</tr>
<tr>
<td>Faculty offices</td>
<td>2</td>
</tr>
<tr>
<td>Registrars Office</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUILDING 3</th>
<th>Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry labs</td>
<td>2</td>
</tr>
<tr>
<td>School Psychologist</td>
<td>2</td>
</tr>
<tr>
<td>Counseling (course &amp; career)</td>
<td>1</td>
</tr>
<tr>
<td>Classrooms</td>
<td>1 &amp; 2</td>
</tr>
<tr>
<td>Faculty offices</td>
<td>1 &amp; 2</td>
</tr>
<tr>
<td>Dental Hygiene labs</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUILDING 4</th>
<th>Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing labs</td>
<td>1</td>
</tr>
<tr>
<td>First Aid</td>
<td>1</td>
</tr>
<tr>
<td>Health Related department</td>
<td>1</td>
</tr>
<tr>
<td>Classrooms</td>
<td>1 &amp; 2</td>
</tr>
<tr>
<td>Faculty offices</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUILDING 5</th>
<th>Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and Graphic Arts labs</td>
<td>2</td>
</tr>
<tr>
<td>Electrical lab</td>
<td>1</td>
</tr>
<tr>
<td>Computer labs</td>
<td>1</td>
</tr>
<tr>
<td>Word Processing labs</td>
<td>1</td>
</tr>
</tbody>
</table>
Computer Center 1
Classrooms 1 & 2
Faculty offices 1 & 2
Department offices (Communications, Foreign Languages, Humanities, Mathematics, Technical & Engineering) 2

LEARNING RESOURCE CENTER (library)
References and Journals 1
Books 2
Audiovisual 2
Student labs (reading, writing, math, computer) 2 & 3
Tutoring Center 2
Testing Center 3
Graphics Lab 3

PHYSICAL EDUCATION CENTER
Gymnasium 1
Nautilus Room 1
Locker rooms 1
Classrooms 2
Faculty offices 2

PORTABLE B
Student Services 1
Foreign Student Services 1
Goal Setting

A goal worksheet (Handout 4) was given to the students for the purpose of setting goals, starting with fanciful goals and breaking these down into career goals, academic goals, and, finally, specific goals that the student could make in self improvement. It was emphasized that it was impossible to work too long on a long term goal, but that could more successfully work on personal improvement goals that were related to long term goals and could, in this manner, see success, progress and be rewarded.

A filmstrip was shown entitled Life Goals: Setting Personal Priorities, Human Relations Media Center, VCC No. BF 441.L5, Pt. 3. This is a sound film strip on loan from the VCC Career Counseling Center.

After the filmstrip, a decision-making lecture was given (Figure 8), discussing information-gathering, prioritizing, selecting alternatives and implementation. Students were given a decision-making handout (Handout 5). The students were also given an evaluation sheet to evaluate their lowest level personal improvement goals to judge how realistic they were (Handout 6). This was discussed in class, generally without dealing with the students' personal goals.

A statement was made about how goal setting has a positive impact on retention when students have long term goals, as contrasted with lessened retention when students do not have long term realistic goals.

This seminar took approximately one hour.

Learning Theory Seminar

Practical theories of learning were presented as an introduction to the eventual seminar on grade getting.

This seminar started with a memory exercise. The students were shown ten words (Figure 9) for ten seconds and were asked to recall in writing the word list. The process was repeated. The first trial results were plotted to show recency-primacy effects. Students were asked to generalize the theory and to discuss methods for compensating for the problem of missing much material in the middle. The second
LIFELONG GOAL

BROAD GENERAL GOALS
(Implementation Goals)

INTERMEDIATE GOALS

SPECIFIC GOALS
GOAL SETTING

Lifes Goals

Broad General Goals

Intermediate Goals

Specific Goals

Career Center

Figure 8. Goal Setting.
KING
ARMY
MONEY
DINNER
WAGON
OFFICE
HEAVEN
JELLY
JEWEL
INSECT

Figure 9. Word List
Other Types of Decision-Making Strategies

A strategy is not good or bad or right or wrong in itself. Different strategies are used at different times for different situations by different people. One study of high school students found the following types of personal decision-making strategies most commonly used.

- **Impulsive**: Little thought or examination, taking the first alternative, "don't look before you leap."
- **Fatalistic**: Letting the environment decide, leaving it up to fate, "It's all in the cards."
- **Compliant**: Let someone else decide, following someone else's plans, "anything you say, Sir."
- **Delaying**: Taking a moratorium, postponing thought and action, "cross that bridge later."
- **Agnizing**: Getting lost in all the data, getting overwhelmed with analyzing alternatives, "I don't know what to do."
- **Planning**: Using a procedure so that the end result is satisfying, a rational approach with a balance between cognitive and emotional, "weighing the facts."
- **Intuitive**: A mystical, preconscious choice, based on "inner harmony," "it feels right."
- **Paralysis**: The decision accepts responsibility but is unable to approach it, "can't face up to it."

Source: Unknown
Now that you have chosen a major goal, let's test the clarity, the reality and the attractiveness of the goal.

1. To what extent does it seem realistic for you to expend energy on this goal at this time in your life? (circle)

   Extremely Realistic   Quite Realistic   Fairly Realistic   Not Very Realistic

2. When you think of the time, energy and self-discipline involved, how strongly do you feel committed to this goal?

   Extremely Committed   Strongly Committed   Fairly Committed   Not Very Committed

3. What signs or evidence will tell you when you have achieved the goal?

   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________

4. What major benefits do you expect to receive when you attain this goal?

   ____________________________________________
   ____________________________________________
   ____________________________________________
   ____________________________________________
5. Are there any important things you will have to give up to achieve this goal? If so, what?


6. What kinds of time will you need to set aside for this? Amount of time per day, week, or month?


7. What can you do to keep yourself psyched for achieving the goal?


8. Will you need to develop any special skills to achieve this goal? If so, describe.


trial was plotted and the dramatic improvement was noted, as well as a strong point made about how increased rehearsal time affects retention.

A long-term vs. short-term memory lecture (Figure 10) was presented and points made about retention improving from rehearsal and coding. A mnemonic code lecture to improve retrieval was presented. Examples of mnemonic codes were given: Ollie Had A Headache Over Algebra, etc. Forgetting theories were discussed.

A presentation of the value of note taking vs. just listening was conducted (Figure 11).

A presentation was given on attention span (Figure 12). An argument was made to not study beyond one's attention span, but rather to take brief, non-mental breaks between study periods.

This seminar took approximately one hour.

Following this seminar the students took a lunch break for approximately one-half hour without the instructor. The intention was for them to get to know each other and thus make contact with at least one student prior to starting college.

Strategies for Dealing with Instructor

Two handouts (7 and 8) were discussed with the students with regard to dealing with instructors in classrooms and labs. Essentially, students were provided with rules that govern social skills and communication skills in the classroom.

The rule for success (Figure 13) was discussed, along with why certain questions were out of line and how certain behaviors influenced instructors to favor or disfavor students.

This seminar lasted approximately one-half hour.
SHORT TERM & LONG TERM MEMORY

Figure 10. Short-Term vs. Long-Term Memory.
LISTENING vs. NOTE TAKING

Stimulus Information
(Lecture, Text, Experiment)

Senses

Brain

Arm

Recording

Studying

Figure 11. Listening vs. Note-Taking.
Figure 12. Attention Span.
HANDOUT 7
STRATEGIES FOR DEALING WITH INSTRUCTORS

GENERAL--USEFUL WITH ALL INSTRUCTORS

RULE #1--CANNOT BE VIOLATED
Give the instructor what he wants, when he wants it, in the quantity and format requested.

RULE #2--Succeeding
If you come to class regularly, take notes in class, study the notes and the text material, review the material with other interested students, do the outside assignments in the time frame, quality and quantity required, take tests on time, you have to do well at Valencia.

RULE #3--Do not ask the following questions:
1. Are you going to do anything important tomorrow?
2. Did you do anything important yesterday?

RULE #4--Child-like behavior is not considered cute at the college level, i.e., passing notes, talking to your neighbor, coming late, trying to impress the class that you know more than the instructor.

RULE #5--Honest communications are typically thought to be desirable, i.e., asking for clarification or an example, stating a point of view (ONCE) that disagrees with the instructor, giving an example from your experience that supports or conflicts with the instructor's premise.

RULE #6--Do not tell the instructor that you cut class to study for another class.

RULE #7--You are here to learn. If you know it all and refuse to be influenced by new ideas, then you should stop going to college.

RULE #8--Go to class. Take good notes when you get there.

RULE #9--Attend the first class meeting. That is the day you will generally get the flavor of the class, the class syllabus, the assignments, the schedules, the overview.

RULE #10--Treat instructors as human beings, with human frailties. Assume that you are not the only student the instructor has to deal with.
SPECIFIC STRATEGIES—Useful with certain instructors

1. Asking for extra credit opportunities can sound like you are back in grammar school.

2. Do not make excuses for absences unless required by the instructor.

3. Know the classroom rules. They vary from instructor to instructor.

4. Do not assume that the best grade in class will get you an "A."

5. Some instructors like you to come by the office to "shoot the breeze," others do not. Be safe: limit your office going to course-related material.

6. Ask your instructor for help only after you have made a sincere attempt to read and solve the assigned problems.

7. If the instructor singles you out for specific recommendations, follow them.

8. Instructors shed a lot of blood correcting papers. Show your appreciation by not making the same mistakes over and over again.

9. Some instructors do not like to be belittled in class for making errors.

10. You can tease some instructors, but not all of them.

11. There are times when the instructor can give you the benefit of the doubt. Be the kind of student that the instructor would want to give the benefit of the doubt.

12. Keep your religious beliefs private. Do not try to convert the instructor.

13. Most instructors will penalize you for late work. Some will not accept it all. Do your work on time.

14. Assume that your grade is a response to the quality of your work, and is not based on your personality, your good looks, your attitude, or your effort.

15. Sloppy, hard-to-read, handwritten assignments do not look as good, and leave a poorer impression than neat, typewritten material. If you can't type it is about time you learn.
16. Organize your work with the reader in mind. This includes tests. Do not run everything together. In analytical courses show your work. It helps to underline key words or have titles for central ideas.

17. If you have a problem, ask the instructor for help or guidance. Most will respond favorably to a legitimate problem. The instructor has numerous options. If you have been a responsible student, the instructor is likely to use a wider range of options.

18. If you have a need to be the class clown you will find that most of the other students will resent you and that the instructor will find a way to knock you out of the class.

19. If you find outside material relevant to class—newspaper clippings, etc.—bring it in. It generally thrills the instructor to think that some of his teachings remain with the student beyond the classroom.

20. If the instructor is looking for someone to answer a question (and you know the answer), speak up. It is comforting for the instructor to know that he can count on someone for a generally correct response.

21. If you must be late, come in with the least amount of attention-getting behavior. Never be late two days in a row.

22. "I can't take your test" is a bad phrase. Seek out the instructor privately for potential options.

23. Do not ask the instructor to repeat material verbatim. It is reasonable to ask him to restate a principle or to give an example, but not a word-for-word repetition.
HANDOUT 8
STRATEGIES FOR DEALING WITH LAB-TYPE COURSES

1. Read the instructions first.

2. Follow the instructions.

3. Read material before you get to lab. Prepare yourself in advance.

4. Bring appropriate material to lab.

5. Record results immediately, as they occur.

6. If you do not know, ask. DO NOT ASSUME ANYTHING.

7. Read and know the safety procedures. People have been blinded, lost hands and died in laboratories.

8. Arrive on time. All instruction comes at the beginning.

9. When working with a partner, do your share and make sure your partner does his/hers.

10. Don't assume that the instructor will deal with the personal problems that you are having with your partner. Act like an adult.

11. If you fake the experimental data, then you have not learned anything, and you have thrown your money away. It is possible for the instructor to give you an "F" for the course if you cheat. Assume that he/she will.

12. Do not fall behind in labs. It is extremely difficult to catch up.

13. Take advantage of open labs when they are available. They allow you to work at your own pace and schedule.

14. The instructor in lab is there to help you, not b.s. with you.

15. The lab typically verifies the lecture. If you miss one or the other, you hurt yourself in both areas.

16. If your instructor allows you to correct your errors, do it. This is a critically important learning process.
RULE FOR SUCCESS

Give the instructor what they want, when they want it, in the quantity and format they want.

Figure 13. Rule for Success.
Stress Management

A lecture was presented on the relationship between stress and its effects on the body (Figure 14), from antiquity to today. The argument was made that the fight or flight system was acting against us in today's sophisticated society, as well as an inability to detune stress that leads to psychosomatic and behavioral problems.

A discussion ensued as to examples of psychosomatic behavior and the behavioral problems that exist in the classroom among students. Test taking anxiety was one example.

This seminar lasted approximately one-half hour.

Mock Registration

The students were given a copy of their PAGSS course request form. In class they personally selected course section numbers and times. These were individually reviewed by the instructor to ensure no overlap, and discussions were held, at student request, as to the best strategy for taking classes (e.g., all in a row, with breaks).

