

DOCUMENT RESUME

ED 035 936

24

CG 004 954

AUTHOR MOUGHAMIAN, HENRY
 TITLE THE EFFECTS OF AN INTENSIFIED COUNSELING PROGRAM ON SOPHOMORE JUNIOR COLLEGE STUDENTS. FINAL REPORT.
 INSTITUTION CHICAGO CITY COLLEGE, ILL.
 SPONS AGENCY OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH.
 BUREAU NO BR-8-E-012
 PUB DATE SEP 69
 CONTRACT OEC-0-8-080012-4404 (010)
 NOTE 72P.

EDRS PRICE MF-\$0.50 HC-\$3.70
 DESCRIPTORS *ASPIRATION, *ASSOCIATE DEGREES, *COMMUNITY COLLEGES, COUNSELING, *COUNSELING EFFECTIVENESS, COUNSELING GOALS, EDUCATIONAL OBJECTIVES, GRADUATION, GRADUATION REQUIREMENTS, HIGHER EDUCATION, JUNIOR COLLEGE STUDENTS, PREDICTIVE MEASUREMENT, SELF CONCEPT, SELF EVALUATION, STUDENT PERSONNEL SERVICES, STUDY SKILLS, SUCCESS FACTORS

ABSTRACT

A MAJORITY OF JUNIOR COLLEGE STUDENTS INTEND TO OBTAIN A TWO-YEAR ASSOCIATE IN ARTS (AA) DEGREE AND TRANSFER TO A FOUR YEAR COLLEGE, BUT ONLY APPROXIMATELY ONE THIRD OF THESE STUDENTS CONTINUE THEIR EDUCATION BEYOND THE COMMUNITY COLLEGE LEVEL. IT WAS HYPOTHESIZED THAT AN INTENSIVE COUNSELING PROGRAM FOR SOPHOMORES WOULD ENABLE STUDENTS TO ACHIEVE THEIR PRIMARY JUNIOR COLLEGE GOAL OF EARNING THE AA DEGREE. SUBJECTS CONSISTED OF TWO MATCHED GROUPS OF ABOUT 100 SOPHOMORES AT CHICAGO CITY COLLEGE. THE EXPERIMENTAL GROUP WAS GIVEN AN INTENSIFIED COUNSELING PROGRAM WHILE THE CONTROL GROUP RECEIVED THE REGULAR AMOUNT OF COUNSELING, AND AT THE END OF THE YEAR THE EFFECTIVENESS OF THE INTENSIFIED COUNSELING PROGRAM WAS DETERMINED. IT WAS FOUND THAT ADDITIONAL COUNSELING OF PROSPECTIVE GRADUATES INCREASED THE GRADUATION RATE, BUT THE SPECIFIC FACTORS IN THE COUNSELING PROCESS THAT CONTRIBUTED TO THIS INCREASE COULD NOT BE ASCERTAINED. THE FOLLOWING RECOMMENDATIONS WERE MADE: (1) COUNSELING SERVICES SHOULD BE IMPROVED; (2) COMMUNITY COLLEGES SHOULD INCREASE THEIR EFFORTS IN KEEPING STUDENTS AWARE OF REQUIREMENTS; (3) THERE SHOULD BE AN INCREASE IN PREDICTIVE MEASUREMENT INSTRUMENTS; AND (4) A MORE THOROUGH ANALYSIS SHOULD BE MADE OF THE FACTORS IN THE COUNSELING PROCESS THAT CONTRIBUTE TO INCREASED STUDENT SUCCESS. (RSM)

BR 8-E-012
PA 24
DE/BR

ED035936

FINAL REPORT

Project No. 8-E-012

Contract No. OEG-0-8-080012-4404(010)

THE EFFECTS OF AN INTENSIFIED COUNSELING PROGRAM
ON SOPHOMORE JUNIOR COLLEGE STUDENTS

September 1969

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

CG004 954

ED035936

Final Report

Project No. 8-E-012

Contract No. OEG-0-8-080012-4404(010)

The Effects of an Intensified Counseling Program
on Sophomore Junior College Students

HENRY MOUGHAMIAN

CHICAGO CITY COLLEGE

CHICAGO, ILLINOIS

September, 1969

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

TABLE OF CONTENTS

Acknowledgments.....	iii
Summary	1
Chapter I, Introduction.....	4
Chapter II, Methods	7
Chapter III, Findings and Analysis.....	10
Chapter IV, Conclusions and Recommendations.....	19
Appendices:	
A: Letter to Students	22
B: Letter to Students	23
C: Chicago City College Counseling Questionnaire	24
D: Loop Campus Reports of Research	28
E: Notes on Methods x Levels Analysis of Variance	63
Bibliography	68

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

ACKNOWLEDGMENTS

Multi-campus research is most difficult, if not impossible, without the efforts and cooperation of various individuals. Mr. Harold Paulson, Director of Counseling, Kennedy-King College (formerly Wilson), and Miss Jean Underwood, Counselor, Loop Campus, worked with the students involved in this project. They also collected and maintained much of the data included in this study. Mr. Wesley Soderquist, Academic Dean, Fenger College, helped coordinate the efforts of these two Chicago City College campuses. Dr. Charles Lindblade and Mr. Edmund Dolan of the Office of Instructional Services, Chicago City College, aided in the processing of the data. Without the help of these individuals this research would not have been possible.

SUMMARY

The goals of individuals attending junior college are as varied as the purposes of a junior college. One student may achieve his goal by the completion of only one course. Another student might need additional technical skills which two or three courses might give him. For these individuals the junior college has fulfilled its purpose if it has met the particular needs of these students. But a majority of junior college students announce their intention of completing a two-year Associate in Arts Degree and transferring to a four-year college. Nationwide it is estimated that less than one-third of these students actually continue their education beyond the junior college level. The typical junior college student has been described as a transient. Many attend temporarily to raise their grade point average in order to get into a four-year institution. For them junior college is a stepping stone. Others are without direction and enter a junior college for the sake of going to "college." Many, however, are attending because the opportunity is available for a low cost education. Through necessity many of the students work, many full-time, and continue their education at the same time.

Upon admission to the Chicago City College (CCC), about 70 per cent of the approximately 30,000-36,000 students for the past several years have stated the aspiration of graduating, i.e., receiving the two-year Associate in Arts Degree. Yet in each of the last five years only 1,000 students have actually received this degree. The population of the Chicago City College differs from the populations of most four-year colleges and universities, in that most of the CCC students have to work and consequently only about 40 per cent attend as full-time students. However, despite this fact, and the attrition rate of approximately 6%, plus the fact that some of the students transfer to senior institutions without achieving the AA degree, it is felt that a substantially larger number of CCC students could and should earn the AA degree. At the beginning of the fall semester, 1966, approximately 10,000 CCC students had earned 30 or more semester hours of college work, but only about 1,000 received AA degrees in June, 1967.

The primary objective of this proposal was to establish the effects of an intensified counseling program on those students who have successfully completed one year of college work (30 semester hours). It was hypothesized that this program would enable these students to achieve their primary junior college goal of earning the AA degree.

Since junior college students as a group have lower ability than four-year college students, if it could be demonstrated through this project that additional counseling helped more students to successfully complete their junior college education, this result could serve as a basis for other junior colleges to re-evaluate their counseling procedures and possibly increase the number of students who seek additional higher education.

The design of the experiment consisted of two matched groups of approximately 100 students each who had achieved 30 credit hours of junior college work. The experimental group was given an intensified counseling program while the control group received the regular amount of counseling. In addition to abilities scores, counselors used interest and attitudinal scores in guiding the experimental group. At the end of the year statistical analyses were made to determine the effectiveness of the intensified counseling program in terms of number of graduates, retention, achievement, and basic knowledge of the counseling program and counseling relationships. A student assessment of the counseling procedures was made to isolate those practices that were found to be most helpful.

The general conclusion of this study indicates that additional counseling of prospective graduates can increase the graduation rate. As indicated by the analyses, this increase cannot be explained in terms of ability, attitude, pre-GPA, nor interest. The specific factors in the counseling process that contributed to this increase could not be determined by this study. More specific findings demonstrate that:

- (1) The intensified counseling did significantly increase the graduation rate.
- (2) The intensive counseling did not have an effect on self-understanding and knowledge of the counseling program and counseling relationships.
- (3) Ability, as measured by the ACT, did not contribute to the increase in the number of graduates. The relative contribution of attitudes in predicting graduation proved negligible.
- (4) There was no basic difference in the retention and withdrawal rates in the experimental and control groups.

Recommendations resulting from the study are:

- (1) Counseling services to prospective graduates should be improved. This study emphasized the quantitative aspect and demonstrated the positive effects of a lower student-counselor ratio.
- (2) Many junior college students do not graduate because of a lack of interest in the A.A. degree and/or a lack of knowledge of graduation requirements. Community colleges need to increase their efforts in making and keeping students aware of requirements. This practice should begin in the freshman year and continue until graduation. The value of identification of potential graduates and individualized attention can have a lasting value for the careers of students.
- (3) As has been demonstrated by most other studies, there is an acute need in junior colleges for predictive measurement instruments. Even though national testing agencies have begun efforts in this area, additional work needs to take place.
- (4) A more thorough analysis needs to be made of the factors in the counseling process that contribute toward increased student success. This analysis should include in-depth interviews with students, as well as other techniques, in order to get a better understanding of the counseling process. This will necessitate an experimental design with tighter controls than used in this study.

CHAPTER I

Introduction

Upon admission to the Chicago City College (CCC), about 70 per cent of the approximately 30,000-36,000 students for the past several years have stated the aspiration of graduating, i.e., receiving the two-year Associate in Arts degree. Yet in each of the last five years only 700 to 1,000 students have actually received this degree. An analysis of the ratio of total number of students to graduates indicates that only one out of 24 students graduates with the Associate in Arts Degree. The population of the Chicago City College differs from the populations of most four-year colleges and universities, in that most of the CCC students have to work and consequently only about 40 per cent attend as full-time students. However, despite this fact, and the attrition rate of approximately 20%, plus the fact that some of the students transfer to senior institutions without achieving the A.A. degree, it is felt that a substantially larger number of CCC students could and should earn the A.A. degree. At the beginning of the fall semester, 1966, approximately 10,000 CCC students had earned 30 or more semester hours of college credit, but only about 1,000 received A.A. degrees in June, 1967.

The goals of individuals attending junior college are as varied as the purposes of a junior college. One student may achieve his goal by the completion of only one course. Another student might need additional technical skills which two or three courses might give him. For these individuals the junior college has fulfilled its purpose if it has met the particular needs of these students. But a majority of junior college students announce their intention of completing a two-year Associate in Arts degree and transferring to a four-year college. Nationwide it is estimated that less than one-third of these students actually continue their education beyond the junior college level. In the Chicago City College it is even less. The typical junior college student has been described as a transient. Many attend temporarily to raise their grade point average in order to get into a four-year institution. For them junior college is a stepping stone. Others are without direction and enter a junior college for the sake of going to "college." Most of the students in the Chicago City College, however, are attending because the opportunity is available for a low cost education. Through necessity most of the students work, many full-time, and continue their education at the same time. Most of these students enter

the Chicago City College with poor academic backgrounds and low ability. Associated with these characteristics are unusually unrealistic goal setting and level of aspiration. But the mere fact that these students have taken the initiative to enroll in college should be an aid in trying to help them in setting, evaluating, and reaching their goals.

Collins (5) argues that junior college counseling leaves much to be desired, particularly in the area of student-counselor ratio. Raines (10) estimated conservatively that a half million junior college students are being deprived of adequate opportunities for counseling. The report further demonstrates that adequate guidance and counseling is provided in less than 50% of the junior colleges. Johnson (7) has demonstrated that junior colleges in the state of Illinois are not providing adequate counseling services to meet student needs.

Richardson (12) found that in senior colleges no significant difference in average grades resulted when counseled and non-counseled groups were compared. Brown (2), however, found significant differences when counseled and non-counseled students were compared. Rose (13) has demonstrated that among four-year college students, counseling can be a significant deterrent to defaulting. Dropping out of college is considered long before the decision is made (11, Previn).

Raines (10) maintains that a stepped-up program of recruitment of junior college counselors must be achieved, as the ultimate success of the comprehensive concept of higher education rests upon adequate counseling. Knoell and Medsker (8) maintain that junior college administrators and board members need to be convinced of the contributions which counseling could make to the total educational experience of the students, given adequate financial support and appropriately trained staff.

