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ABSTRACT

In winter 1995, a study was conducted at Rochester Community College (RCC), in Minnesota, to examine the effectiveness of a study skills class (SS198). Specifically, the study sought to determine if the course met established criteria of retaining 50% of completers in good academic standing for 1 year, to compare retention rates to non-enrolled developmental students, and to gather feedback on the best and worst aspects of the class. Data were gathered from a literature review, a survey of students enrolled in winter 1995, and enrollment and grade point average (GPA) records from RCC's student information system. Study findings included the following: (1) 9 of the 20 developmental students enrolled in SS198 were still attending RCC 1 year later, less than the desired 50%; (2) these 9 students had an average GPA of 2.5; (2) of a sample of 20 developmental student who did not take SS198, only 4 were enrolled 1 year later; (3) these 4 students had an average GPA of 2.6, not significantly different from that of SS198 completers; (4) the elements of the course receiving the most favorable responses were the Internet topics, the variety of topics addressed, and the outside activities; and (6) the elements receiving the most negative responses were the Internet topics and the fact that the class met only once a week. Contains 25 references. The survey instrument and data tables are appended. (HAA)

EVALUATION OF A STUDY SKILLS CLASS AT ROCHESTER COMMUNITY COLLEGE

Leadership

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International Cluster

A practicum report presented to Programs for Higher Education

in partial fulfillment of the requirements for the

degree of Doctor of Education

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EVALUATION OF A STUDY SKILLS CLASS AT ROCHESTER COMMUNITY COLLEGE

by

Bonnie Mercer

August, 1996

The problem under investigation was that it was unclear whether students who enrolled in Study Skills 198 winter quarter, 1995, were helped by the course and were still enrolled at Rochester Community College (RCC) through winter quarter, 1996. The purpose of the study was to determine if the Study Skills 198 class met the established criteria of retaining 50% of the students in good academic standing (2.0 gpa) for one year and to investigate how that compares to non-enrolled students. It was also important to gather feedback to learn what were the best and worst aspects of the class. The research questions were, "Did at least 50% of students who enrolled in Study Skills 198 winter quarter, 1995, remain at RCC through winter quarter, 1996, with at least a 2.0 gpa?" and " What did the students consider to be the most and least helpful about the class?"

A literature review was conducted and the original grant was examined to establish the criteria. Data from the student attitude survey and the admissions office were collected and analyzed. Student gpa data were evaluated using a t test and student retention data were analyzed using a chi square test.

The results showed that student retention did not meet the established criteria of 50%, but exceeded the 2.0 gpa. All recommended the class to new students. A comparison of enrolled and non-enrolled students showed that gpa's were not effected by enrollment in Study Skills 198, but that enrolled students were more likely to be retained.

It was recommended that the findings of this evaluation report be shared with the Dean of Academic Affairs for possible curriculum review, disseminated to counselors, and that this study be repeated with a larger population.

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Chapter 1

INTRODUCTION

Background

Rochester Community College (RCC), with a student enrollment of 4,000 students, is one of 21 community colleges within the Minnesota Community College System (MCCS). According to placement test data, approximately 70% of the new students tested have academic skills below the college level. Hallberg (1991, p.1) states that transition to college is a challenge for all students, but for academically under prepared students, the adjustment is especially complex. Under prepared students often appear unaware of the expected behaviors that successful students take for granted. They are usually unable to assess their own needs or predict the likelihood of their own success, and are therefore often indifferent to services and/or individuals who could help them. If academically under prepared students are to persist in college and succeed, interventions beyond developmental courses are needed. In the fall of 1994, RCC received a grant from MCCS to develop and offer a course to developmental students that addressed their study skills needs.

Purpose

The purpose of this evaluation study was to determine if the Study Skills 198 class met the established criteria of retaining 50% of the students in good academic standing (2.0 gpa) for one year and investigated how that compared to non-enrolled

students. It was also important to gather student feedback about the content of the course and if they felt that the course helped them in college.