The students were then taken to the registration area, where they went through the open listings to see if their classes had been cancelled, and were then taken to see the computer terminal input areas.

A sheet of potential problems (Handout 9) was given to the student and an open discussion was held to get the students to figure out what to do if they had the particular problems in the registration process. A member of the Registrars Office participated in these discussions with the students.

This seminar lasted approximately 1 1/4 hours.

This was the last seminar of the first day.

The first day seminars lasted approximately seven hours, starting at 8:00 a.m. and finishing approximately 3:30 p.m., with a half-hour lunch break.
Figure 14. Stress Model
1. Student will be given a copy of his PAGSS Course Request Form.

2. Student will proceed to Student Lounge.

3. Student will select course sections from Open Listings posted in the Student Lounge.

4. Student will take Course Request Form to computer operator.

5. Operator will tell student if he has a problem.

6. Student must determine the solution to the problem.

PROBLEMS

1. Course is filled.

2. There is a hold on student records because:
   incomplete application (no transcript, application fee);
   probation from previous semester;
   financial hold (previous bills not paid).

3. Not taking the courses approved by the counselor (generally relates to courses mandated by PAGSS scores).

4. The computer is down and won't be back up for two hours.

5. The computer does not recognize that you exist (SS# error, lost application, etc.).

6. The wrong course number was written on the request form.

7. A lab indicator was left off of the request form.

8. There is a conflict in course times.
9. The course requires department permission.

10. The student registered for too many hours (over 19).

The student is to provide a written description of the course of his actions for the problem assigned. What will he do, where will he go, who will he see?
Second Day of Seminars

Introduction

There was a brief discussion of the registration which most of the students had completed between the two seminar days. (Note: The second seminar day occurred approximately two weeks after the first day, but still prior to the first day of classes. Any problems that students had were discussed. The vast majority had no problems whatsoever, and those that did have problems had all been anticipated in the registration seminar. Most students expressed appreciation that they knew what was coming and they had no anxiety about the process.

All students were asked to record all of the information that they remembered from the stress seminar presented in the previous orientation session. The points were numbered and put away until the note taking session.

This seminar lasted approximately 1/4 hour.

Stress Management Seminar

The film Managing Stress (VCC No. BF575.S75, 30 minutes) was shown, following which there was a review of the film and other sources of the treatments of stress that a student has under his control (Figure 15). The destructive treatments (Figure 16) of smoking, drinking, pill popping, etc., were briefly discussed. Greatest emphasis was placed on discussions of the two techniques of aerobic exercise and forms of meditation. A brief demonstration of how people meditate was conducted. It was pointed out that any activity that one does that diverts attention from the stress event is useful for lowering the stress effects.

This seminar lasted approximately one hour.
SURVIVING AT SCHOOL

- Prioritizing
- Most stressful first
- One at a time
- Scheduling - Planning
- Kill with kindness
- Dealing with change
- Dealing with unknown
- Self confidence factors
- Manageable hunks
- Complete before break or end of day

Figure 15. Personal Management of Stress.
DESTRUCTIVE TREATMENTS

- Smoking
- Drinking
- Ugliness
- Overeating
- Internalizing
- Solving all of life's problems yourself

Figure 16. Destructive Treatments.
Grade Getting Seminar

This was just a brief introduction (Figure 17) to describe what was coming in the note taking, studying and test taking seminars to follow.

Note Taking Seminar

The notes that the students remembered from the first day stress seminar were reviewed against an overhead of the seminar leader's notes. It was pointed out that less than half of what was covered was remembered without notes or studying. Often the percentage was much less than half. A strong point was made about one's inability to pass tests if only half or less of the classroom material was learned.

A sound filmstrip Test Taking Skills (LBI049 T48, part one) was shown to the students. The subjects were requested to take notes during the filmstrip and these were then compared to the notes taken by the seminar leader to demonstrate some tricks of the trade in note taking. Hints about note taking were discussed. The major points made related to cues from the instructor, physical note taking considerations, converting to own words, reviewing and rewriting notes.

The filmstrip served the purpose of being a vehicle for practicing note taking as well as to cover some of the subject matter about test taking.

"Taking Lecture Notes" (Handout 10) was provided, with discussion of the handout contents and high points.

A major discussion point was made that classroom notes are different than notes used for test study. Notes should be converted, using mnemonics if necessary, to study notes. A point about the problems of lending notes was also made.

The physiological effect of note taking was discussed. The main theme was that people who only listen can easily be distracted or might lapse into their daydreaming mode. People who take notes activate more senses and a higher-order thinking process, are forced to concentrate and to convert the lecture into their own words.

This seminar lasted approximately 3/4 hour.
GRADE GETTING

- Note Taking
- Studying
- Homework
- Test Taking

Figure 17. Grade Getting.
REASONS FOR TAKING GOOD NOTES

1. to help you determine what the instructor considers important (and, therefore, what will likely appear on tests

2. to force yourself to listen carefully and to test your understanding of the material

3. to obtain supplementary information not found in the textbook

4. to help you study for exams

HOW TO DETERMINE WHAT TO TAKE DOWN

Instructors usually give clues about what is important to take down. Following are some of the more common clues.

1. material written on blackboard

2. repetition

3. emphasis
   a. emphasis can be judged by tone of voice and gesture
   b. emphasis can be judged by amount of time instructor spends on points and the number of examples used.

4. word signals (e.g., "There are two points of view on . . .," "The third reason is . . .," "In conclusion . . .").

5. summaries given at end of class

6. reviews given at beginning of class

NOTE TAKING METHODS

Each student should develop an individual method of taking notes, but most students find the following suggestions helpful.

1. Make the notes brief, but provide enough information for understanding.
2. Put most notes in your own words, but the following should be noted exactly:
   a. formulas
   b. definitions
   c. specific facts.

3. Use an outline form and/or a numbering system.

4. Indentation helps distinguish major from minor points.

5. If you miss a statement, write key words, skip a few spaces, and get the information later.

6. Don't use every space on the page. Leave room for adjusting notes or coordinating notes with text.

7. Date your notes and number the pages.

8. Review notes as soon as possible after class. Adjust and fill in information.

9. Write down what is written on the board.

10. Take down what is shown on overhead transparencies (NOTE: Very often this is just an outline and the instructor fills in that outline. The fill-in will be the key material--the outline will not get it for you.)

11. Record names, dates, places, etc.

12. Record anything that sounds like a general concept or principle.

13. Record anything that is repeated by the instructor.

14. Record any principle for which an example is given. (NOTE: Typically the principle is more important than the example. Students often make the mistake of learning the example rather than the principle.)

15. Simplify and summarize.

16. Use symbols: stars, arrows, etc., to keep track, to emphasize important points, number for priority.

USING NOTES

1. Rewrite notes legibly after class the same day. Fill in what was forgotten or missed. Number and expand examples.
2. Share notes with friends in order to get a conglomerate set of notes.

3. Ask the instructor the next period to clarify any areas where your conglomerate notes are in question.

4. Type notes if time permits. All of this is a rehearsal process and during the note taking process you are rehearsing and thus studying without the real pain of studying.

5. Organize notes for studying. This will probably be in a different format than the notes were given. Use mnemonic coding to organize lists, sets of principles, dates, etc.
Studying Seminar

The students were exposed to the SQ3R method through a handout (Handout 11) and discussion of the handout. The students were also exposed to the seminar leader's views of reading cycles for studying. The reading cycle is brief (15-30 minutes per chapter), useful for skimming, reading charts, reading introductions and summaries. The second reading cycle is the intense reading cycle, with no stone unturned: everything is read, high points are highlighted, notes and questions are recorded. The third reading cycle is the review cycle, where only the underlining is studied. This last cycle is also short (15-30 minutes). This last cycle should be repeated as often as possible.

Students read and underlined two paragraphs from the handout "Underling a Textbook" (Handout 12). An overhead transparency (Figure 18) was then shown, in which experts had underlined the material. Why they included some material and omitted other material was discussed.

The handout "Suggestions for Study Habit Improvement" (Handout 13) was discussed with the students.

This seminar took 3/4 hour.

Test Taking Seminar

Several handouts were provided to the students: "Some General Remarks about Exams," "Procedure for Objective Tests," "Scheduling . . . Essay Exams," and "Anxiety Reduction" (handouts 14-17).

There was a discussion conducted about the techniques successful students have used in the past to improve their testing performance (e.g., studying beforehand, following directions, computer dumping, reviewing the test, attending to the point values on the test, and dealing with what you know first).

A "Clue Word" exercise overhead (Figure 19) was presented, in which the students were asked to determine the cue words in several essay questions.

This seminar lasted 1/2 hour.
The title for this new higher-level study skill is abbreviated to make it easier to remember and to make reference to it simpler. The abbreviation SQ3R stands for the steps that the student follows in using this method. A description of each of the steps is given below.

1. **SURVEY.** Glance over the headings in the chapter to see the few big points that will be developed. Also, read the final summary paragraph if the chapter has one. This survey should not take more than a minute and will show the three to six core ideas around which the discussion will cluster. This orientation will help you organize the ideas as you read them later.

2. **QUESTION.** Now begin to work. Turn the first heading into a question. This will arouse your curiosity and thereby increase comprehension. It will bring to mind information already known, thus helping you to understand that section more quickly. The question also will make important points stand out at the same time that explanatory detail is recognized as such. Turning a heading into a question can be done at the instant of reading the heading, but it demands a conscious effort on your part.

3. **READ.** Read to answer that question, i.e., to the end of the first headed section. This is not a passable plodding along line by line, but an active searching for the answer.

4. **RECITE.** Having read the first section, look away from the book and try briefly to recite the answer to your question. Use your own words and cite an example. If you can do this, you know what is in the book; if you cannot, glance over the section again. An excellent way to do this reciting from memory is to jot down brief cue phrases in outline form on a sheet of paper.

   Now repeat steps 2, 3 and 4 with each successive headed section: that is, turn the next heading into a question, read to answer that question, and recite the answer by jotting down cue phrases in your outline. Read in this way until the entire lesson is completed.

5. **REVIEW.** When the lesson has been read through in this way, look over your notes to get a bird's eye view of the points and their relationship and check your memory as to
the content by reciting the major sub-points under each heading. This checking of memory can be done by covering up the notes and trying to recall the main points. Then expose each major point and try to recall the subpoints listed under it.

These five steps of the SQ3R method—survey, question, read, recite and review—when polished into a smooth and efficient method, should result in faster reading, picking out the important points, and fixing them in memory. The student will find one other worthwhile outcome: quiz questions will seem familiar because the headings turned into questions are usually the points emphasized in quizzes. By predicting actual quiz questions and looking up the answers beforehand, the student feels that he is effectively studying what is considered important in a course.


EXTENSIVE USE OF CAPITAL GOODS

All modern economies—whether they approximate the capitalist, socialist, or communist ideology—are based upon an advanced technology and the extensive use of capital goods. Under pure capitalism it is competition, coupled with freedom of choice and the desire to further one's self-interest, which provides the means for achieving a rapid rate of technological advance. The capitalistic framework is felt to be highly effective in harnessing incentives to develop new products and improved techniques of production. Why? Because the monetary rewards derived therefrom accrue directly to the innovator. Pure capitalism therefore presupposes the extensive use and rapid development of complex capital goods: tools, machinery, large-scale factories, and storage, transportation, and marketing facilities.

Why are the existence of an advanced technology and the extensive use of capital goods important? Because the most direct method of producing a product is usually the least efficient. Even Robinson Crusoe avoided the inefficiencies of direct production in favor of "roundabout production." It would be ridiculous for a farmer—even a backyard farmer—to go at production with his bare hands. Obviously, it pays huge dividends in terms of a more efficient and, therefore, a more abundant output to fashion tools of production, that is, capital equipment, to aid in the productive process. The best way of getting water out of a well is not to dive in after it!

But there is a catch involved. As we recall our discussion of the production possibilities curve and the basic nature of the economizing problem, it is evident that, with full employment and full production, resources must be diverted from the production of consumer goods in order to be used in the production of capital goods. We must currently tighten our belts as consumers to free resources for the production of capital goods which will increase productive efficiency and permit us to have a greater output.
of consumer goods at some future date. The Russian citizenry, for example, has paid for an accelerated rate of industrialization in terms of a standard of living below that which might have otherwise prevailed.

SPECIALIZATION

The extent to which society relies upon specialization is astounding. The vast majority of consumers produce virtually none of the goods and services they consume and, conversely, consume little or nothing of what they produce. The hammershop laborer who spends his life stamping out parts for jet engines may never "consume" an airplane trip. The assembly-line worker who devotes eight hours a day to the installation of windows in Chevrolets may not own a car, or if he does, it may be a Ford. Few households seriously consider any extensive production of their own food, shelter, and clothing. Many a farmer sells his milk to the local creamery and then buys oleomargarine at the Podunk general store. Society learned long ago that self-sufficiency breeds inefficiency. The Jack-of-all-trades may be a very colorful individual, but he is certainly lacking in efficiency.

