

ED 027 893

By- Aughinbaugh, Lorine A.

Group Versus Individual Counseling: A Junior College Study. Final Report.

American River Junior Coll., Sacramento, Calif.

Spons Agency- California State Dept. of Education, Sacramento. Bureau of Pupil Personnel Services.

Pub Date Dec 68

Note- 134p.

EDRS Price MF-\$0.75 HC-\$6.80

Descriptors- Academic Achievement, *Comparative Analysis, Goal Orientation, *Group Counseling, *Individual Counseling, *Junior Colleges, Persistence, Personal Growth, Student Attitudes, *Student Personnel Services

Identifiers- *California

Increases in junior college enrollment, coupled with a shortage of qualified guidance personnel, have forced many colleges to rely more heavily on group than on individual counseling for students. In the fall of 1965, students entering American River College were randomly assigned to either group or individual sessions, or not assigned, and these groups were compared over a two-year period in persistence, academic achievement, goal motivation, student attitude change, and counselor evaluation of students' growth in self-understanding. An analysis of covariance showed that students counseled individually were rated significantly higher by their counselors in growth in self-understanding, and students counseled in groups had a significantly more positive attitude toward counseling. Although there were no significant differences between these groups in persistence, academic achievement, or goal motivation, when they were compared to students not assigned to either group or individual counseling sessions, they were significantly higher in these three areas. It was concluded that, regardless of method, when special attention is paid to counseling, students benefit. (MC)

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.

FINAL REPORT

GROUP VERSUS INDIVIDUAL COUNSELING

A JUNIOR COLLEGE STUDY

AMERICAN RIVER COLLEGE
LOS RIOS JUNIOR COLLEGE DISTRICT
SACRAMENTO, CALIFORNIA

Funded through

California State Department of Education
Bureau of Pupil Personnel Services

NDEA - Title V-A
(National Defense Education Act of 1958
Guidance, Counseling and Testing
Public Law No. 85-864)

April 1965 - V-385-JC
September 1966 - V-443-JC
September 1967 - V-443-JC - Part A

UNIVERSITY OF CALIF.
LOS ANGELES

MAR 20 1969

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

ARC OFFICE OF RESEARCH

December 1968

ED 027 893

JC 690 095

Table of Contents

| | Page |
|--|------|
| Background and History | 1 |
| Statement of Problem | 4 |
| Procedure | 4 |
| Staffing | 12 |
| Problems Encountered in Study | 15 |
| Experimental Design & Statistical Analysis | 16 |
| Data Collection and Coding | 19 |
| Results | 30 |
| A. Student Reaction to Summer Counseling. | 32 |
| B. Counselor Reaction | 33 |
| C. Analysis of Covariance Tables | 36 |
| Summary Tables | 58 |
| General Conclusions | 64 |
| Specific Recommendations | 67 |
| References | 68 |
| Appendixes | 72 |

Report prepared by Lorine A. Aughinbaugh
Assistant Dean of Research

GROUP VERSUS INDIVIDUAL COUNSELING--A JUNIOR COLLEGE STUDY

Background and History

American River Junior College opened its doors in September, 1955, with a stated philosophy that every student possesses worth and with a well organized and staffed guidance corps employed to help each student better understand and develop that worth. Each student who enrolled was required to enter a psychology class - Psych 1A for transfer students or Psych 50 for vocational-technical students. The instructor of this course became the student's counselor for the period of his enrollment at the college. There have been many professional discussions over the years about the double roll of the instructor--counselor versus the single roll of the full time counselor. Although this is not the subject of this study, it should be pointed out that both students and counselors expressed satisfaction with this type of organization in an intensive "self study of student personnel procedure" conducted in 1964-65. During the first semester students feel free to ask many questions before and after class when the counselor-instructor is available to them without a formal appointment. When it is necessary to arrange an office appointment, both counselor and counselee meet with knowledge about each other which would normally take three or more office calls to achieve.

The original counseling load ran about 90 students per counselor, but after 10 years and a rapid enrollment growth, the average load per counselor had risen to 180 students per counselor. Although this was still a much better ratio than would have been possible with full time counselors, many of the counselors felt that changes could be made to improve the time each counselor had to spend with each student during the

academic semester.

The constant enrollment growth during the first ten years had necessitated many changes in the summer pre-registration counseling.

During the first four years of the college each student was scheduled with a counselor for a half hour appointment during which time the first semester class list was to be selected in light of the student's goals, demonstrated ability as indicated by high school transcripts, and placement test scores. The counselors found that far too much of their time was spent in answering general questions such as "where is the bookstore?" and "how much does the student body card cost?" and "do I have to take physical education?" The first major change occurred prior to the fall semester of 1961 when students were scheduled to come in groups of 10 to meet with a counselor who would give them a general overview of the college and provide answers to the type of questions noted above before they were asked. After general discussion, each student completed a tentative class schedule, and then discussed his goals and class selection with the counselor individually.

By the summer of 1964, the number of students had grown to the place where it was necessary to have at least five counselors meeting with groups of 10 students each half day--all reporting the same kind of information. A natural development seemed to be to schedule 50 students for the orientation session with a counselor who enjoyed working with groups. As this hour closed, the students were divided into "goal" groups--university, state college, vocational-technical, and general education and went to smaller rooms with other counselors. The second counselor usually spent another half hour giving specific information related to the "goal area" before the student was asked to work out a proposed class schedule.

Each student's schedule was carefully checked by the counselor in light of the student's goals, ability level, prerequisites, etc. before it was approved. Thus, with this type of plan each student had the benefit of at least two hours of counselor time with the student receiving both group and individual attention.

Not all counselors were comfortable working in this manner, nor were all students satisfied with the group approach. Yet increasing enrollments seemed to indicate that more, rather than less, group work was needed.

At the same time the summer orientation was changing from individual to group practices, some experimentation was going on during the regular school year with multiple counseling groups. These groups had been limited due to counselor time, but the students and counselors involved were expressing a good deal of satisfaction with the kind of growth in personal insight which was occurring.

Counseling at American River seemed to be moving toward groups. Groups seemed more efficient in the summer program and during the regular year they added the dimension of peer involvement which was never present in the individual counseling session. This dimension of peer involvement seemed to be producing rather rapid and dramatic changes for some students.

We had no objective evidence, however, that group procedures really were as effective as individual ones in imparting information, nor were we certain that all students could benefit from peer involvement in counseling. It was felt that recommendations for future changes must be based upon knowledge gained through controlled experimentation.

NDEA Title V funds became available at this time and the counseling staff decided to prepare an application for financial assistance in order to conduct such an experiment.

Statement of Problem

The tremendous increase in junior college enrollment and the shortage of funds to employ qualified guidance personnel have forced many colleges into an increased use of group processes in counseling. As these same pressures began to be felt at American River in the spring of 1965, the staff decided to launch a two year study to determine if the addition or substitution of group processes would be more or less effective than individual counseling.