According to RCC counselors, over 60% of academically under prepared students experience failure and have to withdraw from classes at RCC. In order to increase student success, RCC would like to have evidence that students who completed Study Skills 198 did, in fact, remain in college. Also, RCC needed to report to the grants office at MCCS about follow-up data on Study Skills 198 student retention. This evaluation study examined these issues.

This practicum was directly related to the Leadership seminar in that it addressed two learning outcomes. The first objective, according to Haugerud, Kiah, Little, Murry, and Parks (1995, p.8), states that students will clarify and contrast current approaches to leadership and leadership development with emerging conceptions of organizational development and change theory. The second course objective states that students will identify and analyze future trends and issues related to the functions and roles of practicing leaders in higher education. By evaluating and communicating to the college community the effectiveness of Study Skills 198 on student gpa and retention in this study at RCC, the author demonstrated the leadership skills of identifying and analyzing the issues of under prepared students at RCC. This was an opportunity to demonstrate

leadership skills in the developmental education department at RCC.

Research Questions

The research questions for this study were, "Did at least 50% of students who enrolled in Study Skills 198 winter quarter, 1995, remain at RCC through winter quarter, 1996, with at least a 2.0 gpa?" and "What did the students consider to be the most and least helpful about the class?"

Research Hypothesis

Rochester Community College developmental students who enrolled in study skills 198 will be retained for one year with a 2.0 gpa.

Definition of Terms

For purposes of this evaluation study, the following terms were clarified.

Developmental. Developmental level courses are those classes offered to college students who have academic skill levels below expected college levels. The classes are often considered remedial and do not transfer to other colleges.

Study Skills. Study skills are general college survival skills such as notetaking, time management, test taking, as well as affective qualities of motivation and campus involvement.

Retention. For purposes of this study, to retain a student to reach the grant goals the student had to be enrolled for one academic year, winter 1995 through winter 1996.

Chapter 2

REVIEW OF LITERATURE

Elifson, Pounds, and Stone (1995, p.2) comment that some state legislatures have begun to require public institutions to demonstrate program effectiveness. Taxpayers are calling for accountability in order to determine whether funding should continue in the future. At the same time, educational leaders realize that academic support programs are necessary so that under prepared students have reasonable chances of success. Student retention and satisfaction with college experience have become urgent issue for campus officials according to Umoh, Eddy, and Spaulding (1993, p.37).

These two comments helped focus the literature search for this evaluation study on the following four areas: developmental students, retention factors, barriers to success, and leadership skills. Each of these areas were discussed in detail.

Developmental Students

Boylan (1992, p.1) states that he reviewed over 60 programs for developmental (academically under prepared) students and found that the programs tended to improve gpa and short-term persistence. Kelly and Pappas (1992, p.10) reached similar findings in their evaluation of developmental students who attended a study skills class. The course had positive effects on academic performance and student persistence in college.

Wither (1992, p.1) goes on to say that educators are concerned not only with improving basic academic skills, but also with improving student attitudes about themselves. Her studies have shown that improved self-concept and improved skill levels are positively correlated. Brandt (1993, p.66) agrees when he states that with curriculum that has a clarity of focus, and with expanded opportunity for students, developmental students will reach the high expectations which teachers set.

Retention Factors

Umoh et al. (1993, p.38) state that retention of developmental students is a complex issue that seldom has a single cause, but involves the interaction of different variables. Recognized variables include factors related to student characteristics and student institutional interaction, academic aptitude, level of aspiration, institutional type, student services offered, and student involvement. While the campus environment affects all students' decisions to stay in or drop out of school, it often effects developmental students more acutely.

The development of a sense of belonging or the degree of fit that results from student and instructors' interactions are mentioned by Cash (1993, p.3), Wade (1991, p.16), and Walleri and Peglow-Hoch (1988, p.22) as being important to the retention of students. The feeling of connection plays a bigger role with under prepared students than with better prepared students.

Tobias (1994, p.50) suggests that contributions are made to learning as students' interest in education increases.