In what specific ways might human specialization—the division of labor—enhance productive efficiency? First, specialization permits individuals to take advantage of existing differences in their abilities and skills. If caveman A is strong, swift afoot, and accurate with a spear, and caveman B is weak and slow, but patient, this distribution of talents can be most efficiently utilized by making A a hunter and B a fisherman. Second, even if the abilities of A and B are identical, specialization may prove to be advantageous. Why?
EXTENSIVE USE OF CAPITAL GOODS

All modern economies—whether they approximate the capitalist, socialist, or communist ideology—are based upon an advanced technology and the extensive use of capital goods. Under pure capitalism it is competition, coupled with freedom of choice and the desire to further one's self-interest, which provides the means for achieving a rapid rate of technological advance. The capitalistic framework is felt to be highly effective in harnessing incentives to develop new products and improved techniques of production. Why? Because the monetary rewards derived therefrom accrue directly to the innovator. Pure capitalism therefore presupposes the extensive use and rapid development of complex capital goods: tools, machinery, large-scale factories, and storage, transportation, and marketing facilities.

Why are the existence of an advanced technology and the extensive use of capital goods important? Because the most direct method of producing a product is usually the least efficient. Even Robinson Crusoe avoided the inefficiencies of direct production in favor of "roundabout production." It would be ridiculous for a farmer—even a backyard farmer—to go at production with his bare hands. Obviously, it pays huge dividends in terms of a more efficient and, therefore, a more abundant output to fashion tools of production, that is, capital equipment, to aid in the productive process. The best way of getting water out of a well is not to dive in after it!

But there is a catch involved. As we recall our discussion of the production possibilities curve and the basic nature of the economizing problem, it is evident that, with full employment and full production, resources must be diverted from the production of consumer goods in order to be used in the production of capital goods. We must currently tighten our belts as consumers to free resources for the production of capital goods which will increase productive efficiency and permit us to have a greater output of consumer goods at some future date. The Russian citizenry, for example, has paid for an accelerated rate of industrialization in terms of a standard of living below that which might have otherwise prevailed.
The extent to which society relies upon specialization is astounding. The vast majority of consumers produce virtually none of the goods and services they consume and, conversely, consume little or nothing of what they produce. The hammershop laborer who spends his life stamping out parts for jet engines may never "consume" an airplane trip. The assembly-line worker who devotes eight hours a day to the installation of windows in Chevrolets may not own a car, or if he does, it may be a Ford. Few households seriously consider any extensive production of their own food, shelter, and clothing. Many a farmer sells his milk to the local creamery and then buys oleomargarine at the Podunk general store. Society learned long ago that self-sufficiency breeds inefficiency. The Jack-of-all-trades may be a very colorful individual, but he is certainly lacking in efficiency.

In what specific ways might human specialization--the division of labor--enhance productive efficiency? First, specialization permits individuals to take advantage of existing differences in their abilities and skills. If caveman A is strong, swift afoot, and accurate with a spear, and caveman B is weak and slow, but patient, this distribution of talents can be most efficiently utilized by making A a hunter and B a fisherman. Second, even if the abilities of A and B are identical, specialization may prove to be advantageous. Why?
1. When studying or taking a test, attempt to be in a non-emotional state of mind. If you are worrying about something, this will divert your attention from the study of test material.

2. Provide yourself internal rewards. If you successfully learn something, take a break, buy a candy bar, etc. Rewarding yourself is very powerful in acting as an incentive to follow through to completion.

3. Activate several senses. The more inputs that go to the brain, the better chance there is for retention. For example, when you take notes you are activating oral, sight and tactile senses, whereas when you just listen you may activate only two senses and there may be interfering effects from daydreaming. Note taking forces concentration on the topic.

4. When studying, develop questions from the study material that the instructor might ask. This way you study purposefully rather than randomly.

5. Eliminate distractions. When studying insure that the only material going into your brain is coming from the text or notebook. The TV, stereo and other people will compete for your concentration.

6. Establish retrieval cues. This means that you should develop little tricks that work for you in calling up the material. Developing rhymes or codes or alphabetic arrangements may help.

7. Learn principles, not specifics. It is easier if you learn bigger ideas so that you can apply them to specific situations. If you only learn how to solve one problem, you will be in trouble if the problem is reworded or rearranged.

8. Participation in the classroom will aid your learning. If you are thinking through the material well enough to respond to questions or to ask them, it is rational to think that you are concentrating at a good level. Thus, participation aids concentration.

9. Give yourself feedback. From time to time, stop reading and review in your own mind what you have learned. What is
it that you do not understand? You may have to write this
summary out to ensure that you are doing it conscientiously.

10. Increase trials. Review or read many times. The more
times you go over something in depth, the better understand­
ing you will have, the better the material will be impressed
into memory, and the more you will have questions about what
you do not understand.

11. Never read beyond what you do not understand. Stop and
go back to see if you missed a critical concept. If you do
not understand where you are, you are not going to
understand where you are heading.

12. If you are reading along and you say to yourself, "I
wonder what it is I just read," then you have been reading
too long. Start reading in smaller chunks. Try resting ten
minutes, after reading for ten or fifteen minutes. This
will allow a very intense effort every reading period.
Also, during the rest period you will have the opportunity
to reflect on the material just read in order to identify
what you don't know.

13. Underline key concepts in the book--major headings,
topic sentences, transitions, etc. You can err by under­
lining too much, since then the underlining will have been
useless. The underlining serves the purpose of helping when
reviewing for tests, and it forces you to concentrate while
reading.

14. After you have studied in good depth, not before, study
with a friend by asking each other questions and insure an
understanding of the answer.

15. Study a moderate amount every day, not a whole lot the
night before the test. Cramming has the effect of making
you emotionally upset; something might come up at the last
moment that will interfere with the studying. Studying at a
comfortable pace will allow you to have a great deal of
assurance about successful performance.

16. If you have asked yourself a great number of questions
about the material, you will have a better chance of
eliminating test anxiety.

17. Study and test yourself in a test mode. Write
questions out and answer them in a similar time frame and
condition that the test will be given in. Thus, you will be
practicing taking tests. This practice has the potential of
relieving test taking anxiety.
18. Tape with instructor's permission only. This will allow you to review the lectures completely. You should simultaneously take notes in order to increase your attention to the lectures. It is generally recommended that taping be used primarily to fill in notes.

19. If you are having problems understanding the material, go see your instructor. He/she has dealt with students having your same problem before, and he/she is generally more than willing to help you learn.

20. Try to relate the reading assignments with the material covered in lecture. What were the points that the instructor was emphasizing, giving examples for, or trying to clarify?

21. If your notes are messy and you won't be able to read them when study time comes, rewrite them.

22. When doing a project, make sure you understand the purpose of the project, when it's due, what format is required, and the length required. An outline is a big help. Contact your instructor if you are unsure about any part, so that you won't go too far down the wrong path.

23. Go to class, every time. Often high points are made there, and often material not covered in the text is provided. Test, project and other assignments are given that you need to be aware of.
BEFORE THE EXAM

1. Find out what the exam will cover. This will give you a "set" for reviewing. No exam covers everything taught in a course.

2. Find out what kind of exam it will be: objective, essay, or a combination of both.

   If it's an essay exam, find out whether there will be several short questions of this type, or whether there will be one or more long ones, or possibly a combination of both.

   Objective exams require a specific type of response from you; essay exams require something just as specific, but different. There are successful techniques for preparing and taking each kind. See our handouts on "Essay Exams" and "Objective Exams."

3. Reviewing is a big stumbling block, largely because the task looks so large that the human tendency is to postpone it. This leads to the all-night cram session that sends you into the exam with a blurred mind filled with a jumble of facts and no sense of proportion. (There is, however, such a thing as sensible cramming: see below.)

Start reviewing methodically and fairly early. Make human nature work for you.

On reviewing methodically:

* Separate review time from work on daily assignments.

* Review in short chunks every day—at the most, two hours at a time. (If you work more than that, brain-fag sets in and you're wasting time. If you must work more than that, give yourself a deliberate, unexciting break of ten to fifteen minutes before you start again. If you're interested in why this is good advice, read pp. 31-36 in How to Study and Take Exams by Lincoln Pettit.)
*Divide the review material in each course into logical sections and concentrate on one at a time. Terminology is a good place to start, if you're weak on it.

*Relieve your mind by reviewing your worst subject first. A lot of what is called review is really learning something for the first time, and naturally this will take the most effort.

*Re-review your toughest subject just before the exam--the day before, or even the night before. This is a sensible form of cramming, because it is really review.

On reviewing early:

*There is such a thing as reviewing too early, if you have not been thoroughly on top of the material since the course began. Assuming you are average, and there's plenty you don't remember, the best time to start is probably about two weeks before a major exam if you're fairly weak in the subject, or a week before it if you're moderately sure of yourself.

4. Make sure you know certain elementary additional facts about the exam, such as where it is, when it is, and what you are expected and allowed to bring with you. Then get there early, with the appropriate materials.

For more detail on efficient techniques of reviewing, see our handout "Effective Skill in Reviewing."

DURING THE EXAM

1. Before you start writing:

   *Glance over the whole exam. This does two things for you:

   It gives you a "set" on the exam: what it covers, where the emphasis lies, what the main ideas seem to be. Many exams are composed of a series of short questions all related to one particular aspect of the subject, and then a longer one developing some ideas from another area.
158

It relaxes you, because if you read carefully all the way through it, you are bound to find something you feel competent to answer.

*Observe the point value of the questions and then figure out a rough time allowance. If the total point value for the test is 100, then a 50-point question is worth about half of your time, regardless of how many questions there are. A quick rule of thumb for a one-hour test is to divide the point values in half.

*Underline all significant words in the directions. Many a hapless student has penalized himself because he did not see the word "or," in "Answer 1, 2, or 3." You do not get extra credit for answering three questions in that case. "Enumerate" does not mean "discuss." (See the accompanying RSSL handout on "Common Key-Words Used in Essay Questions.") If you do not clearly understand the directions, ask the proctor.

2. When you begin to work:

*Tackle the questions in the order that appeals to you most. There is nothing sacred about the order in which the questions are asked. Doing well on a question that you feel relatively sure of will be reassuring and will help free your mind of tension. The act of writing often unlocks the temporarily blocked mental processes; when you finish that question you will probably find the others less formidable. On the other hand, you may be the type of person who wants to get the big one off his mind first, and save the easy ones "for dessert." If you are writing in an exam book, be sure to identify the questions clearly.

*Keep the point value and time allowance in mind. This may save you from a very common and panic-producing mistake--such as taking twenty minutes of an hour test to answer a five-point question, and then finding you have five minutes left in which to answer a twenty-point question. It is impossible to score more than five points on a five-point question!
*Work methodically, forcing yourself, if necessary, to do so. If you tend to rush at things, slow down. If you tend to dawdle, pace yourself.

3. When you are finished, check your paper:

*to see if you have left out any questions you meant to tackle later and to see if you have followed directions.

*to catch careless errors. Note: don't take time to recopy answers unless you're sure they're illegible. You are not usually graded on neatness, but accuracy.

AFTER THE EXAM

An excellent way to learn how to take exams is to analyze what you've done on one. When you get your paper back, go over it, noting not only what you did wrong, but why. An hour or two spent in this way may be extremely valuable. See if you detect any point-eating tendencies, such as getting the main idea and then rushing sloppily through the proofs, or simply not following directions, or bogging down on relatively unimportant items, or misreading questions entirely. The next time you face an exam, consciously watch yourself for the weaknesses.

Also note what you did right! This may save you hours of worry the next time around. That question on the English test that haunted you for the next several days may prove to be the one you did best on. Why did it get such a good reception? Often such analysis proves genuinely reassuring.
PROCEDURE FOR OBJECTIVE TESTS

1. MOVE RAPIDLY THROUGH THE TEST.

2. WHEN YOU FIND AN EASY QUESTION OR ONE YOU ARE CERTAIN OF, ANSWER IT.

3. OMIT DIFFICULT ONES ON THIS FIRST PASS.

4. WHEN YOU SKIP A QUESTION, MARK IT IN MARGIN.

5. KEEP MOVING. NEVER ERASE. JOT BRIEF NOTES IN MARGIN FOR LATER USE IF YOU NEED TO.

6. WHEN YOU FINISH THE EASY ONES, RETURN TO THE ONES YOU MARKED AND TRY AGAIN.

7. MARK AGAIN THOSE YOU ARE NOT SURE OF.

8. WHEN YOU REVIEW, GO OVER ALL QUESTIONS.
1. GET AN OUTLINE. LIST THE IMPORTANT POINTS OR IDEAS.

2. ORDER THESE POINTS.

3. ADD SUPPORT IN THE FORM OF EXAMPLES OR FACTS. EACH MAIN POINT WILL BE A SEPARATE PARAGRAPH.

4. BE DIRECT. GET DIRECTLY TO THE CORE.

5. USE SIGNALS TO SHOW YOUR INTENT.
REDUCING THE PRESSURE TO STUDY

1. When you plan your day--plan for study periods.
2. Allocate time for study when you are most intellectually alert.
3. Understand your own attention span and incorporate it into your study scheduling.
4. Study on a timely basis.
5. Study in order to activate long-term memory.
6. Develop mnemonic coding.