One of the major reasons students attend junior colleges as freshmen is their lack of motivation or uncertainty about their interests in or capability for baccalaureate degree programs (1) (Blocker, Plummer and Richardson). Knoell and Medsker (8) report that students complain about a lack of assistance from counselors in working through their motivational problems, including frequent disappointment in their chosen major or profession, conflicting values, personal problems, and others.

Thus, there has been limited research in senior colleges to determine the effect of counseling on achievement and persistence, but aside from a general description of the ideal counseling program, no experiments are mentioned with respect to an increase in junior college graduates through an intensified counseling program.

It was therefore the purpose of this study to determine the effectiveness of intensified counseling in regard to the number of students receiving the A.A. degree. Some of the major considerations of this proposed program were:

- (1) To give each student a more realistic appraisal of his abilities, interests, attitudes, and achievement.
- (2) To aid the student in setting realistic goals compatible with his abilities.
- (3) To aid in the improvement of study skills, such as independent study.
- (4) To aid the student in making periodic evaluation of his progress.
- (5) To help the student reconcile his junior college achievements with requirements of senior institutions.

CHAPTER II

Methods

The sample for this study, beginning during the fall semester 1967, was selected from the full-time sophomore students at the Wilson* and Loop Campuses of the Chicago City College who aspired to achieve the Associate in Arts Degree. There were approximately 700-1,000 such students at each campus. Wilson and Loop campuses were selected since their full-time student bodies are relatively homogeneous in ability (median ACT standard composite score 16-17), achievement and socio-economic status, and are representative of the populations at the other six campuses of the CCC. Initially, the total full-time sophomore group at Loop was matched with the total full-time sophomore group at Wilson on the basis of CCC freshman G.P.A. and Composite ACT score (matched pairs). Since the entire full-time sophomore populations were used in the matching, selective discarding of cases was necessary. From the total number of matched pairs, 99 pairs were randomly selected and one member of each matched pair was then randomly assigned to the experimental group, the other to the control group (4) (Campbell and Stanley). Thus, there were an equal number of students in this experiment at both Wilson and Loop. Even though working with class groups would facilitate identification of these students for purposes of testing, counseling and follow-up, it was decided to assign the experimental treatment to randomized individuals instead of class groups to minimize errors possibly stemming from different classroom groups, time of day, instructor, procedural irregularities, etc.

The present counseling procedure among the eight branches of the Chicago City College is a minimal one, even though practices vary from branch to branch. Counseling provided sophomores consists principally of helping the student plan a suitable program and keeping him aware of graduation requirements. The present student-counselor ratio is approximately 1200 to 1, so much of the academic counseling falls on the shoulders of teachers, many of whom are not qualified. A student with special needs may consult the counselor during the semester but frequently time is not available for adequate counseling. Some of the campuses do conduct counseling classes for freshmen, but it is not a requirement for all full-time students. Only the American College Testing Program is required of all full-time students.

*Name changed to Kennedy-King College on August 12, 1969. For clarity the name Wilson will be used in this report.

The ACT is comprised of four subtests and measures abilities in English, mathematics, social studies, and natural science.

The experimental group was given ability, attitudinal, and interest tests. The control group was given the ACT test only. The ACT was used as a measure of ability, the Kuder Preference Record - Vocational - was used as a measure of student interests. Since most CCC students are of low ability and set unrealistic levels of aspiration, it was believed that if students were aware of both their ability and interests, and were able to reconcile any differences with the aid of a counselor, they would set more realistic goals. The Kuder yields nine interest scores: mechanical, computational, scientific, persuasive, artistic, literary, musical, social service, and clerical. The California Test of Personality measures personal and social adjustment and yields fifteen scores: 12 subtests, two subtest totals, and total scores. The six personal adjustment scales are self-reliance, sense of personal worth, sense of personal freedom, feeling of belonging, withdrawing tendencies, and nervous symptoms. The six social adjustment scales are social standards, social skills, anti-social tendencies, family relations, school or occupational relations, and community relations. Even though the validity of most personality instruments is suspect, the California Test of Personality appears to be as valid as any other test of this type (3) (Buros). The California was used by the counselors in trying to help the students understand themselves better. Since lack of achievement is frequently associated with emotional problems, this test may be an aid in counseling students. At the time of registration the counselor contacted and discussed (see Appendix A) with each individual in the experimental group his ability, attitudinal, and interest scores as well as the value of obtaining an A.A. degree. Special attention was given to reconciling these factors with the student's future academic plans. An evaluation was made of the student's freshman achievement scores. Strengths and weaknesses were diagnosed to give the student an adequate appraisal of what he had done and needed to do in order to successfully complete his sophomore year. The primary objective here was to help the student to develop an objective picture of himself and his goals and to assume the responsibility of periodically making an assessment of his progress. Each student in this group was encouraged to ask for the counselor's advice in time of need throughout the semester. Counseling services were maintained in each branch to make time available for any student who needed it. Special help was given to any student who desired it. This same general procedure (see Appendix B), except for the testing, was also used for the second semester.

As a pre and post measure with both the experimental and control groups, the students were asked to complete the appended questionnaire (see Appendix . C) which measured (1) degree of self-understanding perceived by students and (2) effectiveness of the counseling relationship. It was hoped that the experimental group would show both quantitative and qualitative gains in these areas.

At the end of the school year, June 1968, the following criteria and analysis were used to measure counseling effectiveness:

- (1) Number of graduates -- a chi-square test was used to determine if a significant difference existed among the number of graduates in the experimental and control groups (9) (Lindquist).
- (2) Self-understanding and knowledge of the counseling program and counseling relationships as measured by the counseling questionnaire -- product moment correlations (phi coefficients) were calculated using experimental and control groups as one dichotomy, and positive and negative responses to applicable items on the counseling questionnaire as the other dichotomy. It was hoped that factors related to success could be identified.
- (3) Grade point average -- methods by level analyses of variance was used to determine any difference between the mean grade point average of the experimental and control groups by ability level and by group totals.
- (4) Retention -- descriptive statistics were used to show the attrition rate of the groups.

CHAPTER III

Findings and Analysis

A. Number of Graduates

A part of the basic problem under consideration was to determine if an intensified counseling program would affect the number of graduates in an individual campus. A chi-square test was used to determine if a significant difference existed among the number of graduates in the experimental and control groups. Table I below shows that 43.4% of the students in the experimental group graduated and 26.3% of the students were graduated in the control group.

TABLE I
Number of Graduates

	<u>Experimental</u> N = 99	<u>Control</u> N = 99
Graduates	43	26
% Graduates	43.4	26.3

A chi square significant test was applied to the data in Table I with the results showing the differences between the experimental and control groups are significant at the 2% level.

B. Use of Counseling Questionnaire

The Chicago City College Counseling Questionnaire was distributed to both control and experimental groups as a pre and post instrument. The questionnaire essentially sought to determine (1) the degree of self-understanding perceived by students, and (2) the effectiveness of the counseling relationship. It was hypothesized that:

(1) There would be no significant difference between the Control group and Experimental group in the two areas defined above at the time the pre-test survey was given.

(2) Post-test results would indicate that:

A. The degree of student self-understanding would be greater among the experimental groups.

B. The effectiveness of the counseling relationships would be rated significantly higher by the experimental group.

The degree of self-understanding is measured by items 9, 10, and 12 on the Chicago City College Counseling Questionnaire (see Appendix C).

The results of the two groups on the pre-test are shown in Table Two. It is noted that the numerical scores refer to per cent of positive responses. Thus, seventy-nine and seven tenths (79.7) per cent of the responses by the experimental group were positive. Eighty and four tenths (80.4) per cent of the responses by the control group were positive. Thus, we conclude that there was no significant difference between the experimental and control group with respect to the degree of understanding on the pre-test.

TABLE II
Per Cent of Positive Responses to
Items Measuring Self-Understanding

	<u>Pre-Test</u>	<u>Post-Test</u>
Experimental	79.7	84.4
Control	80.4	80.8

We may draw a similar conclusion with respect to the effectiveness of the counseling relationship. Here, as indicated in Table Three, experimental and control groups yield percentage indices which do not differ significantly. Items 16-30 were used to measure the effectiveness of this relationship. Thus, the first hypothesis is accepted.

TABLE III
Per Cent of Positive Responses to Items Measuring
Effectiveness of the Counseling Relationship

	<u>Pre-Test</u>	<u>Post-Test</u>
Experimental	88.1	89.9
Control	86.7	87.3

The second hypothesis, part A, stated that post-test results would indicate that the degree of self-understanding perceived by students would be (significantly) greater among the experimental group. Data demonstrated in Table Two allows us to reject this hypothesis. Although the experimental group does demonstrate a higher degree of self-understanding, the difference, 3.6%, is not significant.

Part B of the second hypothesis stated that the effectiveness of the counseling relationship would be rated significantly higher by the experimental group. Data in Table Three demonstrates that the experimental group had an 89.9 positive response index. Again, the difference is not significant, and we reject hypothesis 2B. Although the overall difference, though positive, was not significant, it was decided to run phi coefficients on each individual item using experimental and control groups as one dichotomy, and positive or negative responses as the other dichotomy, in the hope of identifying individual factors which related to the small positive difference.

The results in Table Four indicate that 40% of the items on the pre-test yield a correlation of .20 or above, and yet only 20% of the items on the post-test yield correlations of .20 or above. For our purposes here we note that items #22, 25, and 29 all demonstrate a higher r on the post-test results. It is interesting to note that these items are concerned with (a) the effectiveness of counselors in aiding the student to achieving realistic self-understanding, (b) the counselors' understanding of the student's educational world, that is, classroom conditions, problems, and student-teacher relationships, and (c) whether or not the student felt accepted by the counselor. Although no definitive conclusions can be drawn it is suggested that future research focus upon these three facets of the counselor-student relationship.

TABLE IV

Phi Coefficients of Individual Items
Measuring the Effectiveness of Counseling
Relationship on CCC Counseling Questionnaire

Coefficient of Correlation			Coefficient of Correlation		
<u>Items</u>	<u>Pre</u>	<u>Post</u>	<u>Items</u>	<u>Pre</u>	<u>Post</u>
16	-.06	00	24	.28	-.07
17	00	00	25	.20	.39
18	00	00	26	.26	.06
19	00	00	27	.44	.11
20	.39	00	28	.60	.07
21	00	00	29	.10	.28
22	-.17	.33	30	00	00
23	00	.13			

C. Grade Point Average

A methods by level analysis of variance was used to determine if there was any difference between the mean grade point averages of the experimental and control groups by ability levels and by group totals. Table V below depicts the methods by level analysis.

TABLE V

Methods by Level Analysis of Variance

	<u>Sums of Squares</u>	<u>Df</u>	<u>Variance</u>
Methods	.0972	1	.0972
Levels	28.1893	6	4.6982
Cells	28.8055	13	
Methods x Levels	.5190	6	.0865
Within Sub-Groups	<u>15.9342</u>	<u>153</u>	.1041
Total	44.7397	167	

The methods by level analysis of variance indicates that there is no significant difference within the sub-groups or by group totals. The F ratios respectively are .93 and .83. One interpretation of the lack of significant difference is that the basic thrust in the intensified counseling program was to acquaint the student with his interests, attitudes, and ability levels. Here, future research could focus on a more elaborate counseling program which would include such factors as methods of study, note taking, reading achievement levels, and proper placement into junior college curricula.

D. Student Retention

Descriptive statistics (see Table VI below) were used to show retention rates of experimental and control groups.

TABLE VI

Student Retention

	<u>Experimental</u>		<u>Control</u>	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Graduate	43	43.4	26	26.3
Non-Graduate	51	51.3	72	72.4
Withdrew	5	5.3	1	1.3

Here, more students withdrew from the experimental group than the control group. Reasons for this are that many students, although full-time academically, must of necessity work because of socio-economic background, and frequently outside work commitments increase over original expectations to the point that the student cannot continue to successfully pursue his academic work. This problem indicates the need for a substantial increase in junior college financial aid and work-study programs.