Barriers to Success

Students enter college with attitudes and beliefs that affect their learning outcomes. Smith and Price (1996, p.2) suggest that developmental students' explanations for past performance influence their later achievement. Students expect the same from the future as from the past. They analyzed the developmental students' control over factors that contribute to success and concluded that there is only one attribution completely under the students' control, effort. Successful people expend enormous amounts of effort to reach their desired goals. These researchers state that developmental students, the students most in need, are the least likely to seek help.

Conley and Barnes (1990, p.22) also found it to be true that students based their success expectations on their past performances. Very few developmental students feel that their own effort or lack of effort contributes to their achievement.

Hirsch (1994, p.10) found that when this barrier is addressed, students can improve their academic performance. Roueche and Roueche (1993, p.250) suggest one way to address this barrier to success is to provide formal orientation courses throughout the freshman year to socialize students to the academic environment. The content of these courses may include

topics such as time and stress management, team building, and study skill strategies.

Leadership Skills

Daloz (1986, p.236) says that learning is about growth and that teachers share responsibility for students' growth processes. To do this effectively, Loeb (1994, p.1) says that leaders or teachers must have a clear idea of what they want to do. A clearly defined vision or purpose strengthens the organization (or the class). Pursuing a vision often involves risk taking and experimentation according to Senge (1990, p.209).

Duck (1993, p.110) states that leaders are teachers of people on how to think strategically, recognize patterns, and to anticipate problems and opportunities before they occur. Managers and teachers want the troops to get excited and have a "winning attitude".

Leaders of developmental programs need to initiate the planning, evaluation, and improvement themselves. Wilson (1995, p.1) describes a scenario as "stories of possible futures that the organization might encounter." By evaluating Study Skills 198, leadership skills were demonstrated that may evolve into additional opportunities to evaluate and revise other developmental courses.

Summary

The above four areas were identified in the literature as the areas that effect developmental students. Study skills

courses must be designed, taught, and evaluated with them in mind. According to the literature, these factors will contribute to the success of under prepared students.

One concept that was made very clear by the review of the literature was that the retention of community college students, especially those beginning in developmental courses, is a complex issue. While the college can address many of the factors that contribute to students remaining in college (campus environment and counselor contact), there are other variables outside of the institution's control (student's aptitude and past performance). Developmental educators have been successful in creating programs that have had positive effects on academic performance and student persistence in college.

Chapter 3

METHODOLOGY AND PROCEDURES

Five procedures were used to complete this evaluation practicum. First, a review of the literature was conducted. Topics were clustered under the headings of effective developmental programs involving study skill classes and the leadership skills of analyzing the needs of under prepared students. These topics included developmental students, retention factors, barriers to success, and leadership skills.

The second step in the evaluation practicum procedures was to examine the established criteria for the class, Study Skills 198. The original grant writers (an advisor, an English faculty member, and a college researcher) re-convened in June, 1996, to review the goals of the grant. The grant writers visited six developmental classes fall quarter to explain the winter study skills class and to invite students to enroll. The first 20 students who volunteered were enrolled. The grant stated that of the students who enrolled in the course, 50% would be retained for one year with a 2.0 gpa compared to similar developmental students who had not enrolled in Study Skills 198.

Third, the grant provided a student attitude survey to learn what students liked best and worst about the class, would they recommend the class to other students, and was the class helpful. Students' attitudes were collected from this survey and were included in Appendix A.

Fourth, data of student enrollment and grade point averages of students enrolled in Study Skills 198 were collected from the RCC computerized student information system in the records office and it was included in Appendix B. Identical data was collected on other RCC developmental students who did not enroll in the course and it was included in Appendix C.

The fifth step was to analyze the data in three respects. First, to compare the achieved gpa and retention rate to the goal mentioned in the grant to learn if the established criteria was met. Next, the gpa data were further analyzed using a t test because it is a test of the difference between two population means according to Johnson(1996, p.332). The null hypothesis stated that there was no difference one year later in gpa between students who enrolled in the study skills class and students who did not enroll in the study skills class. The alternative hypothesis, however, stated that gpa was dependent on enrollment in the class. The data were analyzed using Stat Star Software (McDougall and Stevens, 1992) at the .05 level of significance.