TEST ANXIETY REDUCTION

1. Study before a test in order to develop confidence.
2. Study in the mode of the test.
3. Believe the instructors when they:
   a. announce a test;
   b. identify the topics to be included;
   c. identify the type of test;
   d. identify the credit for various test parts.
4. Review notes the night before.
5. Come to class exactly on time.
6. Concentrate on the mechanics of test taking.
7. Read the whole test over and answer the questions that you know first.
8. Make notes in the margins of the test to remind you to pick up high points.
10. Parcel out time so that you are forced to finish each section of the test within time limits.
11. Skip questions you do not know and come back to them at the end.
12. Give yourself a brief break during the test. Even a few seconds will allow some time for the thought patterns to change.
13. Wear layered clothes so that you can take some off if the room is too warm.
14. Bring all of the equipment so that you can take the test without the anxiety of looking for someone to give you some help.
Clue Word Exercise

ESSAY TEST

1 - Describe the principle of cognitive dissonance.

2 - Freud and Rogers were both eminent psychologists. Compare their views about the cause of human behavior.

3 - Evaluate the Hawthorne experiment in light of current research methods.

Figure 19. Clue Word Exercise.
Reading and Writing with Low Skills Seminar

A handout (Handout 18) was provided and "Reading in College with Low Reading Skills" and "Writing in College with Low Writing Skills" were discussed. Two overhead transparencies (figures 20 and 21) of the same title were shown and hints discussed with the students.

This seminar took 1/4 hour.

Time Management Seminar

Students were asked to schedule completely two days on the schedule handout (Handout 19). They were asked to block in work, school, social, sleeping and eating times. Discussion then centered on the appropriate number of hours necessary for studying and the problem of making up that number of hours if the time was missed on any given day. Priorities of timing were discussed, during which mandatory activities were identified, and the problems associated with missing any of the study hours were evaluated. Time management hints (Figure 22) were discussed.

This seminar lasted 1/2 hour.

Assertiveness Seminar

The students were requested to judge the first fifteen statements of the "Assertiveness Inventory" handout (Handout 20) as submissive, assertive or aggressive. Following this, a discussion was held which identified why each statement belonged in its appropriate category.

A presentation was made as to the methods for improving one's assertiveness using the "Assertiveness Program" (Figure 23). Discussions centered around how assertiveness differed from aggressiveness, specifically in the college and in the classroom setting.

This seminar lasted 1/2 hour.
How do you know if your reading level is satisfactory for college-level work?
  * Was it satisfactory for high school-level work?
  * Do your PAGSS scores show that you are recommended or mandated into reading classes?

ALTERNATIVE TREATMENTS

1. Take several reading courses.
2. Practice reading.
3. Go to the library and read material of interest.
4. Read instead of watching television.
5. If you read slowly, start reading sooner and give yourself more time.
6. Read more efficiently. Write notes in the margin, emphasize key words or phrases. Underline main points. These techniques will allow you to read completely just one time.
7. Follow the technically recommended process:
   a. Skim the entire reading assignment, looking for titles, diagrams, or other high points. This overview skimming should take about 1/2 to one hour. The intent here is to get the general flavor of the assignment. You will know what is coming when you eventually read in depth.
   b. Read in depth. Underline as you go. Make notes in the margins, write down questions. Do not go beyond anything that you do not understand. This process should take about 15-30 minutes per page.
   c. Outline the chapters, using the underlining that you have just done.
   d. Review the outlined chapter and the outline. Review of a complete chapter should take less than
one hour. For a test you should review at least eight to ten times.

8. Work with a study group. Share the reading load and share summaries with the other members of the group. This is not useful for text reading, but can be useful for voluminous outside reading. Discuss the important points of the readings in order to insure that you did not miss something important. Also, reviewing orally helps the rehearsal process.

WRITING IN COLLEGE WITH POOR WRITING SKILLS

1. Take the grammar and composition courses at the beginning of your college career. Here you will learn and practice the level of writing necessary to survive in the other courses.

2. Practice writing. Write letters to friends and relatives.

3. Take the courses where the instructor assigns primarily essay exams and outside writing assignments.

4. Use the writing lab to get technical grammar and composition help (LRC, second floor).

5. Begin to read a lot. A good guide to writing well is to observe first hand the writing habits of published authors.
Surviving with Low Writing Skills

- Courses
- Practice
- Essay exam courses
- Lab
- Read

Figure 20. Surviving with Low Writing Skills.
Surviving with Low Reading Skills

- Courses
- Practice
- Library
- Read / TV
- Efficiency
  - Skim
  - Depth
  - Outline
  - Review
- Study Group

Figure 21. Surviving with Low Reading Skills.
<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
<th>SUNDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>8:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>9:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>10:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>11:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>12:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>1:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>2:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>3:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>4:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>5:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>6:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>7:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>8:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>9:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>10:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>11:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>12:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TIME MANAGEMENT

- Principles
  Attention Span
  Stress
  Reward
  Self-Concept
  Individual Differences

- Usage
  Studying
  Test Taking
  Work-School Scheduling

Figure 22. Time Management Hints.
The following questions will be helpful in assessing your assertiveness. Be honest in your responses. All you have to do is draw a circle around the number that describes you best. For some questions the assertive end of the scale is at 0, for others at 4. Key: 0 means no or never; 1 means somewhat or sometimes; 2 means average; 3 means usually or a good deal; 4 means practically always or entirely.

1. When a person is highly unfair, do you call it to his attention? .... 0 1 2 3 4
2. Do you find it difficult to make decisions? . 0 1 2 3 4
3. Are you openly critical of others' ideas, opinions, behavior? ........ 0 1 2 3 4
4. Do you speak out in protest when someone takes your place in line? ........ 0 1 2 3 4
5. Do you often avoid people or situations for fear of embarrassment? ........ 0 1 2 3 4
6. Do you usually have confidence in your own judgment? ........ 0 1 2 3 4
7. Do you insist that your spouse or roommate take on a fair share of household chores? . 0 1 2 3 4
8. Are you prone to "fly off the handle"? . . . 0 1 2 3 4
9. When a salesman makes an effort, do you find it hard to say "no," even though the merchandise is not really what you want? ........ 0 1 2 3 4
10. When a latecomer is waited on before you are, do you call attention to the situation? ........ 0 1 2 3 4
11. Are you reluctant to speak up in a discussion or debate? ........ 0 1 2 3 4
12. If a person has borrowed money (or a book, garment, thing of value) and is overdue in returning it, do you mention it? 0 1 2 3 4

13. Do you continue to pursue an argument after the other person has had enough? 0 1 2 3 4

14. Do you generally express what you feel? 0 1 2 3 4

15. Are you disturbed if someone watches you at work? 0 1 2 3 4

16. If someone keeps kicking or bumping your chair in a movie or lecture, do you ask the person to stop? 0 1 2 3 4

17. Do you find it difficult to keep eye contact when talking to another person? 0 1 2 3 4

18. In a good restaurant, when your meal is improperly prepared or served, do you ask the server to correct the situation? 0 1 2 3 4

19. When you discover merchandise is faulty, do you return it for an adjustment? 0 1 2 3 4

20. Do you show anger by name-calling or obscenities? 0 1 2 3 4

21. Do you try to be a wallflower or a piece of the furniture in social situations? 0 1 2 3 4

22. Do you insist that your landlord (mechanic, repairman, etc.) make repairs, adjustments or replacements which are his responsibility? 0 1 2 3 4

23. Do you often step in and make decisions for others? 0 1 2 3 4

24. Are you able openly to express love and affection? 0 1 2 3 4

25. Are you able to ask your friends for small favors or help? 0 1 2 3 4

26. Do you think you always have the right answer? 0 1 2 3 4
27. When you differ with a person you respect, are you able to speak up for your own viewpoint? 

28. Are you able to refuse unreasonable requests made by friends? 

29. Do you have difficulty complimenting or praising others? 

30. If you are disturbed by someone smoking near you, can you say so? 

31. Do you shout or use bullying tactics to get others to do as you wish? 

32. Do you finish other people's sentences for them? 

33. Do you get into physical fights with others, especially with strangers? 

34. At family meals, do you control the conversation? 

35. When you meet a stranger, are you the first to introduce yourself and begin a conversation? 

(Source: unknown)
Assertiveness Program

• Self Monitoring
• Modeling
• Covert Imagery
• Role Playing
• The Real Thing
• Keep At It

Figure 24. Assertiveness Program.
Summary

As a finale the students were shown the film Math Anxiety: We Beat It, So Can You" (VCC No. QA11.M35). The film showed a number of adults who had been scared of math all their lives and how, in eight months, they were made ready to deal with calculus. The film was broadened in discussion to show how many topics and skills are soluble in the manner of going back, starting slowly and spending time dealing with the unknown under relatively pleasant surroundings. Other topics mentioned were speaking in public, essay test taking, word problems, remembering historical dates.

Students also evaluated the two days of seminars. Only the students who completed the two days of seminars did this. The students were asked to evaluate each of the seminars and decide if they should be changed. The students were also asked to subjectively respond to their general feelings about the seminars, their usefulness, whether or not they should be presented to others, and any improvements that could be made.

The second day of seminars took approximately 5 1/4 hours from 8:00 a.m. to slightly past 1:00 each day. There was no lunch break. There was, however, a mid-morning break of approximately ten minutes.
APPENDIX D

QUESTIONNAIRES, DATA SHEETS, LETTERS
Congratulations on your acceptance to Valencia Community College! On behalf of the faculty, I would like to say that we hope your career at Valencia will be fruitful and that you meet all of your goals.

We are continually seeking new ways to help students improve their performance at Valencia. In that light, I would like to invite you to participate with us in an experimental program that is being initiated this year for a very select group of students. We will be providing you with some specialized training in what I call "college-survival" skills.

This training should help you through some of the difficulties that new freshman face when first attending college.

Training will take the better part of two days. You will need to select one of the dates listed below for the first day of training.

July 23
July 24
July 25
July 26

You will sign up for the second day of training after you have attended the first training session.

The training sessions will start at 8 am sharp and continue until 4 pm. Please bring a bag lunch. Drinks will be available at nominal cost. Report to room 3-131 when you arrive on campus.

I strongly urge you to take advantage of this opportunity to help yourself get started on the right foot.

Be sure to mark the date that you will be attending the training session. Please return the questionnaire promptly, in the enclosed self-addressed stamped envelope, so that you will be placed in the section of your choice.

I am looking forward to seeing you at Valencia.

Very truly yours,

[Signature]

Yvan R. Applebaum
Psychology Professor
Congratulations on your acceptance to Valencia Community College! On behalf of the faculty, I would like to say that we hope your career at Valencia will be fruitful and that you meet all of your goals.

You have already participated in our Testing, Counseling and Orientation Program. We feel that this orientation should go a long way toward smoothing your transition into the college.

Because we are continually seeking new ways to help students improve their performance at Valencia, we want to ask your cooperation once more. We are asking you, as one of a select group of students, to fill out the attached questionnaire and research permission slip. Your participation in this research project will help us provide improved services to students.

Please return the attached questionnaire promptly.

Very truly yours,

[Signature]
Ivan R. Applebaum
Psychology Professor
QUESTIONNAIRE

The following information is being gathered in order to help Valencia Community College better serve entering students in the future. This information will not be included in your records and will be kept strictly confidential. Please answer each question.

1. What is your gender?----Male-----Female

2. What is your current age?------

3. What is your race?
   Caucasian------
   Negroid------
   Oriental------
   Other---------

4. What is your parents approximate income?----------

5. On the basis of 4.0 = A, 3.0 = B, 2.0 = C, 1.0 = D, what was your approximate high school Grade Point Average (GPA) rounded off to the nearest tenth?--------

6. How many years of schooling did your parents complete?
   -------Father    -------Mother

7. What is your current marital status?
   ---married---single---divorced---engaged---widowed

8. Have you decided what career to prepare for?
   ---No
   ---Narrowed to several options
   ---Yes

9. What are your academic goals?
   ---Several courses---Assoc. degree---Batchelors degree
   ----Graduate degree

10. To what degree are your parent(s) encouraging you to come to college?
    ---none---little---average---a lot---too much

11. How important is going to college to you?
    ---none---little---average---very---compelling

Your Name                Social Security Number
-----------------------------------
I am pleased to help participate in this research project.
Signature-----------------------------
The following information is being gathered in order to help Valencia Community College better serve entering students in the future. This information will not be included in your records and will be kept strictly confidential. Please answer each question.

1. What is your gender? Male Female

2. What is your current age?

3. What is your race?
   Caucasian
   Negroid
   Oriental
   Other

4. What is your parents approximate income?

5. On the basis of 4.0 = A, 3.0 = B, 2.0 = C, 1.0 = D, what was your approximate high school Grade Point Average (GPA) rounded off to the nearest tenth?

6. How many years of schooling did your parents complete?
   Father
   Mother

7. What is your current marital status?
   Married Single Divorced Engaged Widowed

8. Have you decided what career to prepare for?
   No
   Narrowed to several options
   Yes

9. What are your academic goals?
   Several courses Assoc. degree Batchelors degree Graduate degree

10. To what degree are your parent(s) encouraging you to come to college?
    None Little Average A lot Too much

11. How important is going to college to you?
    None Little Average Very Compelling

Your Name

Social Security Number

I am pleased to help participate in this research project.