Procedure

Each summer for a period of eight or nine weeks, all students new to American River are asked to make an appointment to see a counselor in order to set up their fall class schedules and to answer questions which they may have about procedures or regulations. Appointments are made on a random basis. As soon as the high schools send the final transcripts and the student has filed an application, a physical examination report, and an entrance test score, his records are sent to the evaluations office. After the records are evaluated they are sent to the Counseling Office and an appointment card is mailed asking the student to report for counseling.

As it has been our experience that the very eager students come in the first week and the rather reluctant students the last week or two, it was decided that we would select the students scheduled in the third and fourth weeks of the summer for our experimental groups. In 1965 about 360 students were being scheduled each week, or about 10% of the students new to the school.

The project was designed in such a way that the 360 students who came in during the third week of the summer of 1965 were processed and handled until withdrawal or graduation by individual counseling only. This meant that they were given one-half hour appointments with a counselor for

pre-registration scheduling and that all other counseling contacts with the counselor-instructor during the year would be on an individual basis. The usual week of orientation was to be eliminated from the beginning psychology classes taught by the individual project counselors. Also, the individual project counselors agreed that they would make no recommendations to these students to participate in any of the groups established for improvement in study skills, for vocational selection, or for working toward solutions to personal problems. Whenever one of their students needed assistance with these types of problems, or with any other type of problem, they would be given whatever individual assistance time permitted. Of course the scheduling for classes each semester was to be handled on an individual basis.

The 360 students who came in during the fourth week of the summer were processed and handled until withdrawal or graduation by group methods only. (It was agreed that if one of these students insisted upon seeing a counselor on an individual basis that such a request would not be ignored, but that just as soon as possible he would be urged to join a multiple counseling group.) Each student with an appointment for the fourth week was scheduled for a three hour orientation and class scheduling session. During the first hour they met in groups of fifty students to be given as much general information about American River College as possible by one of the counselors. In the second hour they were divided into groups of about 12 students each depending upon their future "goals" - university transfer, state college transfer, or two year vocational technical students. The counselors working with the smaller groups discussed the requirements for graduation, the ARC equivalent courses, the interpretation of test scores and the student's ability to meet the specific qualifications for entrance into certain subject matter areas. The groups of 12 students were then split into smaller

groups of three or four to work together to develop a class schedule which they would follow for their first semester. Quite often the smaller groups were divided according to the level of English (1A, X or 50) which they were qualified to enter.

The experimental group counselors agreed that they would devote the first week of the required psychology class to an intensive orientation to the college. They would make a point of urging their students to participate in the study skills course, the vocational selection course, and in multiple counseling groups whenever applicable. It was also planned that during the beginning psychology class each "group" student would have the experience of participating in at least three smaller group sessions with classmates outside of class.

As the students in both experimental groups completed their summer counseling and before they turned in their class schedules they were given Forms I and II to complete. (See appendix for forms.)

The counseling clerk marked each student's folder and all forms completed by him with Red if he were part of the "individually counseled" students or with Blue if he were part of the "group counseled" students. Each student was also given a list of the psychology classes taught by the experimental counselors from which he was to select his psychology class when he reported to the gymnasium for registration in September. The counseling project clerk was at the psychology desk during registration to watch that only "project" students were given cards for admittance to "project" classes.

This entire procedure was rather awkward but worked quite well until the last two hours of registration when it became apparent that an unexpected heavy enrollment would make it necessary to overload each psychology class with an additional ten to fifteen students. As is so often true in educational research, it became necessary to compromise

what had been planned to what was best for the total student population at the college. The individual project classes started in September with 287 students who had been planned in the third week of July and with 144 who had completed their admission processing after September 1st. The group project classes started with 269 students who had been planned in the fourth week of July and with 164 who had completed their admission after September 1st.

Our groups were no longer "pure", but as we knew which students had been early or late, we decided to continue as planned but to keep the two types of students separated as we made our statistical analysis. In effect this meant that we not only had Psych 1A, 50, and A type students counseled by individual and group methods, but we also had early and late admissions in the Psych 1A and Psych 50 classes. All Psych A students placed in the experimental Psych 50 classes were late. If they had not been they would have been scheduled in the regular Psychology A classes and would not have been part of the experiment.

It should be understood that students were placed in the psychology classes according to the score earned on the verbal section of the SCAT test. To enter Psych 1A, the score must be at the 35th or higher percentile. To enter Psych 50 the score falls below the 35th percentile. To enter Psych A the score must be below the 20th percentile with the student having earned less than a 2.0 GPA the last two years in high school.

During the first day of classes in September all students who had been scheduled during the third and fourth weeks in July, were asked to complete the Form III questionnaire, regarding their attitude about their summer preregistration experience.

Their names were not asked but the sheets were marked with red and blue, to separate the individual and group students for tallying purposes. A copy of the Form III questionnaire is included in the appendix and a summary of the information is to be found on page 30 of this report.

All of the students enrolled in the project classes were given a series of tests during their first semester. The results of these tests were used by the project counselors to assist their students to a better understanding of self and may account for some of the differences later shown between the project and control students.

The following tests were administered to all project students during the first semester:

- California Psychological Inventory
- Mooney Problem Checklist
- SRA - Verbal Form
- Cooperative General Culture Test, Form A
- Gordon's Survey of Interpersonal Values
- Allport-Vernon Lindzey Study of Values
- Kuder - both Vocational and Personal

Due to a lack of time and staff assistance the test scores have not been incorporated into the analysis of the differences between the students in the two project groups.

During the first year several meetings were held with all the project counselors to establish procedures, work out standards for completing the terminal questionnaire (see Appendix # A-4), etc. The individual and group counselors also met to work out common problems in as uniform a manner as possible.

No additional funds had been requested for the school year 1965-66 as it was felt that the data needed could be collected during the year and saved for analysis at a later time. However, a good deal of time was spent by the project director and the regular counseling clerical staff in checking forms, administering and scoring tests, locating students, and storing materials in preparation for the tabulation and statistical analysis to be done.

An additional NDEA grant was requested and approved for the 1966-67 school year (see Appendix # D-2) which made it possible to employ a part-time project secretary and work on the organization of the data was undertaken.

The first check on continuing enrollment of project students showed that of the 864 students who enrolled in the project classes in September we had 473 left one year later. From the individual project classes we had lost 183 students and from the group project classes, 208 students. This loss of 391 students represented 46% of the total project students. When compared to the 29% of all freshmen students who had returned, the 54% of the project students still enrolled seemed quite high and we began to question the Hawthorne effect which might be operating with both groups of project students. It was decided that we should pick up a group of control students while the material was still accessible. If time and money became available we could then compare the project students with the control students as well as the control students with both segments of the project - individual and group counseled students.