In addition, the retention data were tabulated using a chi square statistical test because it was a means of answering questions about data existing in the form of frequencies or categories according to Bluman (1995, p.419). The null hypothesis stated that there was no difference one year later in retention rates between students who enrolled in Study Skills 198 and students who did not enroll in Study Skills 198. The

alternative hypothesis stated that retention was dependent upon enrollment in Study Skills 198. The data were analyzed at the .05 level of significance using Stat Star Software (McDougall and Stevens, 1992).

The results were shared with the same committee in step two. This evaluation report was forwarded to the Dean of Academic Affairs to make decisions concerning possible curriculum revisions or other changes in the course.

Assumptions

For this evaluation practicum, it was assumed that the instructors followed the course outline for Study Skills 198. Second, it was assumed that the grant-stated 50% retention rate and 2.0 gpa were valid, established criteria. Third, it was assumed that the gpa data of comparing means met the conditions of the t test and that the retention data of comparing categories met the conditions required for using a chi square test.

Limitations

There were three limitations for this evaluation study. First, this study was specific to one study skills class at RCC and was not generalizable to other community college under prepared student populations. Second, the criteria was limited by the expertise of the grant writers. And third, the statistical tests were limited by the small numbers of students (9 and 4) retained for one year.

Chapter 4

RESULTS

The results, the outcomes of each of the procedural components presented in the previous section, are reported here beginning with the literature search.

The research questions for this study were, "Did at least 50% of students who enrolled in Study Skills 198 winter quarter, 1995, remain at RCC through winter quarter, 1996, with at least a 2.0 gpa?" and "What did the students consider to be the most and least helpful about the class?" These questions, as well as Hallberg's (1991, p.1) statement that the traditional study skills coupled with affective factors are very important in the retention of students, helped focus the literature search. Topics were clustered under the four headings of developmental students, retention factors, barriers to success, and leadership skills.

The literature also clarified that learning takes place as the result of knowledge, competence, and attitudinal elements according to Spady (1992, p.6). Leaders in the field of developmental education must continue to evaluate courses and programs in an effort to help reduce barriers to higher education and to meet the needs of under prepared students.

Second, all three members of the grant writing committee met and agreed that the original goal of 50% retention rate for

one year with a 2.0 gpa was valid criteria. Meeting comments were summarized in Appendix D.

Third, input was collected to learn students' attitudes toward Study Skills 198. The 19 students who remained in class were asked to answer four open-ended questions: "Did the class help you? What was the best part of this class? The worst?" and "Would you recommend this class to other students?" Not all students answered each of the four questions and some students had several answers for one question. The components of the class that students liked the best were the outside activities (21% or 4 responses), the use of the internet (26% or 5 responses), and the variety of topics (26% or 5 responses). The worst parts of the class were reported to be meeting only once a week (10% or 2 responses) and that the internet was of no use (10% or 2 responses). All respondents (19) said that they would recommend taking the class to new students. The survey results were reported in Table 1.

Table 1

Student Attitude Survey Summary

Questions	Responses
	n = 19
1. Did the class help?	
Yes	19 (100%)
2. Best part of class?	
Internet	5 (26%)
Variety of topics	5 (26%)
Outside activities	4 (21%)
3. Worst part of class?	
Met once a week	2 (10%)
Internet	2 (10%)
4. Would you recommend this class?	
Yes	19 (100%)

Fourth, retention and gpa data were collected on 20 developmental students enrolled in Study Skills 198 and on 20 developmental students not enrolled. Nine (45%) of the students who enrolled in Study Skills 198 were still attending RCC one year later, winter 1996, with a 2.5 gpa. Four (20%) of the 20 students identified in winter, 1995, who did not enroll in Study Skills 198 remained at RCC through winter 1996 with a gpa of 2.6.

Table 2

A Comparison of Retention and gpa, W '95 to W '96

	W '95	W '96	GPA
Students enrolled, Study Skills	20	9 (45%)	2.5
Students not enrolled, Study Skills	20	4 (20%)	2.6

Table 2 summarized the one year retention rates and gpa for both populations.