Signature

I will be attending the "college-survival" training on the following dates


August 20, 1984

Dear

You are one of a small group of students who were selected to participate in our experimental "survival skills" orientation program. Valencia is extremely interested in developing programs for students that will assist them in being successful in their academic careers.

While you satisfactorily completed the first day of orientation, you have not as yet attended the second orientation day. I realize that it is difficult with vacation and work schedules to attend and I have asked Mr. Applebaum to run a make-up orientation for those few of you who missed the second day.

The second orientation day includes material on managing stress, note-taking skills, study skills, and test-taking skills.

It is very important for the college to know how well students do as a result of attendance at the orientation. Therefore, I do urge you to attend the make-up orientation which will be held:

Monday, August 27 (1st day of class)
1:30 p.m. - 5:00 p.m.
Building 3, Room 228

If you are unable to attend, please call Mr. Applebaum at 299-5000, extension 439.

Sincerely,

Anita J. Harrow, Ph.D.
Dean of the Campus, West

AN EQUAL OPPORTUNITY INSTITUTION
Dear

In the Fall of 1984 you participated in an experimental orientation program at Valencia Community College. At this time we are coming to you again to obtain some additional information that would help our research. Please fill out the attached questionnaire and return it as promptly as possible in the enclosed envelope.

I appreciate the time and effort that you have provided. Hopefully this will lead to improved services for future students.

Thanks again for your help.

Very truly yours,

[Signature]

[Name]
Psychology Professor

AN EQUAL OPPORTUNITY INSTITUTION
QUESTIONNAIRE

1. Did you participate in any of the following activities during your first semester at Valencia?
   [ ] school clubs
   [ ] school athletics
   [ ] student assistant or tutor
   [ ] school newspaper or student government

2. Are you participating in any of the aforementioned activities this semester? Which ones?

3. Did your academic or work goals clarify during your first semester?
   [ ] no
   [ ] a little
   [ ] a moderate amount
   [ ] a significant amount

4. The following elements were presented in the orientation that you participated in last Fall. Please identify those that were any help to you in your first semester.
   [ ] tour & college resources
   [ ] learning theories
   [ ] stress management
   [ ] grade getting
   [ ] study habits
   [ ] reading & writing w/low skills
   [ ] assertiveness
   [ ] goal setting
   [ ] dealing with instructors
   [ ] mock registration
   [ ] note taking
   [ ] test taking
   [ ] time management

5. What knowledge or skill would have aided you in your first semester at Valencia that you were not provided?

6. Please evaluate your overall learning experience at Valencia.
   [ ] very undesirable
   [ ] not very good
   [ ] neutral
   [ ] generally satisfied
   [ ] very pleased
QUESTIONNAIRE

Did you participate in any of the following activities during your first semester at Valencia?

☐ school clubs
☐ school athletics
☐ student assistant or tutor
☐ school newspaper or student government

2. Are you participating in any of the aforementioned activities this semester? Which ones?

3. Did your academic or work goals clarify during your first semester?

☐ no
☐ a little
☐ a moderate amount
☐ a significant amount

4. What knowledge or skill would have aided you in your first semester at Valencia that you were not provided?

5. Please evaluate your overall learning experience at Valencia.

☐ very undesirable
☐ not very good
☐ neutral
☐ generally satisfied
☐ very pleased
MEMORANDUM

TO: Mr. Hoyt Coleran
    Dr. Geri Thompson

FROM: Ivan Applebaum

SUBJ: Orientation of minority students

I have previously conversed with you with regard to an in-depth orientation of minority students. This note is to precisely document that process.

My research project requires that I deal with approximately the same number of experimental and control subjects. It would be of no value to the research to expose subjects to the orientation if we did not know the value of the orientation.

Therefore, if you are able to make students available for this in-depth orientation, in the near future, it will be necessary to randomly ask half of them to simply fill out a detailed demographic questionnaire and expose the second half to the 2 day orientation.

The 2 day orientation is one which attempts to train students in school survival skills, i.e., stress and time management, note taking, study skills and test taking skills. In addition an exposure to the facilities of the institution are provided along with classroom socialization skills.

I am willing to provide this orientation to groups of students (no less than 5 per group) at a time convenient to the students. No orientation will be provided after the end of the second week of class.

If I can provide any further information please contact me at 4139.
If any (or all) of the subsequent problems happened to you in your first semester at Valencia please weight them according to the following scale:

1. **Critical Problem** - It had an effect on my performance in school.
2. **Very Important Problem** - It may have affected my performance in school.
3. **Problem** - Somewhat important but I eventually resolved it without harm.
4. **Bothersome** - It kind of upset me but it did no real harm.
5. **Annoyance** - I solved it without any trouble.

**PROBLEMS IN FIRST SEMESTER**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working while going to school</td>
<td></td>
</tr>
<tr>
<td>Adjusting to school policies</td>
<td></td>
</tr>
<tr>
<td>Pressure to study</td>
<td></td>
</tr>
<tr>
<td>Parking Lot problems</td>
<td></td>
</tr>
<tr>
<td>Getting transcripts from other schools</td>
<td></td>
</tr>
<tr>
<td>Lack of disciplined study habits</td>
<td></td>
</tr>
<tr>
<td>Understanding different degree programs</td>
<td></td>
</tr>
<tr>
<td>Lack of student dress code</td>
<td></td>
</tr>
<tr>
<td>Problems with high school grades and transcripts</td>
<td></td>
</tr>
<tr>
<td>Feeling aloneness</td>
<td></td>
</tr>
<tr>
<td>Lack of peers</td>
<td></td>
</tr>
<tr>
<td>Understanding teacher expectations</td>
<td></td>
</tr>
<tr>
<td>Knowledge of programs and their duration</td>
<td></td>
</tr>
<tr>
<td>Understanding credit system</td>
<td></td>
</tr>
<tr>
<td>Fear of unknown course content</td>
<td></td>
</tr>
<tr>
<td>Lack of counselor caring</td>
<td></td>
</tr>
<tr>
<td>Getting advice on classes to take</td>
<td></td>
</tr>
<tr>
<td>Getting used to reading a lot</td>
<td></td>
</tr>
<tr>
<td>Problem</td>
<td>Box</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>VA Office problems</td>
<td></td>
</tr>
<tr>
<td>Making friends (Not knowing other students)</td>
<td></td>
</tr>
<tr>
<td>Knowledge of testing requirements</td>
<td></td>
</tr>
<tr>
<td>Doing homework</td>
<td></td>
</tr>
<tr>
<td>Transferring courses to VCC</td>
<td></td>
</tr>
<tr>
<td>Getting to class on time</td>
<td></td>
</tr>
<tr>
<td>Finding way around school</td>
<td></td>
</tr>
<tr>
<td>The drive to school</td>
<td></td>
</tr>
<tr>
<td>Course availability-scheduling</td>
<td></td>
</tr>
<tr>
<td>Information on courses needed</td>
<td></td>
</tr>
<tr>
<td>Registration Process confusing</td>
<td></td>
</tr>
<tr>
<td>Overload in first semester (too many classes)</td>
<td></td>
</tr>
<tr>
<td>General anxiety about going to class</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Please explain in further depth any problems that you encountered in your first semester at Valencia that had the effect of interfering with your performance at Valencia.

Your age: Under 25 25-35 36 and over

Your gender: Male Female

Counting this semester, how many semesters have you completed at VCC?

1 2 3 4 5 6 7 8 more

This course #: ______
YOUR PRIMARY REASON FOR COMING TO VALENCIA COMMUNITY COLLEGE

1- To earn an Associates in Arts Degree.
2- To earn an Associate in Science Degree.
3- To meet job requirements.
4- To keep up-to-date in my field.
5- To decide on my career.
6- To learn more about my field of interest.
7- To improve my ability in math, reading, writing or speaking.
8- To understand myself better.
9- To learn how to better relate to people.
10- Other ______________________

NAME_____________________________________

SS#_____________________________________

Please circle the most important reason that you have decided to come to Valencia.
OPEN DOOR SESSIONS

Ivan Applebaum will hold open door sessions at

1:15 every Wednesday during the semester
Building 3 Room 251

These sessions are non-structured sessions in which you may feel free to drop in and discuss any problems you are having at Valencia.

It is the intention of these sessions that students share their problems with others who may have dealt with these same problems and may have solutions for you.

If you are in any jeopardy in your courses it may be in your interest to come and discuss those problems at the open sessions. You may be able to receive some valuable guidance. Again, feel free to use this resource at your own volition.
In order for Valencia to improve the quality of its orientation programs it is necessary to evaluate the quality of the current program. Please be as honest as possible in completing the following questionnaire.

The following orientation sections were presented to you recently. Please check the appropriate level.

<table>
<thead>
<tr>
<th>Seminar needs to be redesigned</th>
<th>Definitely will be useful</th>
<th>Possible the info will be valuable</th>
<th>Info was of no value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(catalog reviewed, fallacies)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Tour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(resources discussed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal Setting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(goals broken down, decision making discussed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning Theory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(repetition, coding, note taking, attention spans discussed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Theory and methods of stress reduction discussed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration (Mock)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Registration problems and solutions discussed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade Getting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(note taking, studying, test taking covered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Budgeting time)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategies for Dealing with Instructors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Getting along with instructors)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SEMINAR EVALUATION
APPENDIX E

POST-TREATMENT SURVEY OF TWO-DAY EXPERIMENTAL SUBJECTS

SPECIFIC COMMENTS
STUDENTS POST SEMINAR COMMENTS

The following are a listing of the students written responses when asked to "Write your impressions of the 2-days of orientation."

1. I found orientation over the two-day period to be most helpful in what I will be doing this year.

2. The seminar was a confidence builder for me being a freshman this year. It helped me to feel that I can cope with any problems that I might be presented with during my schooling. This particular seminar has great value towards incoming students and should be kept up.

3. I think the seminar was helpful but it should be shortened so more people won't drop out.

4. Classes were helpful by uncovering problems I have with note taking and study habits. Tour of the campus was interesting. I feel it will benefit me greatly.

5. I am very impressed with the orientation seminar and Dr. Applebaum. The information and ideas will definitely affect my outlook on VCC and my acquiring an education here. The mock registration and "manipulating" instructors topics were especially helpful.

6. This orientation was very helpful, it has made me more comfortable with the college. I thought the instructor was super.

7. I feel the orientation will help me with my note taking and study habits. I didn't realize before how important budgeting your time was, especially when you have to study so much. The papers that were handed out in the first seminar pertaining to what numbers to call on campus for different situations will be EXTREMELY helpful. Also I enjoyed seeing the whole campus, including learning center and career development areas.

This program helped me to realize that it isn't as scary as I thought college would be, and I met some friends in the process.

8. I left high school with improper study and work skills with no one else but myself to blame. I can honestly say that this seminar gave me self confidence going into college but also cleared up some doubts and fallacies in my mind regarding college.

I appreciated the open and honest approach and now look forward to doing the best that I can do in college. Its been a pleasure.

9. I felt this class was very helpful. It gave me much more confidence about entering college and gaining good study habits.

I think this orientation would be helpful to all students entering the college.
10. I feel much more relaxed at the school now that I have taken this course. I don't feel so afraid. I learned how to cope with many of my problems and also how to cut back on my problems. I feel this session is very beneficial to the new coming student.

11. Possibly a more detailed tour of the campus including resources, what resources do students have, etc.

   More time should be spent on time management. Examples of other peoples schedules maybe.

12. I believe the seminar was valuable. I learned quite a bit in the studying and note-taking sections. I don't believe the goal setting section was of any importance to myself, but might be to others.

13. I think the program benefits everyone, cause a lot of students don't know how to handle teachers. Stress should be followed up more. No one really thinks that students have a lot of stress but we do.

14. I enjoyed attending the class because it helped me realize and others what we have to deal with and what we should do to correct it. This class has prepared me for the following year. Thank you.

15. I found that the two courses were very helpful. I felt more at ease during registration because I already had an idea of what was to happen. I now feel more confident that my experiences at Valencia will be better because of this course.

16. I enjoyed the orientation. It showed a preview of what to expect and it prepared you.

17. Mock registration was very valuable. I also particularly benefited from study and note taking techniques.

   I felt the first session was a little long. The length of time of the second session was easier for me to digest.

18. I thought that the note taking, test taking and college tour were the most useful of all. The small group atmosphere made things more relaxed and personal. Some of the more technical things when it got down to psychology (synapses, Neurons, etc.) I didn't think were too important.

19. This course definitely helped me to get comfortable in the school atmosphere, by the tour of the campus and generally covering how to deal with others.

   I do believe that more time could be spent dealing with stress management, although I did appreciate the information that was given.

20. It was interesting and informative. I believe I will be able to use the majority of this information towards my classes and how to cope with them. I was glad that I took the time to come to these because I learned much about the college.
21. All in all a very good program. It may have drug at times, but most classes do anyway.

   It will help me cope with the stress of college, and I think you for giving me the chance to come.