E. Factors Related to Achievement

Table VII gives the correlations of various attitudes with post-GPA (achievement) and pre-GPA. First order correlations were calculated between all twelve attitudinal factors (as measured by the California Test of Personality), ability (as measured by the ACT), pre-GPA, and post-GPA. Except for the correlations indicated in Table VII, other correlations did not indicate any relationship with achievement. For example, ACT correlated .08 with post-GPA which indicates lack of predictive validity.

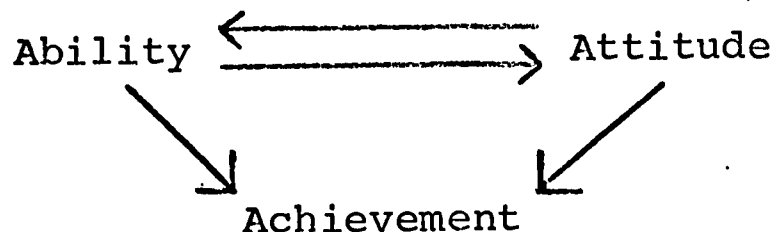
TABLE VII

Post GPA and Pre GPA Correlations
with Attitudes

	<u>Post GPA</u>	<u>Pre GPA</u>
Personal Freedom	.1070	-.0442
Personal Worth	.1387	.0086
Social Standards	.1289	.1617
Pre-GPA	.8000	

It is evident from most of the low correlations in Table VII that even the highest attitudinal correlations with post-GPA do not contribute significantly to achievement. Nevertheless, coefficients of determination were obtained showing the relative and joint contributions of attitudes and pre-GPA to achievement (post-GPA). Since ability as measured by the ACT did not correlate with

achievement, it was decided to use pre-GPA (even though probably a more gross measure) as the measure of ability. An illustration of the relative and joint contributions is given in the diagram below. Direct contributions to achievement are made by attitude and ability, and the product terms, shown by the double arrows, indicate joint contributions of attitude and ability to achievement.



Letting X_1 represent achievement (post-GPA), X_2 represent ability (pre-GPA) and X_3 represent attitude, beta coefficients were calculated by the formulas below (6) (Engelhart):

$$\beta_{13.2} = \frac{r_{13} - r_{12}r_{23}}{1 - r_{23}^2}$$

$$\beta_{12.3} = r_{12} - \beta_{13.2} r_{23}$$

The proportions of variance of the dependent variable to be ascribed to the direct and joint influences of the independent variables were ascertained by calculating:

$$\beta_{13.2}^2, \beta_{12.3}^2, \text{ and } 2\beta_{13.2}\beta_{12.3}r_{23}$$

The first two terms, $\beta_{13.2}^2$ and $\beta_{12.3}^2$, represent, respectively, the direct contributions of attitude and ability to achievement. The product term, $2\beta_{13.2}\beta_{12.3}r_{23}$, is a measure of the joint contribution of attitude and ability to achievement. If all of the variance of X_1 were accounted for, even though this is not the case here, then the formula would be:

$$1 = \beta_{13.2}^2 + \beta_{12.3}^2 + 2\beta_{13.2}\beta_{12.3}r_{23}$$

The results of this path coefficient analysis are given in the coefficients of determination of Table VIII. A per cent interpretation can be given by shifting the decimal points two places to the right.

Since ability (pre-GPA) has much the higher correlation with achievement (post-GPA) than each attitude, the coefficients of determination relative to ability are much higher than the coefficients of determination relevant to attitudes. If one were to predict achievement from pre-GPA and attitude measures, comparison of the regression coefficients for pre-GPA with those for attitudes would show the former much the larger.

TABLE VIII
Coefficients of Determination Showing
Direct and Joint Influences of Ability (Pre-GPA)
and Attitude on Achievement (Post-GPA)

	<u>Ability (Pre-GPA)</u>	<u>Attitude</u>	<u>Ability and Attitude</u>
Personal Freedom	.6500	.0198	-.0010
Personal Worth	.6381	.0174	.0018
Social Standards	.6402	.0000	-.0001

F. Attitudes and Interests of Graduates and Non-Graduates

All students in the experimental group were given the opportunity to take the California Test of Personality and Kuder Preference Record. The primary purpose of administering these measuring devices was to give counselors more information for guidance purposes. Even though there was a comparable number of graduates and non-graduates in the experimental group who took these measuring tools, the true value of the results in aiding students in setting realistic choices can only be speculative.

A study of the mean performances and standard deviations of the graduates and non-graduates is presented in Table IX. Even though there is not a statistically significant difference between any of the means, the graduates do show a higher average score with respect to all of the attitudes measured with the exception of self-reliance and family relations. In these two instances the

groups were still comparable. The largest single difference between the groups is indicated in the "total personal adjustment" score where the mean for the graduates is 65.0 and for the non-graduates 61.3. The smaller standard deviation of the graduates with reference to "total personal adjustment," "total social adjustment," and "total adjustment" indicates a more homogeneous group with reference to attitudes. As these attitudes were pre-measures, they do not indicate effects of the intensified counseling received during this experiment. It would be interesting to attempt to measure attitudinal changes after intensified counseling.

TABLE IX

Attitudes of Graduates (N=23) Vs. Non-Graduates (N=23)
in Experimental Group

Attitude	Mean		Standard Deviation	
	Grad's	Non-Grad's	Grad's	Non-Grad's
Self-reliance	10.7	10.9	2.43	2.69
Personal Worth	10.8	9.7	1.95	2.79
Personal Freedom	11.2	10.2	2.35	2.89
Belonging	11.8	11.4	1.61	2.97
Withdrawing Tendencies	10.0	9.9	3.00	2.97
Nervous Symptoms	9.9	9.4	2.09	3.81
Total Personal Adj.	65.0	61.3	10.71	14.12
Social Standards	11.4	10.0	2.02	2.13
Social Skills	9.5	9.4	2.15	2.68
Anti-social Tendencies	12.0	11.7	2.18	2.85
Family Relations	9.7	9.8	3.12	4.12
School Relations	8.7	8.5	2.85	3.60
Community Relations	8.9	8.7	3.41	3.43
Total Social Adj.	59.6	58.0	9.17	13.57
Total Adj.	124.6	119.3	14.70	25.91

Table X presents the means and standard deviations of those graduates and non-graduates with Kuder scores. Since the number of students taking this inventory was small, it is difficult to generalize the results. The non-graduates indicated greater interest in the areas of "outdoor" and "scientific" while the graduates demonstrated the greatest interest in "social service." The latter is not surprising in view of the fact that a large number of Chicago City College graduates eventually go into teaching. Even though interest inventories are administered to many students beginning in high school, results obtained from college testing should yield greater reliability since there is stabilization with maturity.

TABLE X

Interests of Graduates (N = 13) and Non-Graduates (N = 11)
in Experimental Group

<u>Interest</u>	<u>Mean</u>		<u>Standard Deviation</u>	
	<u>Grad's</u>	<u>Non-Grad's</u>	<u>Grad's</u>	<u>Non-Grad's</u>
Outdoor	21.3	33.0	10.3	12.8
Mechanical	34.9	34.1	15.6	9.8
Computational	27.5	31.9	10.1	10.9
Scientific	31.5	41.0	11.6	14.0
Persuasive	48.1	44.4	14.5	18.3
Artistic	26.4	26.7	11.6	10.0
Literary	28.0	28.8	11.2	12.9
Musical	14.2	11.1	7.1	6.1
Social Service	58.8	41.8	16.5	16.7
Clerical	47.9	45.2	16.6	13.0

CHAPTER IV

Conclusions and Recommendations

Much descriptive research has been done on the junior college student. One of the pitfalls of such research is that, frequently, one profile emerges as that of the "typical" junior college student. A true community college does not have one population of students but many populations depending upon the functions that it seeks to fulfill. To "average" in the statistics of those students in a remedial program or an adult program with the statistics of those students in the baccalaureate and occupational-technical programs yields a composite profile that, in essence, has little or no meaning. The community college or "people's college" serves the needs of many groups; consequently over the years many different types of programs have emerged. Because of the heterogeneity of its populations, counseling has been recognized as one of the most important functions of the community college.

In view of these considerations and the fact that in previous years the Chicago City College has had small graduating classes in relation to its enrollment, the present research was undertaken to determine the effects of an intensified counseling program on sophomore junior college students. Consequently, the experimental group in this research was given additional counseling with the hope that this service would help them to complete successfully their junior college education. In addition to ability scores, the students in the experimental group were invited to take attitudinal and interest inventories which could possibly be of aid in the counseling process. An attempt was made to measure the degree of understanding by the experimental group of the counseling program and counseling relationships.

The scientific study of educational problems is affected not only by the complexity of human behavior itself but also by the techniques and instruments available to measure manifestations of this behavior. In educational research, whether the hypotheses are rejected or accepted, it is most difficult to isolate the causal factors. This research was no exception. The conclusions of this research can be stated in terms of its criteria, namely:

- (1) The intensified counseling did significantly increase the graduation rate. While the specific factors in the counseling process that contributed to this increase may be unexplained by this research, the fact that graduation requirements and the mechanics of applying for graduation were reemphasized with

the candidates doubtlessly contributed to students graduating who otherwise would not have. With many students the problem of graduating may not be one primarily of an academic nature but one of a lack of motivation for an Associate in Arts Degree. In this experiment counselors' continued emphasis on the A.A. Degree did contribute to the increase in number of graduates.

- (2) The intensive counseling did not have an effect on self-understanding⁸ and knowledge of the counseling program and counseling relationships. The lack of a program specifically structured to help achieve these goals might have been a contributing factor. As demonstrated by student comments in Appendix a further consideration might have been the nature of the measuring instrument. It literally overwhelmed some students. The additional counseling did not increase the post-GPA of the experimental group, nor was it hypothesized to.
- (3) Ability, as measured by the ACT, did not contribute to the increase in the number of graduates. This was indicated by the lack of its correlation with post-GPA and by graduate/non-graduate comparisons. Even though pre-GPA correlated highly with post-GPA, the analysis of variance yielded no significant difference between the experimental and control groups.

The relative contribution of attitude in predicting graduation proved negligible. While the attitudinal and interest inventories might have been helpful tools in counseling students in the experimental group, their predictive validity was non-existent.

- (4) There was no basic difference in the retention and withdrawal rates in the experimental and control groups. This is probably accounted for by the fact that all of these students had sophomore standing and were pursuing a full-time program. The total withdrawal rate of six per cent was less than one-third of the total institutional withdrawal rate.
- (5) The general conclusion of this study indicates that additional counseling of prospective graduates can increase the graduation rate. As indicated by the analyses, this increase cannot be explained in terms of ability, attitude, pre-GPA, nor interest. The specific factors in the counseling process that contributed to this increase could not be determined by this study.

Recommendations resulting from this study are:

- (1) Counseling services to prospective graduates should be improved. This study emphasized the quantitative aspect and demonstrated the positive effects of a lower student-counselor ratio.
- (2) Many junior college students don't graduate because of the lack of interest in the A.A. degree and/or a lack of knowledge of graduation requirements. The Chicago City College needs to increase its efforts in making and keeping students aware of requirements. This practice should begin in the freshman year and continue until graduation. The value of identification of potential graduates and individualized attention can have a lasting value for the careers of students.

Of an internal nature, the CCC should thoroughly reevaluate its current graduation policy and establish common requirements among its campuses. An inter-campus committee should be established specifically for this purpose.

- (3) As has been demonstrated by most other studies, there is an acute need in junior colleges for predictive measurement instruments. Even though national testing agencies have begun efforts in this area, additional work needs to take place. A concomitant of this problem relates to reliable grading practices of faculty. Faculty needs to be educated in evaluation procedures.
- (4) A more thorough analysis needs to be made of the factors in the counseling process that contribute toward increased student success. This analysis should include in-depth interviews with students, as well as other techniques, in order to get a better understanding of the counseling process. This will necessitate an experimental design with tighter controls than used in this study.

APPENDIX A

CHICAGO
CITY
COLLEGE

THE LOOP COLLEGE

64 EAST LAKE STREET • CHICAGO, ILLINOIS 60601 • 782-0200

OFFICE OF STUDENT PERSONNEL

November 19, 1968

Dear .

The Office of Student Personnel is participating in a special counseling program for students who have achieved sophomore status at the Loop College. You have been chosen as a student who is eligible for participation in this program. I hope that you will volunteer to participate.

As part of this program early academic advising for the Spring Semester has been arranged for each participant. The early registration will be completed by arranging an appointment with me. This appointment may be secured by coming to the Office of Student Personnel, Room 1104, as soon as possible and signing up for a convenient time on a special sheet which will be designated for students in this program.