The fifth step was to analyze the data. The first stage was to learn if the established criteria (50% retention and 2.0 gpa) had been met. The data collected in step four above revealed that only 45% of the students were retained for one year. But those 9 students had a gpa of 2.5, higher than the 2.0 gpa criteria. Of the developmental students who did not enroll in Study Skills 198, only 4, or 20% were retained for one year with a gpa of 2.6. The data did not meet the criteria of 50% retention for one year, but exceeded the 2.0 gpa.

Next, the means were compared using a *t* test comparing the means of two independent samples, enrolled and not enrolled students. The degrees of freedom were computed to be 11, *df*=11, and the *t* value was computed to be 1.236. Since the level of significance or maximum probability of committing a type 1 error in hypothesis testing is .05, the critical value is 2.20. Hence,

the decision was made to retain the null hypothesis because 1.236 < 2.20. The null hypothesis stated that the gpa was independent of enrollment in Study Skills 198 was accepted. The alternative hypothesis which stated that gpa was dependent on enrollment in the class was rejected. The results of this analysis support the hypothesis that there was no significant difference one year later between gpa's of students who enrolled in Study Skills and those who had not enrolled. The software data analysis printout was placed in Appendix E. Table 3 summarized the t test analysis.

Table 3

T test of gpa

Group	N	M	SD	t calc	t crit	df	p
1	9	2.5	.094	1.236	2.20	11	.24203
2	4	2.6	.173				

The retention data were analyzed using the chi square test. The data were separated into four categories, retained, not retained, enrolled, and not enrolled. Of the 20 students who enrolled in Study Skills 198, 9 were retained one year later and 11 were not retained. Of the 20 students who were not enrolled in Study Skills 198, 4 students were still in college one year later and 16 were not in college. This data was summarized in a four cell chart in Table 4.

The degrees of freedom were computed to be 1, df=1, and the chi square was computed to be 7.813. The software analysis was presented in Appendix F. The level of significance or maximum probability of committing a type 1 error in hypothesis testing was .05 and the critical value was 3.84. Hence, the decision was made to reject the null hypothesis since 7.813 > 3.84. The null hypothesis that stated that the retention rate was independent of enrollment in Study Skills 198 was rejected.

Table 4

Retention Frequency Data, W '95 to W '96

	Enrolled in Study Skills 198	Not Enrolled Study Skills 198
Students retained	9	4
Students not retained	11	16

The results of this study supported the alternative hypothesis that there was a relationship between enrolling Study Skills 198 and remaining in college one year later. Students enrolled in Study Skills 198 were retained at a significantly higher rate than those not enrolled.

Finally, the results from the student survey, retention data, and gpa data were shared with the original grant committee. They in turn, made two recommendations for further action. First, the evaluation report was forwarded to the Dean of Academic Affairs for possible curriculum revision in the fall and, second, that the committee present the data at a counseling teaching and learning workshop.

Chapter 5

DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Discussion

Three aspects of this practicum were elaborated on in terms of discussion, conclusions, implications, and recommendations. These aspects included the need to disseminate the results of this study, revise the course curriculum, provide new counseling techniques, and to conduct further research with a larger population.

First, the results of this study addressed the problem posed in the evaluation proposal that it was unclear whether students who enrolled in Study Skills 198 winter quarter, 1995, were still enrolled at RCC one year later, winter quarter, 1996, and if this course helped them to remain in college. And, it was not known how similar students who did not enroll in Study Skills 198 fair at RCC.

The results indicated that students who enrolled in Study Skills 198 had a significantly higher retention rate after one year as compared to students who did not enroll in Study Skills 198. Gpa's were not affected by course enrollment. Further, the results showed that the retention criteria for enrolled students set by the grant writers was not met, but the gpa was exceeded. The attitude survey revealed students' enthusiasm for the class by unanimously recommending that other new students register for the class. Umoh et al. (1993) support the urgency of collecting

data on student retention and student satisfaction with their college experience.