22. I thoroughly enjoyed both days of this orientation. Only one area I feel could be redesigned and that is the mock registration. I feel it might be helpful to take the participants upstairs of the cafeteria and through to the computer room and finance office. Maybe included in the tour. That’s all.

23. You’ve been most helpful. I needed to know what to expect at VCC. I believe these two days will be instrumental to me in my class time ahead. Thank you.

24. I think having a Psychology teacher was a big asset. It seems they know how to relate better with people. It relieved some stress and anxiety I had about going to college "all on my own". It was a good idea and I would recommend this orientation to a new student.

25. I thought the orientation was very enjoyable and will be helpful to me while I am attending VCC. I personally feel better and more confident knowing someone took the time to help and show that they are concerned. Thanks!
APPENDIX F

DEMOGRAPHICS AND VARIABLES KEY
KEY FOR INDEPENDENT AND DEPENDENT VARIABLES

Age; years
Sex; male=1, female=2
Race; Caucasian=1, Negroid=2, Oriental=3, Other=4
Parental Income; dollars
Fathers schooling; number of years
Mothers schooling; number of years
Marital status; married=1, single=2, divorced=3, engaged=4, widowed=5
Career decision made; no=1, narrowed to several options=2, yes=3
Parental encouragement; none=1, little=2, average=3, a lot=4, too much=5
Importance of college to self; none=1, little=2, average=3, very=4, compelling=5
PAGSS Writing; 0 to 100
PAGSS Math; 0 to 100
PAGSS Reading; 0 to 100
PAGSS Algebra; 0 to 100
Number of hours enrolled-session 1; credit hours
Number of hours withdrawn-session 1; credit hours
Courses withdrawn-session 1; number of courses
Grade Point Average College-session 1; D=1, C=2, B=3, A=4
Grade Point Average High School; D=1, C=2, B=3, A=4
Number of courses Incomplete-session 1; number of courses
Number of courses Enrolled-session 2; number of courses
KEY FOR POST SEMESTER ONE QUESTIONNAIRE

Number of activities participated in-session 1; none=0, school clubs=2, student assistant or tutor=3, school newspaper or student government=4

Goals clarified? no=1, a little=2, moderate=3, significantly=4

Evaluate your learning experience at VCC; very undesirable=1, not very good=2, neutral=3, generally satisfied=4, very pleased=5
APPENDIX G

INTERCORRELATIONAL MATRICES

EXPERIMENTAL AND CONTROL GROUPS
## Control Group

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Sex</th>
<th>Race</th>
<th>Inc</th>
<th>HGPA</th>
<th>FaSc</th>
<th>MoSc</th>
<th>CaDe</th>
<th>AcGo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.05</td>
<td>-.07</td>
<td>-.08</td>
<td>-.08</td>
<td>-.19</td>
<td>.23</td>
<td>.15</td>
<td>.21</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>.23</td>
<td>-.22</td>
<td>.14</td>
<td>-.03</td>
<td>.01</td>
<td>-.04</td>
<td>-.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>-.13</td>
<td>-.22</td>
<td>-.09</td>
<td>-.13</td>
<td>-.10</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inc</td>
<td>-.09</td>
<td>.35*</td>
<td>.01</td>
<td>-.11</td>
<td>-.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HGPA</td>
<td>-.07</td>
<td>-.11</td>
<td>.13</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FaSc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.35*</td>
<td>-.16</td>
<td>.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MoSc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.06</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>CaDe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PaEn</td>
<td>ImCo</td>
<td>P-Wr</td>
<td>P-Ma</td>
<td>P-Re</td>
<td>P-Al</td>
<td>HrEl</td>
<td>HrWi</td>
<td>CrWi</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Age</td>
<td>-.05</td>
<td>.06</td>
<td>.12</td>
<td>-.02</td>
<td>.19</td>
<td>-.35</td>
<td>-.12</td>
<td>-.05</td>
<td>-.09</td>
</tr>
<tr>
<td>sex</td>
<td>.02</td>
<td>-.09</td>
<td>.12</td>
<td>-.05</td>
<td>-.06</td>
<td>-.02</td>
<td>-.22</td>
<td>-.08</td>
<td>-.13</td>
</tr>
<tr>
<td>Race</td>
<td>-.06</td>
<td>.03</td>
<td>-.39</td>
<td>-.24</td>
<td>-.36</td>
<td>-.11</td>
<td>-.10</td>
<td>.32</td>
<td>.32</td>
</tr>
<tr>
<td>Inc</td>
<td>.16</td>
<td>.01</td>
<td>-.04</td>
<td>-.14</td>
<td>.00</td>
<td>-.10</td>
<td>.18</td>
<td>.05</td>
<td>.06</td>
</tr>
<tr>
<td>hGPA</td>
<td>.03</td>
<td>-.11</td>
<td>.31</td>
<td>.45</td>
<td>.33</td>
<td>.45</td>
<td>.05</td>
<td>-.32</td>
<td>-.38</td>
</tr>
<tr>
<td>FaSc</td>
<td>.05</td>
<td>.07</td>
<td>-.04</td>
<td>-.04</td>
<td>-.05</td>
<td>.16</td>
<td>-.13</td>
<td>-.14</td>
<td>-.06</td>
</tr>
<tr>
<td>MoSc</td>
<td>.07</td>
<td>.19</td>
<td>.13</td>
<td>.04</td>
<td>.10</td>
<td>-.14</td>
<td>-.13</td>
<td>-.04</td>
<td>-.05</td>
</tr>
<tr>
<td>CaDe</td>
<td>-.20</td>
<td>.03</td>
<td>-.13</td>
<td>-.30</td>
<td>-.16</td>
<td>-.31</td>
<td>-.06</td>
<td>.01</td>
<td>.04</td>
</tr>
<tr>
<td>AcGo</td>
<td>.11</td>
<td>.17</td>
<td>.02</td>
<td>.12</td>
<td>.17</td>
<td>.06</td>
<td>.22</td>
<td>-.08</td>
<td>-.13</td>
</tr>
<tr>
<td>PaEn</td>
<td>.13</td>
<td>.11</td>
<td>.10</td>
<td>.08</td>
<td>.17</td>
<td>.24</td>
<td>.16</td>
<td>.13</td>
<td>.07</td>
</tr>
<tr>
<td>ImCo</td>
<td>.05</td>
<td>-.08</td>
<td>.06</td>
<td>-.04</td>
<td>-.02</td>
<td>.03</td>
<td>.02</td>
<td>-.22</td>
<td>.29</td>
</tr>
<tr>
<td>P-Wr</td>
<td>.61</td>
<td>.77</td>
<td>.31</td>
<td>.18</td>
<td>-.24</td>
<td>-.31</td>
<td>.31</td>
<td>.10</td>
<td>.31</td>
</tr>
<tr>
<td>P-Ma</td>
<td>.61</td>
<td>.70</td>
<td>.29</td>
<td>-.27</td>
<td>-.37</td>
<td>.43</td>
<td>-.08</td>
<td>.43</td>
<td></td>
</tr>
<tr>
<td>P-Re</td>
<td>.36</td>
<td>.30</td>
<td>-.23</td>
<td>-.30</td>
<td>.27</td>
<td>-.01</td>
<td>.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-Al</td>
<td>.31</td>
<td>-.27</td>
<td>-.31</td>
<td>.42</td>
<td>.17</td>
<td>.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEnl</td>
<td>-.01</td>
<td>-.00</td>
<td>.11</td>
<td>-.02</td>
<td>.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HrWi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CrWi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPAi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I's</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<.01, + p<.001, 2-tail tests of significance
l-Day Experimental Group

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Sex</th>
<th>Race</th>
<th>Inc</th>
<th>HGPA</th>
<th>FaSc</th>
<th>MoSc</th>
<th>CaDe</th>
<th>AcGo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.29</td>
<td>-.29</td>
<td>-.18</td>
<td>.07</td>
<td>.19</td>
<td>-.04</td>
<td>.08</td>
<td>-.23</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>.32</td>
<td>-.13</td>
<td>-.16</td>
<td>.00</td>
<td>-.21</td>
<td>-.42</td>
<td>.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>-.07</td>
<td>-.51</td>
<td>.07</td>
<td>.05</td>
<td>.26</td>
<td>.22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inc</td>
<td>.25</td>
<td>.43</td>
<td>.48</td>
<td>-.17</td>
<td>-.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HGPA</td>
<td>.14</td>
<td>.01</td>
<td>-.03</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FaSc</td>
<td>.62*</td>
<td>-.19</td>
<td>-.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MoSc</td>
<td>.02</td>
<td>.29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CaDe</td>
<td>.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Age</td>
<td>sex</td>
<td>Race</td>
<td>Inc</td>
<td>H3PA</td>
<td>FaSc</td>
<td>MoSc</td>
<td>CaDe</td>
<td>AcGo</td>
</tr>
<tr>
<td>----------</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
<td>-----</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td>.30</td>
<td>-.06</td>
<td>.14</td>
<td>-.13</td>
<td>.03</td>
<td>-.13</td>
<td>-.37</td>
<td>.18</td>
<td>.28</td>
</tr>
<tr>
<td></td>
<td>-.37</td>
<td>-.05</td>
<td>-.05</td>
<td>-.31</td>
<td>-.11</td>
<td>-.49</td>
<td>-.35</td>
<td>-.17</td>
<td>-.19</td>
</tr>
<tr>
<td></td>
<td>.03</td>
<td>.39</td>
<td>.00</td>
<td>-.28</td>
<td>-.11</td>
<td>-.14</td>
<td>.07</td>
<td>.06</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>.13</td>
<td>-.04</td>
<td>.49</td>
<td>.42</td>
<td>.48</td>
<td>.68</td>
<td>-.33</td>
<td>-.46</td>
<td>-.47</td>
</tr>
<tr>
<td></td>
<td>-.02</td>
<td>-.19</td>
<td>.51</td>
<td>.79</td>
<td>.52</td>
<td>.60</td>
<td>-.11</td>
<td>-.36</td>
<td>-.40</td>
</tr>
<tr>
<td></td>
<td>.04</td>
<td>.08</td>
<td>.72</td>
<td>.38</td>
<td>.48</td>
<td>.39</td>
<td>.54</td>
<td>-.45</td>
<td>-.45</td>
</tr>
<tr>
<td></td>
<td>.13</td>
<td>.21</td>
<td>.32</td>
<td>.31</td>
<td>.37</td>
<td>.45</td>
<td>.48</td>
<td>-.17</td>
<td>-.14</td>
</tr>
<tr>
<td></td>
<td>.35</td>
<td>.48</td>
<td>-.13</td>
<td>.11</td>
<td>.01</td>
<td>.03</td>
<td>-.34</td>
<td>.27</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td>-.26</td>
<td>.48</td>
<td>.27</td>
<td>.31</td>
<td>.57</td>
<td>.16</td>
<td>-.11</td>
<td>.59</td>
<td>.60</td>
</tr>
<tr>
<td></td>
<td>.11</td>
<td>-.09</td>
<td>.04</td>
<td>.02</td>
<td>.27</td>
<td>.10</td>
<td>-.05</td>
<td>-.06</td>
<td>-.09</td>
</tr>
<tr>
<td></td>
<td>.21</td>
<td>-.00</td>
<td>.34</td>
<td>.07</td>
<td>.04</td>
<td>.18</td>
<td>.19</td>
<td>.00</td>
<td>-.05</td>
</tr>
<tr>
<td></td>
<td>.65</td>
<td>.86</td>
<td>.55</td>
<td>.06</td>
<td>-.15</td>
<td>-.18</td>
<td>.63</td>
<td>.36</td>
<td>.14</td>
</tr>
<tr>
<td></td>
<td>.72</td>
<td>.81</td>
<td>.01</td>
<td>-.23</td>
<td>-.27</td>
<td>.71</td>
<td>-.16</td>
<td>-.03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.62</td>
<td>.19</td>
<td>.09</td>
<td>.06</td>
<td>.76</td>
<td>-.29</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.05</td>
<td>-.26</td>
<td>-.27</td>
<td>.62</td>
<td>-.37</td>
<td>-.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-.31</td>
<td>-.31</td>
<td>-.01</td>
<td>.34</td>
<td>.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<.01, + p<.001, 2-tail test of significance
2-Day Experimental Group