Another important part of this special program will be to make available to you guidance services which may help you in your planning -- vocationally and educationally. These services will be explained at the time of our appointment.

One of the purposes of this program is to review the counseling services you may have used in the past in order for our office to evaluate its program and plan improvements for future students. One method which will help us obtain student ideas for this planning is to ask you. Thus a questionnaire is enclosed which I would like you to complete and bring in at the time of your appointment. Please do not write your name on it, so that you will feel free to respond in a forthright manner.

Your participation in this program will be appreciated. The program is designed to help you plan for your future primarily. I am looking forward to our conference. Please come to Room 1104 and make an appointment as soon as possible.

Sincerely yours,

M. Jean Underwood
Counselor

APPENDIX B

CHICAGO
CITY
COLLEGE

THE LOOP COLLEGE

64 EAST LAKE STREET • CHICAGO, ILLINOIS 60601 • 752-0200

OFFICE OF STUDENT PERSONNEL

May, 1969

Dear

As you will recall you have been chosen to help the Office of Student Personnel in a project of evaluating the counseling program in the Chicago City College system. I appreciate your participation in this research project.

In order for us to complete this project, we would like your opinion concerning the counseling services at the end of the current semester. Perhaps you have had additional experiences during the semester which have either confirmed your ideas about the counseling program or have changed them. In either case, I would like to hear from you.

Will you be so kind as to complete the enclosed questionnaire and return it as soon as possible in the self-addressed stamped envelope. This is necessary in order to have a measure for each semester of your sophomore year.

Thank you for your help in this project. Best wishes to you in pursuing the goals you have set for yourself.

Sincerely yours,

M. Jean Underwood
Counselor

MJU:jeb

APPENDIX C

Chicago City College Counseling Questionnaire

DIRECTIONS: In this questionnaire you are asked to provide certain facts about yourself and your experience with your College Counseling Program. All of the questions can be answered by a few words or by writing an (X) for the alternative that comes closest to describing your situation. Please answer all questions as accurately as possible. Thank you for your cooperation.

Male _____ Female _____ Age _____ Single _____ Married _____ Other _____

Number of earned credits: 30-34 _____ 35-39 _____ 40-44 _____ 45-49 _____ over 50 _____

What is your major? _____
 _____ Transfer _____
 _____ Terminal _____

1. Do you know where the Counseling Offices for your college are located?
 Yes _____ No _____ Uncertain _____
2. Have you needed help while in college in getting along better in your school work?
 Yes _____ No _____
3. About how many times have you gone to a counselor for help of any kind during this past school year?
 _____ None _____ Three to five times
 _____ Once or twice _____ Five or more times
4. Have you experienced difficulty in seeing a counselor?
 Yes _____ No _____ Sometimes _____
5. Have you needed help while in college in changing your educational program or major?
 Yes _____ No _____
 Did you get the help? Yes _____ No _____
 Help was received from:
 _____ a counselor
 _____ a faculty member
 _____ a student
6. Have you needed help while in college with personal problems?
 Yes _____ No _____
 If yes, did you get help in college? Yes _____ No _____
 Help was received from:
 _____ a counselor
 _____ a faculty member
 _____ a student
7. Have you needed help while in college in choosing your subjects or courses?
 Yes _____ No _____
 If yes, did you get help at college? Yes _____ No _____
 Help was received from:
 _____ a counselor
 _____ a faculty member
 _____ a student

8. Has there ever been any conflict in your mind between whether you should get more education after finishing junior college or go to work?
Yes _____ No _____
9. Have you become aware of a better understanding while in college of your interests and abilities?
Yes _____ No _____
If yes, check one or more:
_____ From tests _____ From a faculty member _____
_____ From a counselor _____ Other (specify) _____
10. Have you found a better understanding while in college of the occupations you might choose? Yes _____ No _____
_____ By studying an occupation in a class
_____ By reading material in the library or Student Personnel Center
_____ By talking with a counselor
_____ By talking with a faculty member
_____ Other (please specify) _____
11. Have you needed help while in college in finding part-time employment? Yes _____ No _____
Help was received from:
_____ a counselor
_____ a faculty member
_____ a student
12. Have you received a better understanding while in CCC of the school or college you want to attend after leaving junior college? Yes _____ No _____
If yes, check one or more:
_____ By reading a school or college catalog
_____ By talking with a counselor
_____ By talking with a faculty member
_____ Other (specify) _____
13. Have you obtained a better understanding while in junior college of the jobs available in your community? Yes _____ No _____
If yes, check one or more:
_____ By talking with an employer
_____ By talking with an employment agency
_____ By talking with a counselor
_____ By talking with a faculty member
_____ Other (specify) _____
14. Have you needed help while attending CCC in finding full-time employment when you leave school or graduate? Yes _____ No _____
If yes, did you get help in college? Yes _____ No _____
Help was received from:
_____ a counselor
_____ a faculty member
_____ a student
15. Have you needed help while attending CCC in obtaining information about scholarships or loans? Yes _____ No _____
If yes, did you get help in college? Yes _____ No _____
Help was received from:
_____ a counselor
_____ a faculty member
_____ a student

DIRECTIONS: Below are several items concerning attributes of counselors. Each item contains several alternatives. Circle the alternative which comes closest to describing your feeling. If you have not had any recent contacts with a college counselor, select that item which best describes the most recent contacts you've had with a counselor. Circle only one response for each item.

16. The understanding that the counselor has of the social and economic forces prevalent in our society today is:
 - A. very limited and inaccurate.
 - B. vague and somewhat unrealistic.
 - C. usually adequate and realistic.
 - D. very extensive and realistic.
17. How do you feel about the counselor's ability to understand students who differ from themselves in background, race, religion, social, or economic status?
 - A. He has an excellent understanding of background differences.
 - B. He has some understanding of students different from himself.
 - C. He has little or no understanding of background differences.
18. How much interest did the counselor show in his job of counseling with you?
 - A. He definitely lacks interest.
 - B. He did not show any interest.
 - C. He seemed to be interested.
 - D. He had a great deal of interest.
19. The counselor is:
 - A. lacking in emotional adjustment.
 - B. like most people in his emotional adjustment.
 - C. very stable and well-adjusted emotionally.
20. In trying to see the student's point of view, the counselor:
 - A. is very tolerant.
 - B. tried to be fair-minded.
 - C. is sometimes overbearing and talked down to the students.
 - D. usually forces his pet ideas on students.
21. The training and experience of the counselor enables him to handle:
 - A. all kinds of student problems.
 - B. only certain kinds of student problems.
 - C. no student problems.
22. How well did the counselor help you achieve a clear-cut and realistic understanding of yourself and your problems?
 - A. very well.
 - B. fairly well.
 - C. not very well.
 - D. not well at all.
23. How do counselors deal with the student's problems?
 - A. they usually dictate the solutions.
 - B. they are likely to give solutions to problems.
 - C. more often than not they present students with alternatives.
 - D. they always offer alternatives from which the student may choose.

24. In helping students with their personal and emotional problems, the counselor is:
A. of great help.
B. of some help.
C. practically of no help.
D. likely to do more harm than good.
25. The understanding that the counselor has of classroom conditions, problems, and student-teacher relationship is:
A. clear and realistic.
B. adequate.
C. lacking and confused.
26. The information possessed by counselor concerning requirements of the various departments of CCC is:
A. very limited and inaccurate.
B. somewhat limited and varying in accuracy.
C. usually comprehensive and quite accurate.
D. always comprehensive and accurate.
27. How do you feel about the amount of time given for interviews by the counselor?
A. interview is quick, impersonal, and rushed.
B. interview feels somewhat hurried.
C. interview time is reasonable.
D. length of interview is set by the student.
28. When advising students in course selection, the counselor:
A. disregards student wishes.
B. tried to dissuade students from their choices.
C. sometimes allows students to make their own choices.
D. provides needed information so that students can make good choices in line with goals and objectives.
29. Did you feel that the counselor accepted you?
A. not at all.
B. a little.
C. a great deal.
D. totally.
30. Do you think the counselor is capable of understanding those students who differ from him in background, race, religion, social or economic status?
A. not at all.
B. a little.
C. a great deal.
D. totally.
31. In the space below, feel free to make any comments on the way you feel about the counselors and the counseling program or anything about this questionnaire.

(Continue on back of page if necessary)

APPENDIX D
COUNSELING RESEARCH PROJECT
1968 - 69

TABULATION OF FIRST SEMESTER QUESTIONNAIRES

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
Number of questionnaires sent		50		50	
Number of questionnaires returned		33	66%	43	86%
Participants:	Male	23	69%	23	54%
	Female	10	31%	20	46%
Age:	17			1	2%
	18	2	6%	2	5%
	19	17	53%	24	56%
	20	10	31%	10	23%
	21	1	3%	2	5%
	22	1	3%		
	23	1	3%	1	2%
	24			2	5%
	26			1	2%
	27	1	3%		
	Married				
	Single	33	100%	42	98%
	Other			1	2%
Credit Hours:	27	1	3%	1	2%
	28	1	3%	4	9%
	29	5	16%	3	7%
	30 - 34	15	44%	23	54%
	35 - 39	9	27%	10	23%
	40 - 44	1	3%	2	5%
	Unidentifiable	1	3%		
	Transfer	19	58%	26	60%
	Terminal	1	3%	3	7%
	Uncertain	13	39%	11	26%

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
Major:	Art			1	2%
	Biology	1	3%	2	5%
	Business	14	44%	19	44%
	Data Proc.			4	9%
	Education	5	15%	2	5%
	Engin. Tech.	1	3%		
	English	3	9%		
	History			1	2%
	Language			1	2%
	Lib. Arts			2	5%
	Med. Tech.	1	3%		
	Music	1	3%		
	Poli. Sci.	2	6%		
	Pre-Law			1	2%
	Pre-Med.			1	2%
	Psychology	1	3%	2	5%
	Sociology			3	7%
	Speech	1	3%		
	Uncertain	3	9%	4	9%
1. Do you know where the counseling offices for your college are located?					
	Yes	31	94%	42	98%
	No	1	3%		
	Uncertain	1	3%	1	2%
2. Have you needed help while in college in getting along better in your school work?					
	Yes	10	31%	19	44%
	No	23	69%	21	49%
	Unanswered			3	7%
3. About how many times have you gone to a counselor for help of any kind during this past school year?					
	None	6	18%	17	40%
	Once or Twice	19	57%	21	49%
	Three to Five Times	6	18%	3	7%
	Five or More Times	2	6%	2	5%

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
4. Have you experienced difficulty in seeing a counselor?					
Yes		4	12%	1	2%
No		26	78%	38	88%
Sometimes		2	6%	2	5%
Does Not Apply		1	3%		
Unanswered				2	5%
5. Have you needed help while in college in changing your educational program or major?					
Yes		14	42%	16	37%
No		19	58%	27	63%
Did you get the help?					
Yes		12	30%	13	31%
No		3	20%	3	19%
Help was received from:					
A Counselor		9	75%	4	31%
A Faculty Member		7	63%	10	77%
A Student				2	15%
6. Have you needed help while in college with personal problems?					
Yes		10	30%	8	19%
No		23	70%	34	79%
Unanswered				1	2%
If yes, did you get help in college?					
Yes		9	90%	4	50%
No		1	10%	5	63%
Help was received from:					
A Counselor		2	22%	2	50%
A Faculty Member		7	77%	1	25%
A Student		1	11%	1	25%
Other (Co-op Coordinator)				1	25%
7. Have you needed help while in college in choosing your subjects?					
Yes		25	76%	35	82%
No		8	24%	8	18%

	CONTROL GROUP		EXPERIMENTAL GROUP	
	No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
7. (Continued)				
If yes, did you get help at college?				
Yes	25	100%	29	83%
No			4	11%
Help was received from:				
A Counselor	12	48%	18	62%
A Faculty Member	14	56%	14	48%
A Student	2	8%	5	17%
Other	1	4%	1	3%
(Co-op Coordinator)				
8. Has there ever been any conflict in your mind between whether you should get more education after finishing junior college or go to work?				
Yes	9	27%	19	44%
No	24	73%	24	56%
9. Have you become aware of a better understanding while in college of your interests and abilities?				
Yes	29	88%	37	86%
No	4	12%	5	12%
Unanswered			1	2%
From Tests	10	34%	17	48%
From a Counselor	6	21%	6	16%
From a Faculty Member	16	55%	15	41%
Other	11	38%	18	49%
(Students, subject enjoyed, experiences, college atmosphere, educational purpose, Co-op instructor)				
Unanswered			1	3%
10. Have you found a better understanding while in college of the occupations you might choose?				
Yes	28	85%	36	84%
No	5	15%	6	14%
Unanswered			1	2%