Conclusions

There were three conclusions that were drawn from this discussion. First, the study supported the conclusion that students who enrolled in Study Skills 198 persisted in college with similar gpa's longer than students who did not enroll for Study Skills 198. Issues of internal validity of research design were considered and it was decided that variation of subsequent class selection during the year, motivation, and hours devoted to study were equally distributed among the 40 participants of the study.

Second, counselors needed to be informed about the results of this study and integrate the results into their advising sessions with students. The participants in the study recommended the course to new students.

Third, the literature revealed conflicting evidence of academic performance and student retention in college (Boylan, 1992, p.1; Kelly et al., 1992, p.10), but this study supported the conclusion that only retention was significantly impacted.

Implications

There were three implications that followed logically from the conclusions. First, a thorough review of the course curriculum considering the student comments on the attitude survey was indicated. Revisions in the topics was suggested.

Second, the results of the study provided a new knowledge base for counselors. Third, because the literature presented some conflicting results, a search for reasons why students left RCC was indicated.

Recommendations

Four recommendations flowed from the implications. It was recommended that the author of this evaluation report discuss the results with the RCC Dean of Academic Affairs in August, 1996, and that a copy of the report be forwarded to the MCCS grants office immediately afterward.

It was also recommended that the author continue to exhibit leadership skills by spear-heading the effort to evaluate the course curriculum. The topic of curriculum revision will be placed on the agenda of the RCC Developmental Education Committee fall quarter, 1996.

It was recommended that the results of the study be disseminated at a counseling workshop fall quarter, 1996. The grants committee will present a session on integrating the results into effective counseling techniques.

Fourth, it was recommended that an additional study with a larger population be conducted in the winter quarter, 1997, at RCC. The author will again collect student enrollment data from the admissions and records office on several sessions of the Study Skills 198 classes.

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APPENDIXES

Appendix A

Student Attitude Survey and Data

N=19

1. Did this class help you?

   Yes 19

2. What was the best thing about this class?

   Outside activities 4

   Internet 5

   Stress control 1

   Variety 5

   Good time 1

   No large commitment 1

   Good tips on time management 1

3. What was the worst thing about this class?

   Met only once a week 2

   Need more college involvement 1

   Being part of outside activities 1

   Internet was of no use 2

   More interaction in class would have helped 1

   Some topics were of low interest 1

4. Would you recommend this class? Yes, 19. Why?

   You learn a lot about yourself 2

   Helpful for first quarter students 2

   Learned a lot of things 1

   Liked competition 1

Good subjects 1

Good for people who need to learn to control 1

All would find the class of value 1

Appendix B

Table 5

Students Enrolled in Study Skills 198 Data

Student	RET W'95	GPA W'95	RET S'95	GPA S'95	RET F'95	GPA F'95	RET W'96	GPA W'96
				n = 20				
1	Y	2.0	Y	2.5	Y	2.1	Y	2.2
2	Y	W	N		N		N	
3	Y	4.0	Y	3.2	Y	3.5	Y	3.6
4	Y	2.5	Y	2.2	Y	2.5	Y	2.5
5	Y	2.7	Y	2.3	Y	2.4	Y	2.7
6	Y	3.5	Y	3.3	N		N	
7	Y	1.6	Y	1.0	N		N	
8	Y	1.1	Y	.8	Y	.7	Y	1.2
9	Y	.5	Y	.3	N		N	
10	Y	2.6	Y	3.3	Y	3.0	Y	3.0
11	Y	W	N		N		N	
12	Y	0.0	N		N		N	
13	Y	2.4	Y	1.2	N		N	
14	Y	3.0	Y	2.9	N		N	
15	Y	3.6	Y	2.6	N		N	
16	Y	W	N		N		N	

(table continues)

Student	RET W'95	GPA W'95	RET S'95	GPA S'95	RET F'95	GPA F'95	RET W'96	GPA W'96
				n = 20				
17	Y	1.6	N		Y	2.7	Y	2.5
18	Y	3.3	Y	1.7	Y	2.4	Y	2.7
19	Y	2.2	Y	2.3	Y	2.3	Y	2.4
20	Y	W	N		N		N	
Totals =	20	1.8	14	2.1	9	2.4	9	2.5

Note. Total numbers of students enrolled and mean gpa are computed. Responses included: RET = retained; Y = yes, enrolled; N = no, not enrolled; W = withdrew from college. Blank cells indicate no data available.