The following steps were undertaken during the year:

- a. The original lists of students were alphabetized and checked against currently enrolled students.
- b. A list of random book numbers was prepared for a matching control group and a list of new students who also enrolled in regular psychology classes in September, 1965, was developed. The list was stratified to the extent that the same proportion of students on the control list fell into Psychology 1A and 50 classes as had been true on the original project list.
- c. A workshop of all project counselors was called on October 29, 1966, in order to:

1. review the criteria to be used. The items of persistence, academic achievement, goal motivation, attitude change toward counseling and counselor evaluation were agreed upon.
 2. develop procedural steps for reaching the 391 students who had not returned, many of whom had left without completing a terminal questionnaire.
 3. discuss and develop the counselor evaluation sheet to be used later in the year.
- d. A form was developed to be used to record the pertinent data (64 items) for each of the students to be studied - project and control. (See Appendix C-1.)
 - e. The general design and statistical analysis of covariance was discussed with several experts including: Mr. Tashnovian, California State Department of Education, Office of Research, and Dr. Frank Pearce, Research Director at College of San Mateo.
 - f. Mrs. Margaret Lial, a member of the mathematics faculty at the college, was employed as the statistical consultant for the project.
 - g. Mrs. Virginia Smith was employed as the data processing consultant and programmer for the project.
 - h. Contacted each student, both project and control who was enrolled during the spring of 1967 (fourth semester) and asked him to complete form #7. (See Appendix A-7.) The percent of return for this group was 90%. Contacted each student, both project and control, who had withdrawn prior to the spring of 1967 and asked him to return form #6. (See Appendix A-6.) The percent of return for this group was 43%. The total percent of return for the project group was 64%, for the control group, 62%.

- i. Called a second workshop of counselors during May, 1967, to bring them up to date on the progress being made on the data collection and to develop a common criteria for the completion of the counselor evaluation forms.
- j. During June the project director, statistician and data processing consultant met several times to develop the coding for each of the five criteria to be used. Refer to pages 19-28.
- k. All of the data for the project students was completed by July 1, 1967, with the exception of noting the students who returned for a fifth semester of enrollment, and the cards were key punched during August.

An additional small grant for the 1967-68 school year (see Appendix D-3) made it possible to complete the data for the fifth semester project enrollees. This included:

- 1) contact the rest of the control students
- 2) finish the data collection on these additional students
- 3) key punch this information

When all of the data had been collected in early December, the program which had been prepared for the IBM 1620 was run for the first time only to discover that it would have to be transferred to the IBM 360 in order to utilize equipment with a larger storage unit.

The program was finally completed in early February, 1968. The last workshop of the project counselors was called on February 22, 1968, to review the statistical analysis with them and to get their reactions to the tentative report which had been prepared by the director and the two consultants. See page 64 for final conclusions.

Staffing

When the first application was submitted in April, 1965, there were twenty-two counselors on the college staff. Thirteen held pupil personnel credentials, two had completed the new designated services credential, and the seven who held a provisional credential were in the final stages of completion. By April, 1967, when the last application was filed, ten counselors had been added to the staff and all thirty-one held cleared credentials; 4 were the new Designated Services Credential and 27 were the General Pupil Personnel Services Credentials.

The project director asked for the interested staff members, who felt they would have time, to volunteer for the project. Eleven offered their services for the following year, but the working team that spring consisted of seven members and the director who worked many hours during May and June of 1965. These counselors split into three teams, one to prepare forms, one to prepare audio-visual materials for the group orientation session, and the third to do library research. We were fortunate that we had members on this team who had access to the libraries at U.C. Berkeley, Sacramento State, The University of the Pacific and the California State Library.

When the actual individual project counseling began the week of July 16, 1965, seven of the eleven counselors who planned to participate in the fall were available for summer counseling. The following week when the group project counseling began, five of the same group continued with an additional two very experienced counselors from the regular staff. As has been explained earlier, the students are not formally assigned a counselor until after they have enrolled in a psychology class. It is very rare that the summer orientation counselor becomes the student's permanent counselor. Of the five counselors who worked both weeks, two became permanent group counselors, two individual counselors, and

one was promoted and had to be replaced by an addition to the staff in September. Two others who worked the first week in individual counseling were assigned to the individual team in the fall. It was unfortunate that three of the group team members were attending school during that summer and were unable to join the project until September.

The reactions of the five who were involved in both special project weeks were quite interesting and varied. "No time to tell them what they need to know" to "The students are much more aware of the help you give them and are much more appreciative" were reactions from the counselors working during the "individual week". While the "group week" counselor comments were "I didn't learn the name of a single student" to "the questions one group member asks seem to answer problems many others in the group have". Several lively discussions among the counselors developed at the end of the two weeks related to the true function of the Junior College Counselor. Was it to answer a student's questions or help him make a decision - which leads directly to the student's expression of appreciation and thus to the counselor's personal satisfaction; or was it to help the student learn to use the resources available to him in order to be able to answer his own questions and formulate his own decisions.

In September, the two teams of counselors had these strengths and weaknesses -

Individual team - 6 members, 3 men and 3 women. Experience ranged from 9 years at American River College to 0 years. One of the least experienced counselors anticipated a move to the East the following year but was very anxious to participate, so was assigned only one class group. The replacement for the counselor who was promoted during the summer came to us as an experienced counselor from the high school level.

A year later, or half way through the project, another male promotion made it necessary to reassign about 50 students from two class groups to one of the other men doing individual counseling. The 25 students still remaining in the 1A class group of the counselor who moved East were assigned to a very experienced counselor, one interested in research, who had transferred to us from another local junior college. Thus, 75 students in the individual population did not have the same counselor for both years at American River.

One of the individual team members holds a Ph.D. in Psychology from Ohio State University.

Group team - 5 members, 2 men and 3 women. Experience ranged from 7 years at American River College to 1 year as a counselor intern at American River. All five were able to complete the two year program with students originally assigned to them. One member of this team also holds an Ed. D. from Indiana University and is a Certified Psychologist.

Each team met several times during the first few weeks in the fall of '65 and less frequently thereafter to work out common procedures. On October 29, 1966, and again in May, 1967, day long workshops were held to develop the questionnaire to be used when students withdrew and to develop standards by which the counselors might evaluate the progress made by the project and control students in developing the ability to make, and accept, responsibility for decisions.

The final reaction of the counselors to the project are summarized on page 33 of this report.

Type of problems encountered in this type of longitudinal study

1. Staff changes

- a. One counselor left when husband was transferred. Counselors assigned to an experienced counselor but one new to college.
- b. One counselor was promoted to an administrative position. Counselors assigned to one of the other project counselors - giving him an unusually heavy assignment.
- c. Both the statistician on the staff and the data processing consultant, who had planned to assist in the project, left the college at the beginning of the year, 1966, for new assignments.
- d. The Director was given a different assignment which meant that daily contact with counselor participants was no longer possible as it had been during the first year and a half of the study.
- e. Former (1/2) Test Secretary used full time for the new federal-work study program during 1965-1966 which meant that some of the test results were late in getting back to the project counselors during the first semester as planned - and therefore, not as useful as had been hoped when the original planning was done.

2. Data collection

The original planning called for the collection of more data than could be stored and analyzed within the capabilities of our data processing equipment. (IBM 1620 with 20 K). Although, we later had access to an IBM 360 with 36 K, the size of our total group continued to limit the factors which could be included in an analysis of covariance study.

Experimental Design & Statistical Analysis

The object of the project was to determine if the addition or substitution of group counseling processes at the junior college level is more or less effective than individual counseling.