	CONTROL GROUP		EXPERIMENTAL GROUP	
	No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
10. (Continued)				
By studying an occupation in a class	15	54%	16	44%
By reading material in library or OSP	3	11%	4	11%
By talking with a counselor	4	14%	7	19%
By talking with a faculty mem- ber	10	36%	13	36%
Other	5	18%	11	31%
(Students, courses, Co-op, work-experience, general awakening, professional people, realizing poten- tial, aware of self, obser- vation, experimenting in fields)				
11. Have you needed help while in college in finding part-time employment?				
Yes	20	61%	19	44%
No	12	36%	23	54%
Unanswered	1	3%	1	2%
Help was received from:				
A Counselor	10	50%	7	37%
A Faculty Member	9	45%	9	47%
A Student				
Other	1	5%		
(Outside agency)				
12. Have you received a better understanding while in CCC of the school or college you want to attend after leaving junior college?				
Yes	23	69%	25	58%
No	8	24%	13	30%
Unanswered	2	6%	5	12%
If yes, check one or more:				
By reading a school or college catalog	16	69%	14	56%
By talking with a counselor	7	30%	9	36%
By talking with a faculty mem- ber	7	30%	7	32%

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
12. (Continued)					
Other		3	14%	5	20%
(Former student, self, growing special interest, own thinking, visiting college, Co-op coordinator)					
13. Have you obtained a better understanding while in junior college of the jobs available in your community?					
Yes		16	48%	11	26%
No		17	52%	29	67%
Unanswered				3	7%
If yes, check one or more:					
By talking with an employer		3	19%	3	27%
By talking with an employment agency				1	9%
By talking with a counselor		6	37%	2	18%
By talking with a faculty member		10	63%	4	36%
Other		4	25%	2	18%
(Thought, reading paper, looking, working, interests, other students)					
14. Have you needed help while attending CCC in finding full-time employment when you leave school or graduate?					
Yes				5	12%
No		33	100%	37	86%
Unanswered				1	2%
If yes, did you get help in college?					
Yes				2	40%
No				3	60%
Help was received from:					
A Counselor				1	50%
A Faculty Member				1	50%
A Student					

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
15. Have you needed help while attending CCC in obtaining information about scholarships or loans?					
Yes		17	52%	21	49%
No		16	48%	22	51%
If yes, did you get help in college?					
Yes		14	82%	15	71%
No		3	18%	6	29%
Help was received from:					
A Counselor		11	78%	13	83%
A Faculty Member		3	18%	3	20%
A Student		1	6%		
16. The understanding that the counselor has of the social and economic forces prevalent in our society today is:					
A. Very limited and inaccurate				1	2%
B. Vague and somewhat unrealistic		4	12%	2	5%
C. Usually adequate and realistic		22	67%	28	65%
D. Very extensive and realistic		4	12%	10	23%
Unanswered		3	9%	2	5%
17. How do you feel about the counselors' ability to understand students who differ from themselves in background, race, social or economic status?					
A. He has an excellent understanding of background differences		10	30%	16	37%
B. He has some understanding of students different from himself		19	57%	25	58%
C. He has little or no understanding of background differences		1	3%	1	2%
Unanswered		3	9%	1	2%

	CONTROL GROUP		EXPERIMENTAL GROUP	
	No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
18. How much interest did the counselor show in his job of counseling with you?				
A. He definitely lacks interest	1	3%	1	2%
B. He did not show any interest	1	3%	3	7%
C. He seemed to be interested	15	45%	14	33%
D. He had a great deal of interest	14	42%	25	58%
Unanswered	2	6%		
19. The counselor is:				
A. Lacking in emotional adjustment				
B. Like most people in his emotional adjustment	14	42%	21	49%
C. Very stable and well-adjusted emotionally	17	51%	22	51%
Unanswered	2	6%		
20. In trying to see the student's point of view, the counselor:				
A. Is very tolerant	10	30%	17	40%
B. Tried to be fair-minded	17	52%	23	54%
C. Is sometimes overbearing and talked down to the student	2	6%	1	2%
D. Usually forces his pet ideas on students	2	6%	1	2%
Unanswered	2	6%		
Both A & B answered			1	2%
21. The training and experience of the counselor enables him to handle:				
A. All kinds of student problems	14	42%	24	56%
B. Only certain kinds of student problems	14	42%	19	44%
C. No student problems				
Unanswered	5	16%		

	CONTROL GROUP		EXPERIMENTAL GROUP	
	No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
22. How well did your counselor help you achieve a clear-cut and realistic understanding of yourself and your problems?				
A. Very well	8	24%	9	21%
B. Fairly well	18	54%	21	49%
C. Not very well	4	12%	11	26%
D. Not well at all	1	3%		
Unanswered	2	6%	2	5%
23. How do counselors deal with the student's problems?				
A. They usually dictate the solutions			1	2%
B. They are likely to give solutions to problems	5	15%	7	16%
C. More often than not they present students with alternatives	20	61%	25	58%
D. They always offer alternatives from which the student may choose	5	15%	10	23%
Unanswered	4	12%		
24. In helping students with their personal and emotional problems, the counselor is:				
A. Of great help	8	24%	10	23%
B. Of some help	17	51%	23	54%
C. Practically of no help	3	9%	6	14%
D. Likely to do more harm than good	1	3%		
Unanswered	4	12%	4	9%
25. The understanding that the counselor has of classroom conditions, problems, and student-teacher relationship is:				
A. Clear and realistic	10	30%	13	30%
B. Adequate	15	45%	24	56%
C. Lacking and confused	5	15%	5	12%
Unanswered	3	9%	1	2%

	CONTROL GROUP		EXPERIMENTAL GROUP	
	No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
26. The information possessed by the counselor concerning requirements of the various departments of CCC is:				
A. Very limited and inaccurate	1	3%	2	5%
B. Somewhat limited and varying in accuracy	9	28%	6	14%
C. Usually comprehensive and quite accurate	17	51%	15	35%
D. Always comprehensive and accurate	3	9%	8	19%
Unanswered	3	9%	1	2%
27. How do you feel about the amount of time given for interviews by the counselors?				
A. Interview is quick, impersonal, and rushed	2	6%	2	5%
B. Interview feels somewhat hurried	6	18%	9	21%
C. Interview time is reasonable	9	28%	15	35%
D. Length of interview is set by the student	13	39%	16	37%
Both C & D Answered			1	2%
Unanswered	3	9%		
28. When advising students in course selection, the counselor:				
A. Disregards student wishes			1	2%
B. Tried to dissuade students from their choices	1	3%	2	5%
C. Sometimes allows students to make their own choices	7	21%	10	26%
D. Provides needed information so that students can make good choices in line with goals and objectives	19	56%	30	70%
Unanswered	5	15%		

	CONTROL GROUP		EXPERIMENTAL GROUP	
	No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
29. Did you feel that the counselor accepted you?				
A. Not at all				
B. A little	9	28%	8	19%
C. A great deal	15	45%	20	46%
D. Totally	6	18%	12	28%
Unanswered	3	9%	3	7%
30. Do you think the counselor is capable of understanding those students who differ from him in background, race, religion, social or economic status?				
A. Not at all				
B. A little	10	30%	12	28%
C. A great deal	19	56%	25	58%
D. Totally			6	14%
Unanswered	4	12%		

31. In the space below, feel free to make any comments on the way you feel about the counselors and the counseling program or anything about this questionnaire.

CONTROL GROUP

"The program is all right, but it can stand some improvements. Particularly in those areas such as business coop, the student receives most of his counseling from a faculty member and hardly uses any other counseling facility."

"I have registered already for the Spring semester and the counselor who advised me impressed me strongly. He was very kind, and suggested a class time that was more suited to my schedule for one of the subjects I chose. He was interested in knowing to what school I was transferring and what my major was. He also made a comment on my grades thus far. He was very cordial and very pleasant. In all my past contacts with counselors in registration, I have found them always helpful."

"Usually near time of registration is hard to get counselor for purposes other than registration. For most part have had good experience with counseling department. Try to get up-date catalogs (college). Asked for NIU catalog, still got 1967-68 catalog. Thank you for opportunity to have say in evaluation your department."

31. (Continued)

"The counselors are basically helpful, knowledgeable people who try to help the students in formulating a good program of studies but some counselors are exceptions. Some of them try to get you to take courses which they want you to take and are very strongly against the classes you choose to take which they don't want you to take. Some counselors seem to be in a big rush to get you through instead of attentively listening to you and helping you reach a satisfactory solution on your program. These counselors are in the distinct minority, but they do exist, and they are really no help to the students coming to them for their advice but tend to discourage students from wanting to see counselors when they feel it necessary."

"I don't think I have ever talked to a counselor at Loop. All my counseling has been done by a few faculty members."

"I think professional counselors rather than faculty members should do all the counseling for registration. Registration is very hurried as it is now, and no personal interest is taken in the student unless he happens to know the faculty member who is "counseling" him. Last semester I went to De Paul University for counseling before I registered so that I'd know what courses I needed and what courses would be transferred."

Many questions on this questionnaire I'm not qualified to answer because I have never gone to a counselor with a problem only for a part-time job and information about financial assistance after I leave Loop. In these two areas I was very satisfied with the help I received."

"I feel that the educational, vocational, and even personal problems that students face (indecision, underachievement, etc.) are results of personality problems, mostly characteristic of adolescence, many a personal thing of the individual. Counseling, as it is usually done, involves a sort of aptitude testing and placing of students, which is supposed to find a "proper" place in society that the student will be happy in. This is of no real help; it doesn't allow the student to really get in touch with himself and figure out and feel what his psychic bag is."

Students need a therapeutic situation where they can accomplish this soul searching. Young folks are rather sensitive; a traditional antiseptic situation is no help. I've often wanted to find a situation to aid me in clearing up the confusion in my mind, but when I think of personnel department handing me pat answers, I'd rather be with myself and uncomfortably alone."

31. (Continued)

"I think Loop College has a dependent and very adequate counseling program to meet the students' needs. I, myself have had a tremendous amount of help and understanding in choosing and finding a part-time job from those services of Miss Bishop and Mr. Ness. Two excellent counselors."

"I feel that counselors should know more about requirements and admission for other schools. The counseling department could hire students to guide other students as far as counseling for Loop freshman is concerned."

"I believe the registration program here is too complicated and involved. I believe it could be simplified, like registration at Bogan College where a friend of mine transferred and said, "Registration was a breeze, everything was in a packet; they handed it to you, you spoke to a counselor, received your schedule and that was it, 3 steps only."

1. See a counselor who gave you your program
2. Receive packet with IBM cards of classes
3. Pay registration"

I believe we need help in organizing registration because sometimes you wait hours, like in my first semester here before I had early registration.

But early registration for students already attending Loop is helpful, but when you ask someone in the Registrar's Office when is it, they respond "Keep looking on the bulletin boards; it's coming soon." Well I looked and looked but didn't see anything, a friend told me about it later so I registered."

"Your questionnaire is a heroic effort at being specific but as such it is aimed, I think, at individuals with the combined imagination and limited intellectual capacities of six-year olds. Better you should have asked than offered multiple-choice quizzes. Your counseling program is probably adequate and if you really wish to improve you will probably have to turn much of the planning and possibly running of it over to the students themselves directly."

The differences between you and the students are just too great to be overcome by intellectualizing, sincerely or otherwise (and probably your efforts to "out think" the problems only antagonize a growing gap).

So either feel complacently satisfied or give up the reins. Thanks."

"Mrs. Wilkins takes a personal interest in each student. Mr. Schultz was helpful in suggesting faculty members to see regarding more specific information."

31. (Continued)

"It seems that there are two counselors (types) which this questionnaire deals with. The kind you seek in time of need, and the kind that program you for courses. The questionnaire mentioned "counselor," but in most cases did not distinguish from program counselors, or student-aid counselors. The last program counselor I had, seemed very discouraging. However, when I needed personal help, and made an appointment with a counselor, this counselor made me feel very capable. He was interested, helpful, and very understanding.