Appendix C

Table 6

Students Not Enrolled in Study Skills 198 Data

Student	RET W'95	GPA W'95	RET S'95	GPA S'95	RET F'95	GPA F'95	RET W'96	GPA W'96
				n = 20				
1	N	2.8	N		N		N	
2	Y	1.8	Y	2.0	Y	2.7	Y	3.0
3	Y		Y	2.0	N		N	
4	N	2.3	N		N		N	
5	Y		Y	2.5	N		N	
6	N		N		N		N	
7	Y	W	N		N		N	
8	N		N		N		N	
9	N		N		N		N	
10	Y	3.2	Y	2.4	N		N	
11	Y	3.0	Y	3.7	Y	3.2	Y	3.5
12	N		N		N		N	
13	Y	1.2	Y	2.3	N		N	
14	Y	3.2	Y	3.3	Y	3.1	Y	2.0
15	Y	2.0	Y	2.1	Y	2.3	Y	2.1
16	Y	1.7	Y		N		N	

(table continues)

Student	RET W'95	GPA W'95	RET S'95	GPA S'95	RET F'95	GPA F'95	RET W'96	GPA W'96
				n = 20				
17	Y	2.2	Y	1.8	Y	2.0	N	
18	N		N		N		N	
19	N		N		N		N	
20	N		N		N		N	
Totals =	11	2.1	10	2.2	5	2.6	4	2.6

Note. Total numbers of students enrolled and mean gpa are computed. Responses included: RET = retained; Y = yes, enrolled; N = no, not enrolled; W = withdrew from college. Blank cells indicate no data available.

Appendix D

Grant Committee Meeting Notes Summary

June 12, 1996

All committee members agreed on the criteria stated in the grant.

	JH	JW	BM
50% Retention	X	X	X
2.0 grade point average	X	X	X
Student Survey	X	X	X

In addition, the following comments were made.

"50% retention rate would be great for 1 year." JW

"I would like to see all of the student data put together in a quick and easy to read format. The counselors need this information because they see the new students during registration. " BM

"I was wondering if all the students planned to enroll for a full year or if they just wanted to take the one class? What were there intentions upon their initial enrollment?" JH

"Maybe, they transferred to another college after this class or got a job." JW

"Bonnie, continue to use 50% with good academic standing of 2.0 gpa. Do it." JH

"Just remember that we are working with just a few, very few students here. This should be done with an n of 150." JW

Appendix E

STAT-STAR Data Analysis

Name:_____ Date: 7/6/1996 Time: 13:43

Procedure: Two Sample |Mean-Ind Sum

Null Hypothesis tested: mu1 = mu2 Comparing VAR 1 & VAR 2

Sample1:	M	=	2.5	Sample2:	M	=	2.6
	SD	=	.094		SD	=	.173
	N	=	9		N	=	4

(M2 - M1) = 0.100

estSE of (M2 - M1) = 0.081 t = 1.236 p-valve = 0.24203
omega^sq
Estimated value of (mu2 - mu1):

95% CI = -0.078 to 0.278

Appendix F

STAT-STAR Data Analysis

Name:_____ Date: 7/6/1996 Time: 13:45

Datafile: NONAME.SSE Procedure: Chi Square |Goodness 'Fit

Group	Observ Freq	Expect Freq	Prop of Samp
A 1	9	4.000	0.450
A 2	11	16.000	0.550

Total N = 20

df = 1

Chi Square = 7.813 prob = 0.00519
IQV = 0.990

(W/ Yate's Correction)
Chi Square = 6.328 prob = 0.01188

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DVER