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Sex</th>
<th>Race</th>
<th>Inc</th>
<th>HGPA</th>
<th>FaSc</th>
<th>MoSc</th>
<th>CaDe</th>
<th>AcGo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.16</td>
<td>-.24</td>
<td>-.61</td>
<td>-.43</td>
<td>-.04</td>
<td>.27</td>
<td>-.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>-.14</td>
<td>.02</td>
<td>-.27</td>
<td>-.16</td>
<td>.07</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>Inc</td>
<td>.22</td>
<td>.15</td>
<td>.13</td>
<td>-.26</td>
<td>-.22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HGPA</td>
<td>.14</td>
<td>.05</td>
<td>-.25</td>
<td>.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FaSc</td>
<td>.63</td>
<td>.00</td>
<td>.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MoSc</td>
<td>.24</td>
<td>.28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CaDe</td>
<td></td>
<td></td>
<td>.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>P&lt;.01</td>
<td>P&lt;.001</td>
<td>2-tail test of significance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
<td>--------</td>
<td>-----------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.64</td>
<td>.10</td>
<td>.07</td>
<td>.06</td>
<td>.14</td>
<td>-.28</td>
<td>-.34</td>
<td>-.10</td>
<td>-.09</td>
</tr>
<tr>
<td>sex</td>
<td>-.28</td>
<td>.29</td>
<td>.16</td>
<td>.15</td>
<td>.20</td>
<td>.20</td>
<td>.09</td>
<td>.08</td>
<td>.19</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inc</td>
<td>.15</td>
<td>-.06</td>
<td>.03</td>
<td>.22</td>
<td>.07</td>
<td>.26</td>
<td>.36</td>
<td>.23</td>
<td>.24</td>
</tr>
<tr>
<td>HGPA</td>
<td>.39</td>
<td>-.14</td>
<td>.05</td>
<td>.17</td>
<td>-.03</td>
<td>.42</td>
<td>.08</td>
<td>-.15</td>
<td>-.16</td>
</tr>
<tr>
<td>FaSc</td>
<td>.31</td>
<td>.14</td>
<td>-.01</td>
<td>.21</td>
<td>.07</td>
<td>.09</td>
<td>.06</td>
<td>-.22</td>
<td>-.23</td>
</tr>
<tr>
<td>MoSc</td>
<td>.05</td>
<td>.17</td>
<td>.08</td>
<td>.11</td>
<td>.06</td>
<td>-.12</td>
<td>-.17</td>
<td>-.02</td>
<td>-.02</td>
</tr>
<tr>
<td>CaDe</td>
<td>.00</td>
<td>.54*</td>
<td>.28</td>
<td>.23</td>
<td>.20</td>
<td>-.03</td>
<td>-.41</td>
<td>.15</td>
<td>.14</td>
</tr>
<tr>
<td>AcGo</td>
<td>.31</td>
<td>.05</td>
<td>.29</td>
<td>.25</td>
<td>.21</td>
<td>.38</td>
<td>.08</td>
<td>-.38</td>
<td>-.38</td>
</tr>
<tr>
<td>PaEn</td>
<td>.17</td>
<td>-.05</td>
<td>.04</td>
<td>-.13</td>
<td>.05</td>
<td>.31</td>
<td>.13</td>
<td>.13</td>
<td>-.51*</td>
</tr>
<tr>
<td>ImCo</td>
<td>.17</td>
<td>.31</td>
<td>.15</td>
<td>.09</td>
<td>.11</td>
<td>.29</td>
<td>.26</td>
<td>-.01</td>
<td>-.38</td>
</tr>
<tr>
<td>P-Nr</td>
<td>.74</td>
<td>.85*</td>
<td>.63</td>
<td>-.04</td>
<td>.00</td>
<td>.00</td>
<td>.24</td>
<td>-.44</td>
<td>.25</td>
</tr>
<tr>
<td>P-Ma</td>
<td>.82</td>
<td>.73+</td>
<td>.06</td>
<td>.05</td>
<td>.06</td>
<td>.21</td>
<td>.53*</td>
<td>.24</td>
<td></td>
</tr>
<tr>
<td>P-Re</td>
<td>.65</td>
<td>-.16</td>
<td>-.09</td>
<td>-.09</td>
<td>.24</td>
<td>-.42</td>
<td>.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-Al</td>
<td>.23</td>
<td>-.21</td>
<td>-.21</td>
<td>-.04</td>
<td>-.24</td>
<td>.26</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HEnl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HrM</td>
<td>.99</td>
<td>-.15</td>
<td>-.16</td>
<td>-.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CrM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPA1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l's</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.01, *p<.001, 2-tail test of significance

Note: In the 2-day experimental group there was only 1 racial group
APPENDIX H

REASONS FOR WITHDRAWAL
A telephone survey was conducted during the experimental semester of students who were identified as withdrawing from courses. This information was made available by the office of the registrar. Both experimental and control subjects were interviewed. The following are the reasons given by subjects from each group. Not all subjects responded and no attempt has been made to statistically analyze this sparse data.

Experimental Group
1. didn't like the course
2. working too many hours
3. poor performance in class (4)
4. left town
5. car accident

Control Group
1. didn't like the course
2. left town (2)
3. working too many hours
4. poor performance in class
5. death in family
6. transportation problems
APPENDIX I
GRADE POINT AVERAGE
T-TESTS
### 2.0 and below GPA

<table>
<thead>
<tr>
<th>Group</th>
<th>Cases</th>
<th>T Value</th>
<th>Deg.of Freedom</th>
<th>2-tail prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Enrol-S1</td>
<td>1</td>
<td>0.5</td>
<td>30</td>
<td>0.62</td>
</tr>
<tr>
<td>C</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours W-S1</td>
<td>1</td>
<td>-0.1</td>
<td>30</td>
<td>0.90</td>
</tr>
<tr>
<td>C</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incompletes-S1</td>
<td>1</td>
<td>2.0</td>
<td>30</td>
<td>0.06</td>
</tr>
<tr>
<td>C</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CrsEnrol-S2</td>
<td>1</td>
<td>0.7</td>
<td>31</td>
<td>0.50</td>
</tr>
<tr>
<td>C</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours Enrol-S1</td>
<td>2</td>
<td>2.0</td>
<td>27</td>
<td>0.06</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours W-S1</td>
<td>2</td>
<td>-1.6</td>
<td>27</td>
<td>0.12</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incompletes-S1</td>
<td>2</td>
<td>2.8</td>
<td>27</td>
<td>0.01</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CrsEnrol-S2</td>
<td>2</td>
<td>2.1</td>
<td>27</td>
<td>0.05</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Over 2.0 GPA

<table>
<thead>
<tr>
<th>Group</th>
<th>Cases</th>
<th>T Value</th>
<th>Deg.of Freedom</th>
<th>2-tail prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Enrol-S1</td>
<td>1</td>
<td>-0.6</td>
<td>59</td>
<td>0.55</td>
</tr>
<tr>
<td>C</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours W-S1</td>
<td>1</td>
<td>-0.2</td>
<td>59</td>
<td>0.84</td>
</tr>
<tr>
<td>C</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incompletes-S1</td>
<td>1</td>
<td>-0.8</td>
<td>59</td>
<td>0.44</td>
</tr>
<tr>
<td>C</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CrsEnrol-S2</td>
<td>1</td>
<td>-0.2</td>
<td>59</td>
<td>0.81</td>
</tr>
<tr>
<td>C</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours Enrol-S1</td>
<td>2</td>
<td>-0.5</td>
<td>65</td>
<td>0.64</td>
</tr>
<tr>
<td>C</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hours W-S1</td>
<td>2</td>
<td>-0.6</td>
<td>65</td>
<td>0.54</td>
</tr>
<tr>
<td>C</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incompletes-S1</td>
<td>2</td>
<td>0.1</td>
<td>65</td>
<td>0.90</td>
</tr>
<tr>
<td>C</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CrsEnrol-S2</td>
<td>2</td>
<td>-0.5</td>
<td>65</td>
<td>0.61</td>
</tr>
<tr>
<td>C</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The test for homogeneity did not show any differences in significance therefore only the pooled variance estimate is reported here for t-value, degrees of freedom and 2-tail probability of significance.
APPENDIX J

MULTIPLE REGRESSION STATISTICS
## Multiple Regressions

### Control Group-Multiple Regressions

**Summary Table (Multiple R)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>51.8</td>
<td>1</td>
<td>51.8</td>
<td>9.6</td>
</tr>
<tr>
<td>PAGGS Math</td>
<td>51.8</td>
<td>70</td>
<td>0.7</td>
<td>9.9</td>
</tr>
<tr>
<td>Race</td>
<td>333.6</td>
<td>69</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>106.6</td>
<td>67</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>116.6</td>
<td>68</td>
<td>1.7</td>
<td></td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>116.6</td>
<td>67</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>116.6</td>
<td>67</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>116.6</td>
<td>67</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>116.6</td>
<td>67</td>
<td>1.6</td>
<td></td>
</tr>
</tbody>
</table>

### Hours Enrolled-S1

**Summary Table (Multiple R)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>95.3</td>
<td>1</td>
<td>95.3</td>
<td>4.8</td>
</tr>
<tr>
<td>PAGGS Math</td>
<td>1401.1</td>
<td>70</td>
<td>20.0</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>130.8</td>
<td>2</td>
<td>65.4</td>
<td>3.3</td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>1365.7</td>
<td>69</td>
<td>19.8</td>
<td></td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>183.6</td>
<td>3</td>
<td>61.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>1312.8</td>
<td>68</td>
<td>19.3</td>
<td></td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>213.0</td>
<td>4</td>
<td>53.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>1283.5</td>
<td>67</td>
<td>19.2</td>
<td></td>
</tr>
</tbody>
</table>

### Hours Withdrawn-S1

**Summary Table (Multiple R)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>95.3</td>
<td>1</td>
<td>95.3</td>
<td>4.8</td>
</tr>
<tr>
<td>PAGGS Math</td>
<td>1401.1</td>
<td>70</td>
<td>20.0</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>130.8</td>
<td>2</td>
<td>65.4</td>
<td>3.3</td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>1365.7</td>
<td>69</td>
<td>19.8</td>
<td></td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>183.6</td>
<td>3</td>
<td>61.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>1312.8</td>
<td>68</td>
<td>19.3</td>
<td></td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>213.0</td>
<td>4</td>
<td>53.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>1283.5</td>
<td>67</td>
<td>19.2</td>
<td></td>
</tr>
</tbody>
</table>
### GPA-S1

<table>
<thead>
<tr>
<th>Summary Table</th>
<th>Analysis of Variance</th>
<th>DOF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Multiple R)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>.16</td>
<td>Regression</td>
<td>1</td>
<td>1712.0</td>
<td>1712.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>70</td>
<td>64345.4</td>
<td>919.2</td>
</tr>
<tr>
<td>Race</td>
<td>.24</td>
<td>Regression</td>
<td>2</td>
<td>3798.7</td>
<td>1899.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>69</td>
<td>62258.7</td>
<td>902.3</td>
</tr>
<tr>
<td>Age</td>
<td>.26</td>
<td>Regression</td>
<td>3</td>
<td>4387.1</td>
<td>1462.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>68</td>
<td>61670.3</td>
<td>906.9</td>
</tr>
</tbody>
</table>

### Incompletes-S1

<table>
<thead>
<tr>
<th>Summary Table</th>
<th>Analysis of Variance</th>
<th>DOF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Multiple R)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imp. Coil</td>
<td>.18</td>
<td>Regression</td>
<td>1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>70</td>
<td>1.9</td>
<td>0.0</td>
</tr>
<tr>
<td>HS GPA</td>
<td>.23</td>
<td>Regression</td>
<td>2</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>69</td>
<td>1.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Age</td>
<td>.28</td>
<td>Regression</td>
<td>3</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>68</td>
<td>1.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Sex</td>
<td>.30</td>
<td>Regression</td>
<td>4</td>
<td>0.2</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>67</td>
<td>1.8</td>
<td>0.0</td>
</tr>
</tbody>
</table>

### Courses Enrolled-S2

<table>
<thead>
<tr>
<th>Summary Table</th>
<th>Analysis of Variance</th>
<th>DOF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Multiple R)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAGSs Math</td>
<td>.38</td>
<td>Regression</td>
<td>1</td>
<td>37.9</td>
<td>37.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>70</td>
<td>219.6</td>
<td>3.1</td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>.43</td>
<td>Regression</td>
<td>2</td>
<td>48.0</td>
<td>24.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>69</td>
<td>209.5</td>
<td>3.0</td>
</tr>
<tr>
<td>Income</td>
<td>.46</td>
<td>Regression</td>
<td>3</td>
<td>54.6</td>
<td>18.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>68</td>
<td>202.9</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Experimental Group - 1 Day Multiple Regressions

### Hours Enrolled-S1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Multiple R</th>
<th>Analysis of Variance</th>
<th>DOF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>.96</td>
<td>Regression</td>
<td>1</td>
<td>6708.7</td>
<td>6708.7</td>
<td>241.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>20</td>
<td>555.9</td>
<td>27.8</td>
<td></td>
</tr>
</tbody>
</table>

### Hours withdrawn-S1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Multiple R</th>
<th>Analysis of Variance</th>
<th>DOF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>.93</td>
<td>Regression</td>
<td>1</td>
<td>7889.2</td>
<td>7889.2</td>
<td>129.8</td>
</tr>
<tr>
<td>Car. Dec.</td>
<td>.97</td>
<td>Regression</td>
<td>2</td>
<td>4244.5</td>
<td>212.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>19</td>
<td>615.8</td>
<td>32.4</td>
<td></td>
</tr>
</tbody>
</table>