I hope this questionnaire aids in helping the counselors and the students."

"These are all general answers, because I have been counseled by some persons that are not capable of weighing facts without biases."

"Not enough counselors to work with more than a small minority. Unfortunately, everybody needs a little guidance. Just not enough people to help."

"My co-op coordinator who is a faculty member is always around when any of us needed him. So we never really need the school counselor."

"Very helpful."

"In #11--I didn't need help in finding employment, but when I was thinking of getting a job, I went to the counselor because I knew they were available and it was handier. They were well prepared and eager to help. Although I haven't used the counseling often, I'm glad to know they're there. They show interest in the student."

"Can't trust anybody."

31. In the space below, feel free to make any comments on the way you feel about the counselors and the counseling program or anything about this questionnaire.

EXPERIMENTAL GROUP

"My first experiences with counselors at this college were very unsatisfactory. To be truthful it is hard to make a judgment because I am not sure these were real counselors. But, the last counselor I spoke with was very understanding."

"Although I have not utilized all opportunities open to me to consult a counselor, I do believe that the times that I did were helpful. I have always found the counselors patient, and very willing to help."

31. (Continued)

"As I have been to the counseling department only once and that was to secure this questionnaire, most of the questions did not affect. To evaluate the counselor in many of the questions, I had to use my high school counselor as a guide so I did not find the questionnaire effective in its attempts to evaluate CCC counselors."

"When I registered upon first entering junior college directly from high school, I didn't understand fully what courses would be accepted by most four-year institutes and those that would not. Such as courses with or without labs. This was not explained to me by a counselor at the time. I'd like to suggest that a program of pre-college indoctrination be given to first semester students who may be told some of these problems, mainly because they don't know enough about college to ask pertinent questions."

"This questionnaire was very difficult to answer fairly, for I have never made an appointment with a counselor except to register for the next semester's classes. I have registered 4 times at Loop. The first two times I had terrible counselors. They told me I had to take this and this and this, and then I was finished. As an after effect, both of them made gross errors on my program, and I had to go through much trouble to straighten out conflicting classes. My next counselor was simply for summer school registration, and that took about 2 minutes. The only good counselor I had was for fall registration. I explained my previous problems and he understood and showed interest."

I assume the reason for this is that during registration, teachers double as counselors to speed up the process, and they usually know less about the courses and requirements than I do. They have little or no knowledge about any departments other than their own. From talking with other students, I find this is a popular complaint."

"My experiences with counselors demonstrated to me their professional abilities, however, they did not help me in regard to understanding my position as a transfer student who wishes to transfer to a 4-year college. I was forced to take ridiculous courses that the 4-year college would not accept. The counselor's reply, "It's a Loop College rule."

"I think some students should be required to report to a counselor in order to motivate them into doing better in school because some seem to be unable to accept the responsibility of studying."

"I think that this program is really a good idea. The student who is getting ready to graduate in June can get "ahead of the crowd" and choose the course he needs for his graduation."

31. (Continued)

"Certain of the questions seem geared to the Negro student and How accurately the counselor is sizing up his situation. In Helping the students at Loop all of the counselors should be understanding and aware of the fact that a good many of the students there at Loop most probably in talking with a counselor perhaps don't really want "A D V I C E" per se but maybe only to be listened to and have someone sympathize with the changes they appear to be going through. I found some of the questions asked to be hardly relevant to the problems Loop students face. I simply did not know how to answer a good many of the questions because I do not have that much knowledge of the Student Personnel Office. I offer my suggestions because I have been asked to do so."

"I think each student would benefit more from the counseling program if he were assigned a special certain counselor to help with any advice he might need. Then each counselor would have a certain number of regular students he would take care of. This way a student would know his own counselor and appointments might be easier to get."

"I do not feel I'm fair to judge the counseling program at Loop because I attended only one interview and I knew what I wanted when I came and stubborn as I am I paid little attention to what was said."

"Wherein the counselors attempt to treat the student with a personal interest, in a large school such as Loop City College it is understandably difficult for a counselor to donate any really substantial amount of time and counseling to any one student."

"I don't think that I have had enough experience to answer the questions. The only time I have come in contact with the counselors is when I make out the class schedule."

"Question 30 and 17 seem to be repetitive."

"This questionnaire can't give an accurate picture if someone has very little or no dealings with counselors. It is aimed at persons who deal with them quite frequently."

"Answers deal mostly with experience with one counselor. I feel Loop needs more counselors!! Definitely, an introduction to the counselors, such as a letter or an orientation when first starting college would make more students bring problems to the counselors."

"Mr. Hansen was great help with information of financial aid."

"Mr. Golden, Business Management Coordinator, has had the largest influence on me in helping me to obtain goals for my future and has made the co-op program very effective."

31. (Continued)

"Thus far in college I have had one encounter with a counselor for an actual meeting and the counselor was of help. However, in previous encounters with past counselors, I received little or no help (this was in high school) and I feel this accounts for the reason I have seen the college counselor on only one occasion. Had I not had the problem which I felt I really needed the help with (student financial aid) I probably would never have gone to the counselor.

I only hope that future college counselors will be as helpful to me as this one was."

"I have found the counselors at Loop excellent. They are always willing to do as much for the student as is possible. As one who talks a great deal to the counselors and faculty here, I would say that their suggestions and their ability to talk with a student on a friendly, uncomplicated level as an adult are their strongest points."

"My experience with counselors has been limited, however, on those occasions in which I did seek advice I left with a favorable impression. The questionnaire on the whole is good, however, there are areas which I don't feel apply specifically to my experience and therefore were difficult or impossible to answer."

"The counselors are good, but not superhuman as might be implied from some of the answers offered. CCC has a good quality of counselors but a very poor quantity of them."

"I think the co-op counselors should know what courses are needed for graduation. Several in my class were given wrong information concerning a specific course. Now they cannot graduate in June as they lack subject credits!"

"From the counselors I know and have talked to, I think they are going a great job."

"I feel that the counseling and the counselors are fairly good. The only time counseling becomes inadequately administered is during registration, but bear in mind that this is the time at which it is most needed."

CHICAGO CITY COLLEGE
THE LOOP COLLEGE
COUNSELING RESEARCH PROJECT
1968 - 69

TABULATION OF SECOND SEMESTER QUESTIONNAIRES

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
Number of questionnaires sent		50		50	
Number of questionnaires returned		33	66%	38	76%
Participants:	Male	26	79%	21	57%
	Female	7	21%	16	43%
Age:	19	13	42%	18	49%
	20	13	42%	13	35%
	21	1	3%	2	5%
	22	1	3%		
	23	1	3%	1	3%
	25	1	3%	2	5%
	26			1	3%
	27	1	3%		
	Married				
	Single	31	100%	37	100%
	Other				
Major:	Art	1	3%	2	5%
	Biology	1	3%	3	8%
	Business	12	39%	19	51%
	Data Proc.			1	3%
	Education	3	10%	1	3%
	Engin. Tech.	1	3%		
	English	3	10%		
	History			1	3%
	Language	2	6%	1	3%
	Liberal Arts			1	3%
	Music	1	3%		
	Poli. Sci.	2	6%		
	Pre. Med.			1	3%
	Psychology	2	6%	2	5%
	Sociology			2	5%
	Speech	1	3%		
	Uncertain	2	6%	1	3%

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
Credit Hours:	40 - 44	1	3%	1	3%
	over 50	31	97%	36	97%
	Transfer	22	71%	29	79%
	Terminal	5	16%	4	10%
	Uncertain	4	13%	3	8%
1. Do you know where the counseling offices for your college are located?					
	Yes	26	84%	37	100%
	No	2	6%		
	Uncertain	3	10%		
2. Have you needed help while in college in getting along better in your school work?					
	Yes	11	35%	16	43%
	No	20	65%	21	57%
3. About how many times have you gone to a counselor for help of any kind during this past school year?					
	None	4	13%	4	11%
	Once or Twice	21	68%	14	38%
	Three to Five Times	4	13%	14	38%
	Five or More Times	2	6%	5	13%
4. Have you experienced difficulty in seeing a counselor?					
	Yes	2	6%	1	3%
	No	27	87%	32	86%
	Sometimes	2	6%	4	11%
5. Have you needed help while in college in changing your educational program or major?					
	Yes	12	39%	9	24%
	No	19	61%	28	76%

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
5. (Continued)					
Did you get the help?					
Yes		12	100%	7	77%
No				2	22%
Help was received from					
A Counselor		6	50%	5	71%
A Faculty Member		4	33%	4	57%
A Student		2	17%	1	14%
6. Have you needed help while in college with personal problems?					
Yes		7	23%	9	24%
No		24	77%	23	76%
If yes, did you get help in college?					
Yes		6	86%	5	55%
No		1	14%	3	33%
Unanswered				1	11%
Help was received from:					
A Counselor		2	25%	4	80%
A Faculty Member		3	50%	1	10%
A Student		1	13%	1	10%
7. Have you needed help while in college in choosing your subjects?					
Yes		24	77%	27	73%
No		7	23%	10	27%
If yes, did you get help at college?					
Yes		21	88%	27	100%
No		3	12%		
Help was received from:					
A Counselor		13	62%	20	74%
A Faculty Member		13	62%	10	37%
A Student		2	9%	1	4%

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
8. Has there ever been any conflict in your mind between whether you should get more education after finishing junior college or go to work?					
Yes		9	29%	15	40%
No		21	68%	22	59%
Unanswered		1	3%		
9. Have you become aware of a better understanding while in college of your interests and abilities?					
Yes		28	90%	37	100%
No		2	6%		
Unanswered		1	3%		
If yes, check one or more:					
From Tests		8	29%	19	51%
From a Counselor		5	18%	13	35%
From a Faculty Member		18	64%	10	27%
Other		8	28%	15	40%
(Different courses, students, awareness of the new, student competition, self-awareness, experiences in school, work experience, clubs)					
10. Have you found a better understanding while in college of the occupations you might choose?					
Yes		24	77%	32	36%
No		6	19%	5	14%
Unanswered		1	3%		
By studying an occupation in a class		10	41%	10	31%
By reading material in library or OSP				7	21%
By talking with a counselor		7	29%	13	40%
By talking with a faculty member		13	54%	11	34%

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
10. (Continued)					
Other		4	17%	7	21%
(Talking with relatives, talking with students, talking with businessmen, specific courses, own study, observation, work experience)					
11. Have you needed help while in college in finding part-time employment?					
Yes	17	55%	16	43%	
No	13	42%	21	57%	
Unanswered	1	3%			
Help was received from:					
A Counselor	8	47%	8	50%	
A Faculty Member	6	35%	6	38%	
A Student	3	18%	1	6%	
Unanswered			1	6%	
12. Have you received a better understanding while in CCC of the school or college you want to attend after leaving junior college?					
Yes	22	71%	29	79%	
No	6	19%	8	21%	
Unanswered	3	10%			
If yes, check one or more:					
By reading a school or col- lege catalog	11	50%	15	51%	
By talking with a counselor	8	36%	18	62%	
By talking with a faculty member	5	23%	7	24%	
Other	7	32%	3	10%	
(Speaking with friends, family discussions, stu- dent opinions, checking with prospective schools, self, counselor from school of transfer)					

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
13. Have you obtained a better understanding while in junior college of the jobs available in your community?					
Yes		9	29%	16	43%
No		21	68%	21	57%
Unanswered		1	3%		
If yes, check one or more:					
By talking with an employer		3	33%	1	6%
By talking with an employment agency				5	31%
By talking with a counselor		5	55%	5	31%
By talking with a faculty member		5	55%	9	56%
Other (Student, reading catalogs)		1	11%	2	12%
14. Have you needed help while attending CCC in finding full-time employment when you leave school or graduate?					
Yes		2	6%	5	14%
No		28	90%	32	86%
Unanswered		1	3%		
If yes, did you get help in college?					
Yes		1	50%	2	40%
No		1	50%	3	60%
Help was received from:					
A Counselor		1	100%	1	50%
A Faculty Member				1	50%
A Student					
15. Have you needed help while attending CCC in obtaining information about scholarships or loans?					
Yes		17	55%	25	68%
No		13	42%	12	32%
Unanswered		1	3%		