### GPA-S1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Multiple R</th>
<th>Analysis of Variance</th>
<th>DOF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imp. Coll</td>
<td>.50</td>
<td>Regression</td>
<td>1</td>
<td>7780.0</td>
<td>7780.0</td>
<td>6.8</td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>.62</td>
<td>Regression</td>
<td>20</td>
<td>1136.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>.68</td>
<td>Regression</td>
<td>19</td>
<td>986.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAGGS Math</td>
<td>.80</td>
<td>Regression</td>
<td>18</td>
<td>902.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>.62</td>
<td>Regression</td>
<td>17</td>
<td>609.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Car. Dec.</td>
<td>.84</td>
<td>Regression</td>
<td>16</td>
<td>591.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fath. Sch.</td>
<td>.66</td>
<td>Regression</td>
<td>15</td>
<td>558.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Incompletes-S1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Multiple R</th>
<th>Analysis of Variance</th>
<th>DOF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>.96</td>
<td>Regression</td>
<td>1</td>
<td>8543.1</td>
<td>8543.1</td>
<td>212.4</td>
</tr>
<tr>
<td>Car. Dec.</td>
<td>.98</td>
<td>Regression</td>
<td>2</td>
<td>4484.0</td>
<td>224.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>19</td>
<td>20.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Summary Table

<table>
<thead>
<tr>
<th>Variable</th>
<th>Multiple R</th>
<th>Analysis of Variance</th>
<th>DOF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car. Dec.</td>
<td>.51</td>
<td>Regression</td>
<td>1</td>
<td>19.8</td>
<td>19.8</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>20</td>
<td>56.2</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.63</td>
<td>Regression</td>
<td>2</td>
<td>31.0</td>
<td>15.5</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>19</td>
<td>45.0</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>.65</td>
<td>Regression</td>
<td>3</td>
<td>31.7</td>
<td>10.6</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>18</td>
<td>44.3</td>
<td>2.5</td>
<td></td>
</tr>
</tbody>
</table>
Experimental Group - 2 Day Multiple Regressions

### Hours Enrolled-S1

<table>
<thead>
<tr>
<th>Summary Table (Multiple R)</th>
<th>Analysis of Variance</th>
<th>DOF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car.Dec. 0.41</td>
<td>Regression</td>
<td>1</td>
<td>14.4</td>
<td>14.4</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>22</td>
<td>71.4</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>Imp. Coll. 0.56</td>
<td>Regression</td>
<td>2</td>
<td>27.3</td>
<td>13.7</td>
<td>4.9</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>21</td>
<td>58.5</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>Income 0.61</td>
<td>Regression</td>
<td>3</td>
<td>31.7</td>
<td>10.6</td>
<td>3.9</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>20</td>
<td>54.1</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Aca.Goals 0.64</td>
<td>Regression</td>
<td>4</td>
<td>34.6</td>
<td>8.7</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>19</td>
<td>51.1</td>
<td>2.7</td>
<td></td>
</tr>
</tbody>
</table>

### Hours Withdrawn-S1

<table>
<thead>
<tr>
<th>Summary Table (Multiple R)</th>
<th>Analysis of Variance</th>
<th>DOF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imp. Coll. 0.26</td>
<td>Regression</td>
<td>1</td>
<td>9.6</td>
<td>9.6</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>22</td>
<td>105.7</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>Aca. Goals 0.39</td>
<td>Regression</td>
<td>2</td>
<td>17.3</td>
<td>8.6</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>21</td>
<td>98.1</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>Income 0.47</td>
<td>Regression</td>
<td>3</td>
<td>25.1</td>
<td>8.4</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>20</td>
<td>90.2</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>HS GPA 0.51</td>
<td>Regression</td>
<td>4</td>
<td>29.5</td>
<td>7.4</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>19</td>
<td>85.9</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Fath.Sch. 0.55</td>
<td>Regression</td>
<td>5</td>
<td>34.8</td>
<td>7.0</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>18</td>
<td>80.6</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>PAGGS Math 0.58</td>
<td>Regression</td>
<td>6</td>
<td>38.2</td>
<td>6.4</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>17</td>
<td>77.1</td>
<td>4.5</td>
<td></td>
</tr>
</tbody>
</table>

### GPA-S1

<table>
<thead>
<tr>
<th>Summary Table (Multiple R)</th>
<th>Analysis of Variance</th>
<th>DOF</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aca. Goals 0.47</td>
<td>Regression</td>
<td>1</td>
<td>4.6</td>
<td>4.6</td>
<td>6.3</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>22</td>
<td>16.2</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>HS GPA 0.60</td>
<td>Regression</td>
<td>2</td>
<td>7.4</td>
<td>3.7</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>21</td>
<td>13.4</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Multiple R</td>
<td>Regression</td>
<td>Residual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>.63</td>
<td>3</td>
<td>8.3</td>
<td>2.8</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>12.5</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Car. Dec.</td>
<td>.65</td>
<td>4</td>
<td>8.6</td>
<td>2.2</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>6.6</td>
<td>1.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Income</td>
<td>.67</td>
<td>6</td>
<td>10.1</td>
<td>1.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Imp. Coll.</td>
<td>.70</td>
<td>7</td>
<td>10.7</td>
<td>0.6</td>
<td></td>
</tr>
</tbody>
</table>

**Incompletes-51**

**Summary Table**

(Multiple R) Analysis of Variance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Multiple R</th>
<th>Regression</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAGGS Math</td>
<td>.56</td>
<td>1</td>
<td>33.0</td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>.54</td>
<td>2</td>
<td>41.0</td>
</tr>
<tr>
<td>Car. Dec.</td>
<td>.75</td>
<td>3</td>
<td>51.0</td>
</tr>
<tr>
<td>Sex</td>
<td>.80</td>
<td>4</td>
<td>57.7</td>
</tr>
<tr>
<td>Income</td>
<td>.84</td>
<td>5</td>
<td>63.3</td>
</tr>
</tbody>
</table>

**Courses Enrolled-52**

**Summary Table**

(Multiple R) Analysis of Variance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Multiple R</th>
<th>Regression</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAGGS Math</td>
<td>.29</td>
<td>1</td>
<td>4.2</td>
</tr>
<tr>
<td>Sex</td>
<td>.41</td>
<td>2</td>
<td>45.6</td>
</tr>
<tr>
<td>Aca. Goals</td>
<td>.46</td>
<td>3</td>
<td>10.5</td>
</tr>
<tr>
<td>HS GPA</td>
<td>.49</td>
<td>4</td>
<td>12.0</td>
</tr>
<tr>
<td>Age</td>
<td>.55</td>
<td>5</td>
<td>15.0</td>
</tr>
<tr>
<td>Imp. Coll.</td>
<td>.59</td>
<td>6</td>
<td>17.3</td>
</tr>
<tr>
<td>Income</td>
<td>.61</td>
<td>7</td>
<td>18.7</td>
</tr>
<tr>
<td>Path. Sch.</td>
<td>.64</td>
<td>6</td>
<td>20.3</td>
</tr>
</tbody>
</table>
APPENDIX K

CO-VARIANCE STATISTICS

[Co-Variance Analysis of Experimental and Control Groups: GPA Semester One with PAGSS Math vs. Dependent Variables]
### Control Group

#### Hours Enrolled-S1 By GPA S-1 with PAGSS Math

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate PAGSSMath</td>
<td>34.6</td>
<td>1</td>
<td>34.6</td>
<td>6.2</td>
<td>0.01</td>
</tr>
<tr>
<td>Main Effect GPA S-1</td>
<td>4.1</td>
<td>1</td>
<td>4.1</td>
<td>0.7</td>
<td>0.40</td>
</tr>
<tr>
<td>Explained</td>
<td>38.7</td>
<td>2</td>
<td>19.4</td>
<td>3.5</td>
<td>0.04</td>
</tr>
<tr>
<td>Residual</td>
<td>377.2</td>
<td>68</td>
<td>5.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>415.9</td>
<td>70</td>
<td>5.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Hours Withdrawn-S1 By GPA S-1 with PAGSS Math

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate PAGSSMath</td>
<td>104.7</td>
<td>1</td>
<td>104.7</td>
<td>7.1</td>
<td>0.01</td>
</tr>
<tr>
<td>Main Effect GPA S-1</td>
<td>372.9</td>
<td>1</td>
<td>372.9</td>
<td>25.2</td>
<td>0.00</td>
</tr>
<tr>
<td>Explained</td>
<td>477.6</td>
<td>2</td>
<td>238.8</td>
<td>16.1</td>
<td>0.00</td>
</tr>
<tr>
<td>Residual</td>
<td>1008.3</td>
<td>68</td>
<td>14.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1485.9</td>
<td>70</td>
<td>21.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Courses Enrolled-S2 By GPA S-1 with PAGSS Math

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate PAGSSMath</td>
<td>41.1</td>
<td>1</td>
<td>41.1</td>
<td>16.3</td>
<td>0.00</td>
</tr>
<tr>
<td>Main Effect GPA S-1</td>
<td>41.2</td>
<td>1</td>
<td>41.2</td>
<td>16.4</td>
<td>0.00</td>
</tr>
<tr>
<td>Explained</td>
<td>82.2</td>
<td>2</td>
<td>41.1</td>
<td>16.4</td>
<td>0.00</td>
</tr>
<tr>
<td>Residual</td>
<td>170.9</td>
<td>68</td>
<td>2.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>253.1</td>
<td>70</td>
<td>3.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Experimental Group Day-1

### Hours Enrolled-S1 By GPA S-1 with PAGSS Math

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate PAGSSMath</td>
<td>0.0</td>
<td>1</td>
<td>0.0</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Main Effect GPA S-1</td>
<td>0.0</td>
<td>1</td>
<td>0.0</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Explained</td>
<td>0.0</td>
<td>2</td>
<td>0.0</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Residual</td>
<td>71.1</td>
<td>15</td>
<td>4.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>71.1</td>
<td>18</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Hours Withdrawn-S1 By GPA S-1 with PAGSS Math

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate PAGSSMath</td>
<td>11.3</td>
<td>1</td>
<td>11.3</td>
<td>1.5</td>
<td>0.24</td>
</tr>
<tr>
<td>Main Effect GPA S-1</td>
<td>71.4</td>
<td>1</td>
<td>71.4</td>
<td>9.2</td>
<td>0.01</td>
</tr>
<tr>
<td>Explained</td>
<td>82.8</td>
<td>2</td>
<td>41.4</td>
<td>5.3</td>
<td>0.02</td>
</tr>
<tr>
<td>Residual</td>
<td>123.6</td>
<td>16</td>
<td>7.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>206.4</td>
<td>18</td>
<td>11.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Courses Enrolled-S2 By GPA S-1 with PAGSS Math

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate PAGSSMath</td>
<td>0.1</td>
<td>1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.89</td>
</tr>
<tr>
<td>Main Effect GPA S-1</td>
<td>12.7</td>
<td>1</td>
<td>12.7</td>
<td>3.8</td>
<td>0.07</td>
</tr>
<tr>
<td>Explained</td>
<td>12.6</td>
<td>2</td>
<td>6.4</td>
<td>1.9</td>
<td>0.18</td>
</tr>
<tr>
<td>Residual</td>
<td>53.7</td>
<td>16</td>
<td>3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>66.5</td>
<td>18</td>
<td>3.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Experimental Group Day-2

### Hours Enrolled-S1 By GPA S-1 with PAGSS Math

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate PAGSSMath</td>
<td>0.1</td>
<td>1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.67</td>
</tr>
<tr>
<td>Main Effect GPA S-1</td>
<td>1.6</td>
<td>1</td>
<td>1.6</td>
<td>0.5</td>
<td>0.51</td>
</tr>
<tr>
<td>Explained</td>
<td>1.7</td>
<td>2</td>
<td>0.8</td>
<td>0.2</td>
<td>0.75</td>
</tr>
<tr>
<td>Residual</td>
<td>65.4</td>
<td>19</td>
<td>3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>67.1</td>
<td>21</td>
<td>3.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Hours Withdrawn-S1 By GPA S-1 with PAGSS Math

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate PAGSSMath</td>
<td>3.2</td>
<td>1</td>
<td>3.2</td>
<td>0.6</td>
<td>0.44</td>
</tr>
<tr>
<td>Main Effect GPA S-1</td>
<td>8.1</td>
<td>1</td>
<td>8.1</td>
<td>1.5</td>
<td>0.23</td>
</tr>
<tr>
<td>Explained</td>
<td>11.3</td>
<td>2</td>
<td>5.7</td>
<td>1.1</td>
<td>0.36</td>
</tr>
<tr>
<td>Residual</td>
<td>101.0</td>
<td>19</td>
<td>5.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>112.4</td>
<td>21</td>
<td>5.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Courses Enrolled-S2 By GPA S-1 with PAGSS Math

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate PAGSSMath</td>
<td>0.0</td>
<td>1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.91</td>
</tr>
<tr>
<td>Main Effect GPA S-1</td>
<td>0.2</td>
<td>1</td>
<td>0.2</td>
<td>0.1</td>
<td>0.75</td>
</tr>
<tr>
<td>Explained</td>
<td>0.2</td>
<td>2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.94</td>
</tr>
<tr>
<td>Residual</td>
<td>37.2</td>
<td>19</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>37.5</td>
<td>21</td>
<td>1.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES