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
15. (Continued)					
If yes, did you get help in college?					
Yes	13	76%	23	92%	
No	4	24%	2	8%	
Help was received from:					
A Counselor	11	85%	22	95%	
A Faculty Member	3	23%	3	13%	
A Student					
16. The understanding that the counselor has of the social and economic forces prevalent in our society today is:					
A. Very limited and inaccurate					
B. Vague and somewhat unrealistic	4	13%			
C. Usually adequate and realistic	24	78%	29	79%	
D. Very extensive and realistic	2	6%	7	19%	
Unanswered	1	3%	1	3%	
17. How do you feel about the counselors' ability to understand students who differ from themselves in background, race, social or economic status?					
A. He has an excellent understanding of background differences	9	29%	15	40%	
B. He has some understanding of students different from himself	20	65%	22	59%	
C. He has little or no understanding of background differences					
Unanswered	2	6%			

	CONTROL GROUP		EXPERIMENTAL GROUP	
	No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
18. How much interest did the counselor show in his job of counseling with you?				
A. He definitely lacks interest			1	3%
B. He did not show any interest			2	5%
C. He seemed to be interested	13	42%	11	30%
D. He had a great deal of interest	17	55%	23	60%
Unanswered	1	3%		
19. The counselor is:				
A. Lacking in emotional adjustment	1	3%	1	3%
B. Like most people in his emotional adjustment	14	45%	17	46%
C. Very stable and well-adjusted emotionally	14	45%	13	49%
Unanswered	2	6%	1	3%
20. In trying to see the student's point of view, the counselor:				
A. Is very tolerant	11	36%	19	51%
B. Tried to be fair-minded	18	58%	17	46%
C. Is sometimes overbearing and talked down to the student	1	3%		
D. Usually forces his pet ideas on students				
Unanswered	1	3%	1	3%
21. The training and experience of the counselor enables him to handle:				
A. All kinds of student problems	16	52%	17	46%
B. Only certain kinds of student problems	13	42%	17	46%
C. No student problems				
Unanswered	2	6%	4	10%

	CONTROL GROUP		EXPERIMENTAL GROUP	
	No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
22. How well did your counselor help you achieve a clear-cut and realistic understanding of yourself and your problems?				
A. Very well	7	23%	13	35%
B. Fairly well	20	65%	22	59%
C. Not very well	2	6%		
D. Not well at all	1	3%		
Unanswered	1	3%	2	5%
23. How do counselors deal with the student's problems?				
A. They usually dictate the solutions	1	3%		
B. They are likely to give solutions to problems	7	23%	3	8%
C. More often than not they present students with alternatives	15	48%	19	51%
D. They always offer alternatives from which the student may choose	9	29%	13	35%
Unanswered	1	3%	2	5%
Both B & C Answered	1	3%		
Both C & D Answered	1	3%		
24. In helping students with their personal and emotional problems, the counselor is:				
A. Of great help	6	19%	11	30%
B. Of some help	20	64%	19	51%
C. Practically of no help	3	10%	4	10%
D. Likely to do more harm than good				
Unanswered	2	6%	3	8%
25. The understanding that the counselor has of classroom conditions, problems, and student-teacher relationship is:				
A. Clear and realistic	8	26%	13	35%
B. Adequate	20	64%	22	59%
C. Lacking and confused	1	3%	1	3%
Unanswered	2	6%	1	3%

		CONTROL GROUP		EXPERIMENTAL GROUP	
		No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
26.	The information possessed by the counselor concerning requirements of the various departments of CCC is:				
	A. Very limited and inaccurate	1	3%	1	3%
	B. Somewhat limited and varying in accuracy	4	13%	5	14%
	C. Usually comprehensive and quite accurate	19	61%	22	59%
	D. Always comprehensive and accurate	5	16%	7	21%
	Unanswered	2	6%	2	5%
27.	How do you feel about the amount of time given for interviews by the counselors?				
	A. Interview is quick, impersonal, and rushed				
	B. Interview feels somewhat hurried	2	6%	5	14%
	C. Interview time is reasonable	15	48%	15	40%
	D. Length of interview is set by the student	13	42%	16	43%
	Unanswered	2	6%	1	3%
	Both C & D Answered	1	3%		
28.	When advising students in course selection, the counselor:				
	A. Disregards student wishes				
	B. Tried to dissuade students from their choices	1	3%	2	5%
	C. Sometimes allows students to make their own choices	6	19%	8	21%
	D. Provides needed information so that students can make good choices in line with goals and objectives	21	68%	24	64%
	Unanswered	3	10%	3	8%

18

	CONTROL GROUP		EXPERIMENTAL GROUP	
	No. Resp.	Percent Resp.	No. Resp.	Percent Resp.
29. Did you feel that the counselor accepted you?				
A. Not at all				
B. A little	7	23%	3	8%
C. A great deal	14	45%	19	51%
D. Totally	9	30%	14	37%
Unanswered	1	3%	1	3%
30. Do you think the counselor is capable of understanding those students who differ from him in background, race, religion, social or economic status?				
A. Not at all	1	3%		
B. A little	4	13%	8	21%
C. A great deal	20	64%	25	67%
D. Totally	4	13%	3	8%
Unanswered	2	6%	1	3%

31. In the space below, feel free to make any comments on the way you feel about the counselors and the counseling program or anything about this questionnaire.

CONTROL GROUP

"There should be a full-time psychologist available to students who may wish limited psychiatric help."

"Question 30 is extremely ambiguous. I think it could be either reworded to make its meaning more clear or be eliminated. I also hope you will forgive the delay, I seemed to have foolishly misplaced the first questionnaire and then completely forgot about it."

"Mr. Schultz and Mrs. Wilkins have been extremely helpful to me in counseling. It was through Mrs. Wilkins that I received an ISSC grant."

"In the few meetings I had with the counselors, I found the meetings somewhat hurried. What problems I had were adequately answered and alternatives were offered so that I may decide for myself as to which alternative would be most beneficial to my individual interests."

31. (Continued)

"This questionnaire is very comprehensive and I think that it is a good idea to find out what the students think about the counselors at their school. But, I think this questionnaire is a little too lengthy and some of the questions are not really that relevant to the basic student-counselor relationship.

"I was happy to fill out this form and I hope my comments will be of some use for the betterment of relations in Loop City College."

"Concerning my counseling engagements at Loop, I have always solved my problem economically, socially and mentally through and with the help of a counseling session and exceptional counselor.

Since some of my interviews have been so fabulous I hoped for a longer period of time to just go on talking about all sorts of things because it is such a worthwhile experience. I myself have recommended counseling services at Loop to my friends because "Man, you don't know what your missing!!!"

"I requested to see the counselor. He saw me and told me to wait 5 minutes. Forty minutes later, I left. (He never came back) I had to wait the next day to see him, but I had as long an interview as I wished. However, it would have been more convenient to see him the first day."

"The counseling program is very useful to the student and very helpful."

"I do not want the counseling department to feel slighted because I haven't brought my problems to them. I know of students who think the counselors do a very fine job. As for myself, I have been able to solve my problems with a faculty member who has taken a personal interest in me.

Regarding the questionnaire: The choices in some of the multiple choice questions are not a true representation of some of my feelings. I would suggest that the letter "E" be put in and leave the line blank for the student.

Sorry to have taken so long in answering, but I guess I am a procrastinator at heart.

"I can't answer No. 28 since some counselors do not know specific requirements in certain fields. Some only say what they think is required but are not sure."

"Many students at Loop seem to be in the midst of figuring out themselves, they could use therapy."

31. (Continued)

"Counselors are only human and cannot be knowledgeable in all areas. They try very hard to help the students and seem to be deeply interested in the outcome of their work."

"Good."

"Counseling service is very good, my only criticism is that there is not enough counselors."

"I have summed up my comments in the previous questions. I have always found the counselors willing to help and adequately prepared. They are very friendly and understanding people."

"Mr. Welsch who has been my Co-op Counselor for the past five semesters has always been there when any of his students needed help so I've never used anyone else as a counselor but him. He was more or less like a big brother to talk to."

"Questions are vague and ambivalent. Too general. Most questions asked students are not qualified to give factual answers because of the lack of information or generality of the questions and answers."

"I feel that the counseling program at Loop is very good, although I myself have not used its services often. I also feel that the counseling done by Loop faculty members is another great to students; as it was an aid to me."

"I'm sorry I couldn't answer questions 16-30. I believe you might find this information out by asking your staff."

31. In the space below, feel free to make any comments on the way you feel about the counselors and the counseling program or anything about this questionnaire.

EXPERIMENTAL GROUP

"The counselors whenever I needed them always responded in a good and fair manner."

"I was very happy with the counselors at Loop until I was almost forced to finish this questionnaire. I was under the impression that there are about 9 counselors there, and each one varies in personality and ability. Now the hell am I supposed to answer form questions about 9 people simultaneously, since I have contacted almost all of them. Even if there were only one there aren't enough answers to cover the question."

I did not answer the last several simply because they are not worth answering.

31. (Continued)

If in the future you make up a reasonable questionnaire about the counselors I will be happy to cooperate."

"Since there was no mention of any specific counselor I don't see the point of questionnaire."

"It has been a semester with many social and educational problems for me and I have gone to Miss Underwood quite frequently to get advice and encouragement. In view of the fact that neither of my parents are here in the U.S. I have personal adjustments to make by myself and have needed encouragement and fortunately enough I have been subsequently blessed with a thoughtful counselor as Miss Underwood. I cannot adequately express my appreciation and thanks for these services, but with mere simplicity I'll say to all you beautiful and talented counselors and especially to Miss Underwood who has been so thoughtful, Thanks very much and keep up the good work of sending out workmen with a replenished supply of tools like me."

"I believe the counseling I received was very helpful in solving both present and anticipated difficulties."

"More counselors are needed to handle volume of students adequately."

Constantly make known the fact that counselors are there for student benefits and they are always available."

"My experiences with the counseling services at Loop have been very pleasant and very worthwhile. I appreciate very much the time that has been devoted to my particular needs during my enrollment at Loop."

The counselors have all been helpful and genuinely interested in the problems and progress of the students with whom they deal."

"Please accept my apologies for not returning this letter at a sooner date."

"As the Loop campus is large and somewhat understaffed in this department, it is understandable that a counselor can devote only so much time and effort to individuals; however, I found the counseling services most informative and beneficial."

"All I have to say is just that I think that when I went to my counselor she was the best. I would also believe then that the rest of the counselors are just like her. They give 200% to the students."

31 (Continued)

"I don't think that I have had enough experience to answer the questions. The only time I have come in contact with the counselors is when I make out the class schedule."

"Most counselors are interested in helping the student. This is true, however, only of those who are professional counselors and not teachers who double as counselors during the rush registration period. These 'part time' counselors know little of the requirements of 4-year institutions or departments in CCC other than their own.

I have had very little occasion to speak with a counselor in my two years at Loop, and I find the last two pages of this questionnaire very difficult to answer. I feel it is very unfair to judge the emotional stability (among other things) of a person simply by talking with him for ten minutes."

"I have just completed the two years at Loop, and I am keeping a very good memory of this school. I have had some very good instructors and I really was helped every time I really sought for help. For example, my biology teacher had a session at her house before every unit test. I found this very helpful, because you can be there with a group of students, exchange questions, opinions.

I also enjoyed very much my time in the English Department, as well as all the different activities they have for foreign students."

"Counselors have helped me greatly, with sincere effort on their part. They were available to me when I needed them. I only regret I didn't take advantage of their counseling more often."

"Some of the questions asked would depend on the individual counselor."

"Two of the counselors I met had a bit too much of a mother-type attitude and tended to be sympathetic and yielding rather than giving stern, clear-cut advice. I disliked being treated as a child. Speak to me as a man, though I am not one yet."

"I am completing my second year at Loop. Since first coming here, the counseling service has had a complete turnover, in my estimation. From what I considered a very cheap and shoddy counseling set-up, the Loop College counseling service seems to have undergone a vast improvement. I just hope that the general treatment of incoming freshman has improved. I can still remember quite vividly how insecure and uncomfortable I felt at the hands of the impersonal and incapable people who ran the registration at that time.

Questions 19 and 21 seem to be rather vague."

31. (Continued)

"The counselor was very helpful and I think the whole department encourages the student body to use its services. If students don't benefit from the services of the counseling department, it is because of the students own lack of interest."

"Besides yourself (Miss Underwood), Dr. Altschuler, and Mr. Lottich are the only two counselors that actually care to really find out about the student and find out what he or she wants. I suggest that the school get in full-time social workers to do the job adequately."

"I have not circled an answer for #24 because I have never encountered this situation. This question can be answered, I feel, only by a student who has needed this type of help and then the student will only receive the kind of help he allows the counselor to give."

"I am now a student at Chicago State College, South. I have never talked to a counselor while I was at CCC; however, entering CSC was the first time I have talked to a counselor since I was in high school. My discourse with him was just pertaining to school."

"I think because of the difficulty sometimes experienced when trying to see a counselor, many students will not get the help they could have if they discussed academic questions with a counselor."

"I don't understand the purpose of this questionnaire."

STATED REASONS FOR NOT APPLYING FOR A.A.

EXPERIMENTAL GROUP

Student Number	Reasons
1	Would not enroll in Physical Science -- not needed at school he wishes to attend.
6	Would not enroll in Physical Science -- not needed at 4-year school.
8	Would not enroll in Biology -- has had Physical Science -- needs one science for 4-year school.
15	Would not enroll in Physical Science 112 -- 4-year school required one year of science.
31	Failed Fall semester course in Science -- withdrew.
32	Needed second course in Physical Science -- full year not required at school.
35	Needed Social Science 102 and withdrew from Humanities 202 during Fall semester -- plans marriage and does not feel she needs A.A.
38	Had planned on A.A. -- withdrew from Biology 111 and D.P. during Fall semester which reduced necessary hours.
43	Did not accept invitations to come in -- 2 letters and 3 phone calls.
46	Needed full-time work because of family difficulty, thus withdrew from school.
52	Did not want Physical Science.
64	Dropped one course in Spring -- will complete all required courses by June, but needs elective hours.
68	Co-op Student -- lacks courses in Secretarial curriculum -- plans on completing requirements in Fall 1969.
72	Did not want to enroll in Biology -- insisted upon delaying it until he transfers.
74	Will need Physical Science 102 -- did not want to enroll in it during Spring -- will complete A.A. requirements in summer school.

Student
Number

Reasons

- | | |
|----|--|
| 75 | Will need 4 semester hours of elective and did not want to enroll for full load because of work -- will complete in summer school. |
| 77 | Will complete all requirements but wants to take more work during summer and school to which she is transferring will not accept credits after the awarding of an A.A. degree. |
| 80 | Will complete all requirements but decided after registering to withdraw from one elective course -- thus he will need 3 semester hours. |
| 81 | Withdrew from school during Fall semester because she wanted to work full time. |
| 82 | Failed 2 courses during Fall semester -- pulled down GPA -- could not carry full load during Spring. |
| 89 | Will qualify -- did not apply. |
| 94 | Withdrew from school during Fall semester. |
| 95 | Needed Social Science and did not wish to enroll in it. |

Appendix

Notes on Methods x Levels Analysis of Variance

The methods x levels analysis of variance is essentially application of the analysis of variance technique to groups which have been matched on the basis of initial test scores. These scores may be intelligence test scores, an initial achievement or pretest score, or some composite of both, for example, predictions of final achievement scores based on a multiple regression equation involving the initial tests as the predictor variables. It will usually suffice, however, to match, in terms of the one initial test which has the higher correlation with the final measures of achievement. In these notes the method is illustrated by application to data relevant to the experimental and control groups in this research. The initial measure was the pre-GPA while the final measure was the post-GPA. While the method is illustrated for two groups, it can easily be extended to more than two groups by using additional columns in the computing table.

We will assume that the initial and final scores have been entered on 3 x 5 cards one for each student and that there are two sets of cards: one for the experimental students and one for the control students. The steps are listed below.

1. Tally the frequency distribution of initial scores of the smaller group, preferably in not more than ten intervals. Locate cases from the other group seeking to obtain the same frequency of initial scores in each class interval. Do this as randomly as possible from the cards of the other group. Occasionally cases will need to be rejected in a particular class interval of the smaller group. Ideally, one should have such a large supply of possible cases that the two distributions of initial scores have the same proportions, or percents, of cases in each interval as the total distribution of the supply, or better, the population to which one wishes to generalize. In the present study the distribution of initial scores approximates that of the entire population of the experimental and control groups.
2. Adjacent to the final score on each card enter the square of the final score. This is most easily done from a table of squares.

3. Sort cards by class intervals of initial scores keeping compared groups separate and check to insure that there is the same number of cards in corresponding intervals. (The frequencies need not be equal in the intervals on the same level so long as proportionality is maintained. Each interval of one group may, for example, have a third more cases than the other group so long as this is true of all the intervals for that group.)
4. Enter in each cell of the main part of the computing table the following data relevant to the cases of the given group in the given class interval or level:
 - a. The number of cases, n_{ij}
 - b. The sum of the final scores, ΣY_{ij}
 - c. The sum of the squares of the final scores, ΣY_{ij}^2
 - d. The square of the sum of final scores, $(\Sigma Y_{ij})^2$
 - e. The cell mean, M_{ij} which equals $\Sigma Y_{ij} \div n_{ij}$
 - f. The square of the sum of final scores divided by n_{ij} $(\Sigma Y_{ij})^2 \div n_{ij}$

Check each entry in each of the 20 (or more) such cells. The symbols i and j refer to rows and columns respectively.

5. In the cells of the column headed "Both (or all) groups" enter the following data computed from data given in cells on same level.
 - g. The total number of cases on that level. For the first row

$$n_{11} + n_{12} = 7 + 7 = 14$$
 - h. The sum of the final scores on that level

$$\Sigma Y_{11} + \Sigma Y_{12} = 22.43 + 24.36 = 46.79$$
 - i. The square of the sum of final scores on that level

$$(\Sigma Y_{i.})^2 = (\Sigma Y_{1.})^2 = 46.79^2 = 2189.3041$$
 - j. $(\Sigma Y_{i.})^2 \div n_{i.}$ or $2189.3041 \div 14 = 156.3788$

6. In the cells at the bottom of the first two, or group, columns perform the same operations summing vertically as indicated. For the cell at the bottom of the first column:

$$k. n_{.j} = n_{.1} = n_{11} + n_{21} + n_{31} \dots + n_{101} =$$

$$7 + 6 + 12 \dots + 7 = 84$$

$$l. \Sigma Y_{.j} = \Sigma Y_{.1} = \Sigma Y_{11} + \Sigma Y_{21} + \dots + \Sigma Y_{101} =$$

$$22.43 + 18.66 + \dots + 13.52 = 214.06$$

$$m. (\Sigma Y_{.j})^2 = (\Sigma Y_{.1})^2 = 214.06^2 = 45821.6836$$

$$n. (\Sigma Y_{.j})^2 \div n_{.j} \text{ or } 45821.6836 \div 84 = 545.4962$$

7. In the cell at the bottom of the column headed "Both (or all) groups" perform essentially the same procedure.

o. Sum the $n_{i.}$ in this column to obtain N the total number of cases, sum the $n_{.j}$ in this row as a check. Here N is equal to 168.

p. Sum the $\Sigma Y_{i.}$ of the column and as a check the $\Sigma Y_{.j}$ to obtain the sum of all the final scores $\Sigma \Sigma Y$, here, 424.08.

q. Square this sum to obtain $(\Sigma \Sigma Y)^2$, here, 179,843.8464.

r. Divide this square by N, $179,843.8464 \div 168 =$
1070.4990.

8. The completion of the methods x levels analysis of variance is shown on the page which follows the table.

COMPUTING TABLE
Methods by Levels Analysis of Variance Calculations

GPA Level	Control		Experimental		Both	
3.25- 4.00	7 22.43 72.2987	503.1049 3.2043 71.8721	7 24.36 85.6408	593.4096 3.4800 84.7728	14 46.79	2189.3041 156.3788
3.00- 3.24	6 18.66 58.3518	348.1956 3.1100 58.0326	6 18.31 55.9707	335.2561 3.0516 55.8760	12 36.97	1366.7809 113.8984
2.75- 2.99	12 35.82 107.2352	1283.0724 2.985 106.9227	12 33.61 96.3941	1129.6321 2.8008 94.1360	24 69.43	4820.5249 200.8552
2.50- 2.74	19 49.12 129.0874	2412.7744 2.5852 126.9881	19 48.26 123.5814	2329.0276 2.5400 122.5804	38 97.38	9482.8644 249.5490
2.25- 2.49	16 35.98 83.7073	1294.5604 2.248 80.9100	16 35.08 78.7576	1230.6064 2.1925 76.9129	32 71.06	5049.5236 157.7976
2.00- 2.24	17 38.53 88.2633	1484.5609 2.2664 87.3271	17 37.95 85.7631	1440.2025 2.2323 84.7177	34 76.48	5849.1904 172.0350
0.00- 1.99	7 13.52 27.0382	182.7904 1.931 26.1129	7 12.45 23.1491	155.0025 1.778 22.1432	14 25.97	674.4409 48.1743
Totals	84 214.06	45821.6836 545.4962	84 210.02	44108.4004 525.1000	168 424.08	179843.8464 1070.4990

Computations of (a) - (e)

$$a = 1070.4990$$

$$b = 1115.2387$$

$$c = 1099.3045$$

$$d = 1098.6883$$

$$e = 1070.5962$$

$$SS_T = b - a = 44.7397$$

$$SS_L = d - a = 28.1893$$

$$SS_M = c - a = .0972$$

$$SS_{cells} = c - a = 28.8055$$

$$SS_{ML} = SS_{cells} - SS_M - SS_L = .5190$$

$$SS_W = SS_T - SS_{cells} = 15.9342$$

Methods by Levels Analysis of Variance

	<u>Sums of Squares</u>	<u>Degrees of Freedom</u>	<u>Variance</u>
Methods	.0972	1 (M - 1)	.0972
Levels	28.1893	6 (L - 1)	4.6982
Cells	28.8055	13 (ML - 1)	
Methods x Levels	.5190	6 (M - 1) x (L - 1)	.0865
Within sub-groups	15.9342	154 (N - ML)	.1035
Total	44.7397	167 (N - 1)	.2679

1 + 154 df not significant at 5% level.

$$F = \frac{.0972}{.1035} = .939$$

6 + 154 df not significant at 5% level

$$F = \frac{.0865}{.1035} = .8357$$

BIBLIOGRAPHY

1. Blocher, Clyde E., Robert Plummer and Richard Richardson, The Two Year College: A Social Synthesis. Prentice Hall, 1965.
2. Brown, William F. "Student to Student Counseling for Academic Adjustment," Personnel and Guidance Journal. 43(8): 811-17, 1965.
3. Buros, Oscar K. (Editor) The Fifth Mental Measurements Yearbook. Highland Park, N. J., 1959.
4. Campbell, Donald T. and Stanley, Julian C., "Experimental and Quasi-Experimental Designs for Research on Teaching," Handbook of Research on Teaching. Rand McNally, 1963.
5. Collins, Charles, "Junior College Counseling: A Critical View," Personnel and Guidance Journal. 42(6): 546-550, 1965.
6. Engelhart, Max D., "The Techniques of Path Coefficients," Psychometrika I December, 1936.
7. Johnson, James J. "Personnel Services in Illinois Junior Colleges," The Journal of College Student Personnel. 7: 236-240, 1966.
8. Knoell, Dorothy M. and Leland L. Medsker, From Junior College to Senior College: A National Study of the Transfer Student. American Council on Education, 1965.
9. Lindquist, E. F., Design and Analysis of Experiments in Psychology and Education: Boston, 1953.
10. National Committee for Appraisal and Development of Junior College Personnel Programs. Junior College Student Personnel Programs: Appraisal and Development. A report to the Carnegie Corporation of New York. Washington, D.C.: American Association of Junior Colleges, 1965.
11. Previn, Lawrence, "Counseling the College Dropout," Journal of College Placement. 26: 31+, 1965.
12. Richardson, LaVange H., "Grade Patterns of Counseled and Non-Counseled Students," Journal of Counseling Psychology. 9: 347-52, 1962.
13. Rose, Harriett, "Predicting and Prevention of Freshman Attrition," Journal of Counseling Psychology. 12: 399-401, 1965.
14. Harris, Chester W. (Ed.), Encyclopedia of Educational Research. Macmillan Company, 1960.