The experiment was designed so that six major groups or 13 sub groups of randomly selected students were to be exposed to one of three methods of counseling for a period of two years (or until they withdrew from college). The three methods of counseling used were individual, group or combination of individual and group as used with the control students. At the conclusion of this period of time each group was to be rated on five criteria, and comparisons between the groups were to be made by the use of the analysis of covariance.

Experimental Design

| <u>Groups</u> | | <u>Treatment</u> | <u>Observations</u> |
|---------------|---------------------------------|------------------|-------------------------------------|
| <u>Major</u> | <u>Sub</u> | | |
| I | 1 In1 - 1A - E | Ind. Counseling | P AA GM AC CE for each sub group |
| | 2 In2 - 1A - L | Ind. Counseling | |
| II | 3 G1 - 1A - E | Group Counseling | |
| | 4 G2 - 1A - L | Group Counseling | |
| III | 5 In3 - 50 - E | Ind. Counseling | P AA GM AC CE for each sub group |
| | 6 In4 - 50 - L | Ind. Counseling | |
| IV | 7 G3 - 50 - E | Group Counseling | |
| | 8 G4 - 50 - L | Group Counseling | |
| | 9 Sub group 6 plus Psych A | Ind. Counseling | P AA GM AC CE |
| | 10 Sub group 8 plus Psych A | Group Counseling | P AA GM AC CE |
| V | 11 C1 - 1A | Reg. Counseling | P AA GM CE for each sub group |
| VI | 12 C2 - 50 | Reg. Counseling | |
| | 13 Sub group 12 plus Psych A | Reg. Counseling | |

Experimental Design Legend

G - Students counseled by group method

I - Students counseled by individual method

C - Students used for control

1A - Students eligible for Psych. 1A or transfer programs

50 - Students eligible for Psych. 50 or programs not intended for transfer

Early - Students preregistered in July

Late -- Students preregistered in September

The general design was checked against the following possible threats to internal validity:

History - Same period of time - no problem

Maturation - All beginning students - so can assume same level of maturation in similar groups when randomly selected, no problem.

Criteria Symbols

P = Persistence

AA = Academic Achievement

GM = Goal Motivation

AC = Attitude change on part of student

CE = Counselor evaluation of student's growth in self understanding

Testing - No formalized tests to be compared as part of final results.

Instrumentation - Students in project groups were aware that they were "special." This effect would be nullified when comparing group counseled with individually counseled students - but would be one of the factors noted when comparing experimental with control groups.

Statistical Regression - This is not a problem as no comparison is to be made between earlier and later statistical information.

Selection - Students were assigned to major groups by random methods.

Experimental Mortality - One of the criteria to be studied is persistence. Therefore, "drop outs" are a part of the study. The original numbers in each group were felt to be sufficiently large that the final results would not be affected significantly by experimental mortality.

Inner-action affects of selection with other variables - None anticipated with groups chosen by random method.

Statistical Analysis of the Data

The primary means of analysis was through use of the analysis of covariance. This procedure was used to isolate each factor or criteria, from the effect of the other four factors. The analysis of covariance procedure is used to determine whether among the set of groups there are means which differ significantly. The test takes into consideration all the sample means together rather than two by two. Analysis of covariance involves estimating the standard deviation of the population by two methods, one using each variate and one using the group means as the variate, and then comparing these estimates. With the null hypothesis that all groups are taken from the same population, the standard deviation should be the same in each estimate. The ratio of the two estimates should be close to 1.0. If the means actually differ significantly, the estimate which involves use of the means as variates will be greater than the estimate using all the variates. In this case, the ratio will be greater than 1.0. A one-tailed F-test was used to determine significant difference since only F-ratios greater than 1.0 were of interest.

The results were significant for all combinations of factors and groups at the one percent level. The T Test was then used to identify those pairs of means, adjusted by the covariance analysis, which differed significantly. A two-tailed T Test at the 10% level, 5% at each tail, was used. (Refer to: F Test - Table D reprinted by permission from G.W. Snedecor - Statistical Methods, Fifth Edition, pages 246 to 249, Iowa State College Press, Ames, Iowa, 1956. T Test - Table B abridged from Table 3 of R.A. Fisher and F. Yates, Statistical Tables for Biological, Agricultural and Medical Research, published by Oliver and Boyd, Ltd., Edinburgh, by permission of the authors and publishers.)

In addition to the covariance analysis, means and standard deviations were computed for each of the groups for each factor studied. Correlations of the five factors by pairs were computed using both estimates of variance for the total group for each factor. The only significant correlation was between persistence and academic achievement.

Data Collection & Coding

After the criteria to be studied had been agreed upon, it was necessary to develop a record form from which the data could be key punched and a method of assigning values to each factor.

The following pages show (1) a description of the items which were recorded, the card columns needed, and where the information for each student could be located. (2) The method of coding for each criteria factor. See Appendix C-1 for a sample sheet of recorded information.

ITEMS NEEDED FOR NDEA COUNSELING PROJECT

| <u>Description</u> | <u>Card Columns Needed</u> | <u>Where Information Found</u> |
|---|----------------------------|---|
| 1. Consecutive Number | 4 | Computer Assigned |
| 2. Number Semesters Enrolled | 1 | Permanent Record |
| 3. Cum. Units Completed (w/decimal) | 3 | Permanent Record |
| 4. First w/d semester code | 1 | Permanent Record |
| 5. First w/d reason | 4 | Student Folder |
| 6. Second w/d semester code | 1 | Permanent Record |
| 7. Second w/d reason | 4 | Student Folder |
| 8. First left at end of term | 1 | Permanent Record |
| 9. First reason for leaving | 4 | Terminal Form or Questionnaire |
| 10. Second left at end of term | 1 | Permanent Record |
| 11. Second reason for leaving | 4 | Terminal Form or Questionnaire |
| 12. First re-entry semester code | 1 | Permanent Record |
| 13. Second re-entry semester code | 1 | Permanent Record |
| 14. Standing each semester | 5 | Permanent Record |
| 15. Cum. Units Attempted (w/decimal) | 3 | Permanent Record |
| 16. Cum. grade points earned (") | 4 | Permanent Record |
| 17. SCAT Verbal scores | 2 | Application or Student Folder |
| 18. SCAT Quantative scores | 2 | Application or Student Folder |
| 19. Stated major at entry | 2 | Fall, 1965, Majors listing or student's first appli- cation in folder |
| 20. Major realistic or unrealistic | 1 | Research Analyst Determination |
| 21. Change in attitude | 1 | Counselor Determination |
| 22. Group Code | 1 | Entry Form |
| 23. Beginning Counselor Code | 2 | Fall, 1965, Counselor List |
| 24. New Counselor Code | 2 | Spring, 1967, Counselor List |
| 25. Sex | 1 | Application |
| 26. Birthdate | 5 | Entry Form |
| 27. Cum. GPA | -- | Computed and stored in Computer |
| 28. Stated major at end | 2 | Questionnaire or permanent record |
| 29. Realistic or unrealistic | 1 | Research Analyst Determination |
| 30. Current Status | 1 | Questionnaire |
| 31. Counselor Evaluation | 1 | |

NDEA COUNSELING PROJECT

CARD FORMAT

| <u>Card Columns</u> | <u>Description</u> | <u>Computer Assigned</u> |
|---------------------|-------------------------------|--------------------------|
| 1 - 4 | Consecutive Number | |
| 5 - 6 | Group Code | KP |
| 7 - 11 | Birthdate | KP |
| 12 | Number Semesters Enrolled | KP |
| 13 - 15 | Total Units Attempted | KP |
| 16 - 18 | Total Units Completed | KP |
| 19 - 22 | Total GP Earned | KP |
| 23 | First Withdrawal Sem. Code | KP |
| 24 | Second Withdrawal Sem. Code | KP |
| 25 | First Left End of Term Code | KP |
| 26 | Second Left End of Term Code | KP |
| 27 | First Re-entry Semester Code | KP |
| 28 | Second Re-entry Semester Code | KP |
| 29 - 33 | Standing Code Each Semester | KP |
| 34 - 35 | SCAT Verbal Score | KP |
| 36 - 37 | SCAT Quant. Score | KP |
| 38 | Sex | KP |
| 39 - 40 | Beginning Counselor Code | KP |
| 41 - 42 | End Counselor Code | KP |
| 43 - 46 | First Withdrawal Reason Code | KP |
| 47 - 50 | Second Withdrawal Reason Code | KP |
| 51 - 54 | First Left Reason Code | KP |
| 55 - 58 | Second Left Reason Code | KP |
| 59 - 60 | Stated Major at Entry | KP |
| 61 | Realistic - Unrealistic | KP |
| 62 - 63 | Major at Leaving | KP |
| 64 | Realistic or Unrealistic | KP |
| 65 | Current Status | KP |
| 66 | Counseling Attitude Change | KP |
| 67 | Counselor Evaluation | KP |

NDEA COUNSELING PROJECT

Key Punch Instructions

Card Columns

| | |
|---------|--|
| 1 - 4 | Skip |
| 5 - 6 | Punch as Coded |
| 7 | Jan - Sept. 1 - 9; Oct, 0; Nov. -; Dec. + |
| 8 - 11 | Punch as Coded |
| 12 | " " |
| 13 - 15 | " " (Including decimal digit, i.e., 13-punch 130; 7 1/2-punch 075) |
| 16 - 18 | " " Same as Above |
| 19 - 22 | " " Same as Above |
| 23 | Punch as Coded -Skip if Blank |
| 24 | " " " |
| 25 | " " " |
| 26 | " " " |
| 27 | " " " |
| 28 | " " " |
| 29 - 33 | " " " |
| 34 - 35 | Punch as Coded |
| 36 - 37 | " " |
| 38 | " " |
| 39 - 40 | " " |
| 41 - 42 | " " |
| 43 - 46 | Punch: Code 1, Col. 43; Code 2, Col. 44; Code 3, Col. 45; Code 4, Col. 46 (Punch all "reason" codes listed) |
| 47 - 50 | Punch Code 1, Col. 47; Code 2, Col. 48; Code 3, Col. 49; Code 4, Col. 50 |
| 51 - 54 | Punch Code 1, Col. 51; Code 2, Col. 52; Code 3, Col. 53; Code 4, Col. 54 |
| 55 - 58 | Punch Code 1, Col. 55; Code 2, Col. 56; Code 3, Col. 57; Code 4, Col. 58 |
| 59 - 60 | Punch as Coded |
| 61 | " " |
| 62 | " " |
| 63 - 64 | " " |

FACTOR 1 = PERSISTENCE

(Card Columns - 12, 13-15, 16-18)

I. Persistence = P1

This represents the attendance pattern and the score for persistence was obtained as follows:

P1 = twice the number of semesters enrolled minus 1 (if withdrawn before the end of semester) plus 1 (if returned for 5th semester) plus a rating value - assigned as described below:

Rating Value

A. If the student left at end of semester or withdrew during a semester, the rating value was determined by the reason for leaving as follows:

| Reasons for leaving Code | Values Assigned |
|---|--|
| a. 24 = married 2 = dissatisfied with student activities 9 = courses not available 1 = dissatisfied with self 3 = dissatisfied with counseling 4 = dissatisfied with instruction | a = 0 value The 0 rating was given for those reasons to be merely excuses and which were such that a student could have made some effort or arrangement to overcome. |
| b. 5 = transportation problems 25 = lack of finances 27 = other | b = 1 value The 1 rating was given for those reasons which were "unknown factors" to the evaluator. |
| c. 6 = accepted full-time employment 7 = changed vocational goals 8 = military service-volunteered 26 = poor scholastic standing | c = 2 value The 2 rating was given for those reasons which indicated a decision on the part of the student to change original goals and therefore his course of action. |
| d. 21 = moved from district 22 = military service-drafted 23 = health problems-verified | d = 3 value The 3 rating was given for those reasons which were felt to be beyond the control of the student. |
| e. 10 = transferred to another school 11 = developed job skills sought 12 = earned certificate 13 = AA degree | e = 4 value The 4 rating was given for those reasons which indicated either continuation or completion of the stated goal. |

FACTOR 1 = PERSISTENCE (Continued)

- B. If the student completed either 4 or 5 semesters, the rating was determined by the current status as follows:**

Current status

- a. 10 = transferred to another school a = 4 value
20 = completed educational objective
21 = moved away from district
22 = military service

II. Persistence = P2

This represents the number of units completed. This score was obtained as follows:

P2 = cumulated units attempted minus the cumulative units completed.

III. P score = 30 (P1) + P2

In order to obtain a positive P score in every case, the multiplier of 30 was used. Maximum score = 390. Minimum score = 30.

FACTOR 2 - ACADEMIC ACHIEVEMENT

(Card Columns - 19-22, 29-33)

I. Academic Achievement = GPA as indicated in data

II. Academic Standing Score = AS

A. This represents the academic standing and was obtained as follows:

AS = 1st semester rating plus 2nd semester rating plus 3rd semester rating plus 4th semester rating (ratings determined as indicated below) plus bonus of 1 if standing was 1, 2, or 3 in the first semester becoming 0 in the second semester.

| <u>B. Semester</u> | <u>Standing</u> | <u>Rating</u> |
|--------------------|-----------------|---------------|
| 1 | 0 | 2 |
| | 1, 2, or 3 | 1 |
| 2 | 0, 7 | 2 |
| | 6 | 1 |
| | 5 | 0 |
| 3 | 0, 7 | 2 |
| | 6 | 1 |
| | 4, 5 | 0 |
| 4 | 0, 7 | 2 |
| | 6 | 1 |
| | 4, 5 | 0 |

The 2 rating was given to indicate that the student began the semester in good standing (0) or was on continued probation (7) - (satisfactory work in less than 12 units.)

The 1 rating was given to indicate that the student began the semester on probation (1, 2, 3, 6) so that there was doubt as to his ability to perform satisfactorily.

The 0 rating was given to indicate that the student had been disqualified and readmitted. He had previously failed to perform satisfactorily.

III. A score = GPA + AS

Maximum score = 12. Minimum score = 1.0.

FACTOR 3 = GOAL MOTIVATION

(Card Columns - 59-61, 62-64, 65)

I. Goal Motivation -

G1 represents the realism of the goal as represented by the major declared at admission when compared to entrance test scores at admission -

| | Rating |
|-----------------------------|--------|
| Major within ability levels | 4 |
| Major possible with effort | 3 |
| Major completion doubtful | 2 |
| Major unrealistic | 1 |
| Major undeclared | 0 |

II. Goal Motivation -

G2 represents the realism of the goal as represented by the major at time of completion or withdrawal.

Same rating as for G1

III. Goal Motivation -

G3 represents the degree and type of change in goal when G1 is compared to G2

| Change from - to | Rating | |
|------------------|--------|---|
| 1 - 4 | 9 | The 9 rating indicates a major gain in realistic goal. |
| 2 - 4 | 9 | |
| 1 - 3 | 9 | |
| 2 - 3 | 8 | The 8 rating indicates a gain in realistic goal. |
| 0 - 4 | 8 | |
| 0 - 3 | 8 | |
| 3 - 4 | 7 | The 7 rating indicates a small gain in realistic goal. |
| 0 - 2 | 7 | |
| 1 - 2 | 7 | |
| 4 - 4 | 6 | The 6 rating indicates a realistic goal with no change noted. |
| 3 - 3 | 6 | |
| 4 - 0 | 6 | |
| 3 - 0 | 6 | |
| 1 - 0 | 4 | The 4 rating indicates an unrealistic goal or no goal at all. |
| 2 - 0 | 4 | |
| 0 - 0 | 4 | |
| 2 - 2 | 4 | |
| 1 - 1 | 4 | |
| | | |

FACTOR 3 = GOAL MOTIVATION (Continued)

| Change from - to | | | Rating | |
|------------------|---|---|--------|--|
| 4 | - | 3 | 3 | The 3 rating indicates a small loss in realism of goal. |
| 3 | - | 2 | 3 | |
| 2 | - | 1 | 2 | The 2 rating indicates a larger loss in realism of goal. |
| 4 | - | 2 | 2 | |
| 3 | - | 1 | 2 | |
| 4 | - | 1 | 1 | The 1 rating indicates a change from no stated goal - or a realistic goal - to an unrealistic one. |
| 0 | - | 1 | 1 | |

IV. Goal Motivation -

G4 represents the degree of accomplishment of the goal and was obtained from the student's current status as follows:

| <u>Current Status</u> | | <u>Rating</u> | |
|-----------------------|------------------------------------|---------------|---|
| <u>Code</u> | <u>Explanation</u> | | |
| | | 3 | The 3 rating was given to indicate that the goal as stated was accomplished - or in process of accomplishment |
| 1 | Transf - State College | | |
| 2 | Transf - University | | |
| 3 | Transf - J. C. | | |
| 4 | Transf - Private or other training | | |
| 5 | Working in field | | |
| 10 | AA degree | | |
| 20 | Currently enrolled - day | | |
| 21 | Currently enrolled - eve | | |
| 22 | Currently enrolled - Placer | | |
| | | 2 | The 2 rating was given to indicate an unplanned interruption rather than a change in goal. |
| 8 | Mission for church | | |
| 12 | Temporary illness | | |
| 17 | Military service-drafted | | |
| | | 1 | The 1 rating was given to indicate a voluntary decision on part of student to alter goal. |
| 6 | Working out of field | | |
| 9 | Homemaker | | |
| 27 | Military service - volunteered | | |
| 11 | Other | 0 | The 0 rating indicated no information given. |

V. Goal Motivation Score =

$$G 1 + G 2 + G 3 + G 4$$

Maximum score = 20. Minimum score = 1.

FACTOR 4 = ATTITUDE CHANGE TOWARD COUNSELING

(Card Columns - 66)

- I. Attitude change - ATC represents the change in attitude toward counseling from high school to college measured subjectively from statements made by project students on a questionnaire given during the first summer as compared to the same questions given at end of enrollment at ARC. See sample questionnaire attached. This information is not available on the control group.

Coding:

Rating

| | |
|-------------------------------------|---|
| Negative high school to positive AR | 4 |
| Positive high school to positive AR | 3 |
| Negative high school to negative AR | 2 |
| Positive high school to negative AR | 1 |
| No Information | 0 |

- II. ATC score = Rating Given

Maximum = 4

Minimum = 1

FACTOR 5 = COUNSELOR EVALUATION

(Card Columns - 67)

I. Counselor Evaluation = CE represents the subjective evaluation by the student's ARC counselor at the end of the two-year study.

| <u>Coding</u> | <u>Rating</u> |
|--|---------------|
| Was quite immature in ability to make meaningful personal decisions when he entered ARC, but has grown in his ability to make, and take responsibility for personal decisions. | 5 |
| Was able to make meaningful personal decisions when he entered ARC, but no longer needs reassurance about them. | 4 |
| Was very mature in ability to make meaningful personal decisions when he entered ARC and has continued to grow in this regard as his knowledge and experience have grown. | 3 |
| Was able to make meaningful personal decisions when he entered ARC, but needed reassurance that his choices were acceptable - and still does. | 2 |
| Was very mature in ability to make meaningful personal decisions when he entered ARC, but has made no noticeable growth in this area since matriculation. | 2 |
| Was quite mature in ability to make meaningful personal decisions when he entered ARC and continues to be immature in this regard. | 1 |
| Counselor did not know student well enough to evaluate on above. | 0 |

II. CE score = rating given
Maximum = 4 Minimum = 1

RESULTS

A. Student Reaction to Summer Counseling Experience

On the first day of class in September, the project students in attendance were asked to complete a short check sheet (12 main questions) relating to the way they felt about the counseling experience they had had in mid July. The check sheets were turned in unsigned, but color coded so that the responses of the students who had had group or individual counseling might be separated.

Of the original 720 students scheduled in July, 682 had completed the summer counseling. Of this number 70 did not complete registration (35 group and 35 individual), an additional 56 went into honors classes, were unable to schedule a "project" psychology class, or were not present the first day of class.

The responses tabulated included 269 from group counseled students and 287 from individually counseled students. The results reported in percentages follow:

| <u>Part I</u> | <u>G</u> | <u>I</u> | <u>G</u> | <u>I</u> | <u>No</u> | <u>Answer</u> |
|--|----------|----------|----------|----------|-----------|---------------|
| | Yes | | No | | | |
| 1. Use AR catalog | 89.4 | 73.5 | 10.6 | 26.5 | | |
| 2. Use schedule | 86.0 | 69.4 | 14.0 | 30.6 | | |
| 3. Imp. of prerequisites | 74.3 | 68.0 | 25.7 | 32.0 | | |
| 4. Graduation requirements | 55.7 | 48.1 | 44.3 | 51.9 | | |
| 5. Maj. req. transfer | 56.7 | 56.5 | 43.3 | 43.5 | | |
| 6. Diff-req. and elective | 70.4 | 75.9 | 29.6 | 24.1 | | |
| 7. Locate classroom | 86.4 | 74.9 | 13.6 | 25.1 | | |
| <u>Part II</u> | | | | | | |
| 8. In appropriate course | 87.0 | 86.4 | 13.0 | 11.0 | 2.6 | |
| 9. Greater difficulty than high school | 68.9 | 65.9 | 31.1 | 31.1 | 3.0 | |

Part III

10. Sources most helpful in planning program

| | <u>Group</u> | <u>Individual</u> | <u>No Answer</u> |
|-------------------------------|--------------|-------------------|------------------|
| AR catalog | 44.0 | 33.08 | |
| 4 year catalog | 2.8 | 2.23 | |
| Friend | 15.75 | 12.6 | |
| Orientation lecture | 4.2 | 1.85 | |
| Discussion with AR counselor | 27.3 | 43.59 | |
| Discussion with h/s counselor | 2.8 | 2.58 | .37 |
| Other | 3.15 | 3.70 | |

Part IV

11. Seek help if problem arises

| | | | |
|-----------------------------|------|------|--|
| Counselor | 92.5 | 81.6 | |
| Priest or minister | 0.0 | .37 | |
| Depend on problem | .74 | .74 | |
| Friend or former AR student | 3.7 | 3.6 | |
| Parents | 1.94 | 2.7 | |
| Don't know | 1.12 | 11.0 | |

Part V

12. Rate the pre-registration counselor (check two)

| | | | |
|--------------------|------|------|--|
| Friendly | 32.3 | 32.4 | |
| Unfriendly | 1.16 | .73 | |
| Interested | 13.7 | 14.9 | |
| Indifferent | 7.7 | 5.4 | |
| Busy | 13.3 | 9.5 | |
| Helpful | 19.9 | 20.4 | |
| Knowledgeable | 9.2 | 6.29 | |
| Lacked information | 2.74 | 2.4 | |
| No tally | 0.0 | 7.98 | |

Part I. As might have been expected more of the students who had gone through the group process felt that they had a better understanding of the college tools, catalog and schedule, understood the importance of prerequisites and ARC graduation requirements, and had a better understanding of the campus itself. No difference was shown in their understanding of the major requirements for the transfer school they planned to attend, while the students counseled individually seemed to have a slightly better grasp of the difference between a "required" and an "elective" course.

Part II. The similarity of responses in Part II would seem to indicate that both groups felt equally pleased with their class schedules and were equally concerned about the difference in difficulty between high school and college courses. In other words, the students in both groups were from the same student population and the differences in their responses reflected a real difference in their attitude toward counseling - not a difference in the kind of students responding in each group.

Part III. The "group" students relied more heavily on the American River catalog and other sources while the "individual" students found the counselor the most helpful agent in planning the class program. Again the question arises, is the function of counseling to help the student learn to help himself - or to rely upon others to help him.

Part IV. Although the "group" students indicate that they had had less help from the counselors in the schedule planning session than the "individual" students, a larger percentage of them indicated they would seek help from a counselor if a problem arose. The group experience in the summer then did not discourage the use of future counselor help when needed.

Part V. Student reaction to counselors varied little from group to individual counseling. The group students felt their counselors were

a bit more knowledgeable while many more individual students, on this item as on other questions, expressed no opinion.

In conclusion, if one were to depend solely upon the reaction of the students, the group program for pre-registration counseling is a more effective means of imparting information than is individual counseling. And more important, the use of groups in this way does not give the student the feeling that the counselor should not be sought out for help if and when the need arises.

B. Counselor Reaction

On June 7, 1967, the project counselors were asked to react to a few questions and invited to comment in general about their reaction to the two-year experience which they were completing.

In answer to the question "were you able to maintain the group or individual counseling procedure for the students who started on the project in the fall of 1965?" all five of the individual counselors replied in the affirmative. Three of the group counselors answered yes, but two felt they had had some difficulty, especially toward the end of the second year. The two major problems listed were a lack of time in which to schedule groups and the fact that when "group" students made individual appointments it wasn't always possible to see them except as individuals. A few students refused to join counselor groups after the first semester except for scheduling purposes.

When asked "what were some of the major difficulties or frustrations encountered during the last two years with your project group?" the group counselor responses included--difficult to encourage individual problem solving in a group situation and harder to use test profiles in group situation than when working with an individual student. The individual counselors felt they have been quite restricted, especially during the first semester, when they had the students in class and could

not follow the usual group procedures or recommend group programs which they have become accustomed to using.

The question "do you feel that the counseling method you were using aided or hindered your relationships with your project students - as compared to the combined methods used with your other counselors?" evoked a "No" answer from two individual counselors while the other three felt that the relationship could have been better if some group work had been possible. Three of the group counselors, on the other hand, said they felt the group techniques had enhanced the relationship, while two felt they could have strengthened the relationship through individual counseling.

The final question: "Following this experience, would you recommend that we:

| | Answers | from |
|--|---------|-------|
| | G.C. | I. C. |
| Work toward more group work | 3 | 2 |
| Work toward more individual work | 1 | 0 |
| Continue as at present (combined methods) | 1 | 3 |

Comments from group counselors included:

"Doing mostly individual counseling before the project, I can see some real advantages in both methods and will use both in the future."

"Although, I do not think straight group counseling would work well for me, it has a great many advantages - counselees move faster into assistance from each other."

Comments from individual counselors included:

"May experiment with a few group schedule planning sessions in the future."

"I believe that having group type participation in class (psychology) encourages more self-referrals and establishes better initial rapport between student and counselor. It seemed to me that fewer of the counselees in the experimental group voluntarily sought counseling than was true of my other counselees who had some group activity in class."

"Neither individual counseling nor group counseling by itself meets the needs of the student. Counseling at times can be done more effectively in groups and will promote social and personal interaction which individual counseling might not attain."

C. Analysis of Covariance Tables

In order to determine what significance, if any, existed between the students counseled by group procedures and those counseled by individual procedures, the data processing program was written so that each of the thirteen groups could be compared individually with each other with each of the five factors isolated.

The 21 tables on pages 37 to 57 show these comparisons.

Covariance Table #1

Psych 1A (1) Early Individual Counseling compared with Psych 1A (3) Early Group Counseling:

| <u>Factors</u> | <u>Sig.</u> | | <u>Not Sig.</u> | |
|----------------|---|--------------------------|---|--------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 11.53 | 7.87 |
| 1 - 3 | | | 16.36 | 2.86 |
| 1 - 4 | | | 16.07 | 14.47 |
| 1 - 5 | | | 16.41 | 1.49 |
| 2 - 1 | | | 0.34 | -0.21 |
| 2 - 3 | | | 0.47 | -0.18 |
| 2 - 4 | | | 0.47 | 0.17 |
| 2 - 5 | | | 0.48 | -0.21 |
| 3 - 1 | | | 0.50 | 0.25 |
| 3 - 2 | | | 0.49 | 0.33 |
| 3 - 4 | | | 0.52 | 0.44 |
| 3 - 5 | | | 0.52 | 0.27 |
| 4 - 1 | 0.19 | -0.32 | | |
| 4 - 2 | 0.19 | -0.28 | | |
| 4 - 3 | 0.19 | -0.32 | | |
| 4 - 5 | 0.19 | -0.32 | | |
| 5 - 1 | | | 0.28 | 0.23 |
| 5 - 2 | | | 0.28 | 0.27 |
| 5 - 3 | | | 0.29 | 0.24 |
| 5 - 4 | 0.29 | 0.31 | | |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

When attitude change is adjusted for all other factors, the students counseled by the group method show a greater positive change of attitude than did those counseled by the individual method.

Counselor evaluation for the individually counseled student is significantly higher when adjusted for attitude change.

Covariance Table #2

Psych 1A (2) Late-Individual Counseling compared with Psych 1A (4)
Late Group Counseling:

| <u>Factors</u> | <u>Sig.</u> | | <u>Not Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 15.55 | 13.03 |
| 1 - 3 | | | 22.07 | 17.99 |
| 1 - 4 | 21.68 | 23.78 | | |
| 1 - 5 | 22.14 | 27.55 | | |
| 2 - 1 | | | 0.46 | -0.22 |
| 2 - 3 | | | 0.64 | 0.19 |
| 2 - 4 | | | 0.64 | 0.35 |
| 2 - 5 | | | 0.65 | 0.47 |
| 3 - 1 | | | 0.68 | -0.29 |
| 3 - 2 | | | 0.67 | -0.19 |
| 3 - 4 | | | 0.69 | -0.02 |
| 3 - 5 | | | 0.71 | -0.06 |
| 4 - 1 | 0.25 | -0.31 | | |
| 4 - 2 | 0.25 | -0.26 | | |
| 4 - 3 | | | 0.26 | -0.23 |
| 4 - 5 | | | 0.27 | -0.19 |
| 5 - 1 | 0.38 | -0.74 | | |
| 5 - 2 | 0.38 | -0.68 | | |
| 5 - 3 | 0.39 | -0.65 | | |
| 5 - 4 | 0.39 | -0.61 | | |

Summary of A Covariance

When persistence is adjusted for attitude change and counselor evaluation, the individually counseled students show a greater persistence than do the group counseled students.

Group counseled students show a significantly greater positive attitude change when adjusted for persistence and academic achievement. They also show a significantly higher counselor evaluation when adjusted for all other factors.

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Covariance Table #3

Psych 50 (5) Early Individual Counseling compared with Psych 50 (7) Early Group Counseling:

| <u>Factors</u> | <u>Sig.</u> | | <u>Not Sig.</u> | |
|----------------|---|--------------------------|---|--------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 17.29 | 4.42 |
| 1 - 3 | | | 24.55 | 12.94 |
| 1 - 4 | | | 24.11 | 12.73 |
| 1 - 5 | | | 24.62 | -2.19 |
| 2 - 1 | | | 0.51 | 0.18 |
| 2 - 3 | | | 0.71 | 0.37 |
| 2 - 4 | | | 0.71 | 0.39 |
| 2 - 5 | | | 0.72 | -0.05 |
| 3 - 1 | | | 0.75 | 0.51 |
| 3 - 2 | | | 0.74 | 0.47 |
| 3 - 4 | | | 0.77 | 0.57 |
| 3 - 5 | | | 0.79 | 0.53 |
| 4 - 1 | | | 0.28 | 0.15 |
| 4 - 2 | | | 0.28 | 0.15 |
| 4 - 3 | | | 0.29 | 0.18 |
| 4 - 5 | | | 0.29 | 0.12 |
| 5 - 1 | 0.42 | 1.22 | | |
| 5 - 2 | 0.42 | 1.22 | | |
| 5 - 3 | 0.44 | 1.29 | | |
| 5 - 4 | 0.44 | 1.27 | | |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

The individually counseled students show a significantly higher counselor evaluation when adjusted for all other factors.

Covariance Table #4

Psych 50 (6) Late Individual Counseling compared with Psych 50 (8) Late Group Counseling.

| <u>Factors</u> | <u>Sig.</u> | <u>Actual Difference</u> | <u>Not Sig.</u> | <u>Actual Difference</u> |
|----------------|---|--------------------------|---|--------------------------|
| | <u>Difference Required for Significance</u> | | <u>Difference Required for Significance</u> | |
| 1 - 2 | | | 26.66 | -7.39 |
| 1 - 3 | | | 37.84 | 3.28 |
| 1 - 4 | | | 37.16 | 12.92 |
| 1 - 5 | | | 37.95 | -6.49 |
| 2 - 1 | | | 0.78 | 0.35 |
| 2 - 3 | | | 1.09 | 0.42 |
| 2 - 4 | | | 1.09 | 0.71 |
| 2 - 5 | | | 1.11 | 0.13 |
| 3 - 1 | | | 1.16 | -0.03 |
| 3 - 2 | | | 1.14 | -0.16 |
| 3 - 4 | | | 1.19 | 0.16 |
| 3 - 5 | | | 1.21 | 0.08 |
| 4 - 1 | | | 0.43 | -0.34 |
| 4 - 2 | | | 0.43 | -0.38 |
| 4 - 3 | | | 0.45 | -0.33 |
| 4 - 5 | | | 0.46 | -0.37 |
| 5 - 1 | | | 0.65 | 0.57 |
| 5 - 2 | | | 0.65 | 0.52 |
| 5 - 3 | | | 0.68 | 0.59 |
| 5 - 4 | | | 0.67 | 0.65 |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

There are no significant differences in these two groups when analyzed on all factors.

Covariance Table #5

INDIVIDUAL

Psych 1A (1) Early compared with Psych 50 (5) Early

| <u>Factors</u> | <u>Sig.</u> | | <u>Not Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 14.47 | -14.15 |
| 1 - 3 | 20.54 | -21.42 | | |
| 1 - 4 | | | 20.17 | 17.41 |
| 1 - 5 | 20.59 | 23.37 | | |
| 2 - 1 | 0.43 | 0.74 | | |
| 2 - 3 | | | 0.59 | -0.12 |
| 2 - 4 | 0.59 | 1.18 | | |
| 2 - 5 | 0.60 | 1.36 | | |
| 3 - 1 | 0.63 | 3.16 | | |
| 3 - 2 | 0.62 | 2.91 | | |
| 3 - 4 | 0.65 | 3.37 | | |
| 3 - 5 | 0.67 | 3.34 | | |
| 4 - 1 | 0.23 | -0.30 | | |
| 4 - 2 | 0.23 | -0.39 | | |
| 4 - 3 | 0.25 | -0.49 | | |
| 4 - 5 | | | 0.25 | -0.19 |
| 5 - 1 | 0.35 | -0.88 | | |
| 5 - 2 | 0.35 | -0.99 | | |
| 5 - 3 | 0.37 | -0.95 | | |
| 5 - 4 | 0.37 | -0.79 | | |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

The Psych 50 students show a significantly greater attitude change and counselor evaluation than the Psych 1A students. They also show a significantly higher persistence score when adjusted for good motivation than do the Psych 1A students.

The Psych 1A students show a higher goal motivation and academic achievement score than do the Psych 50 students.

Covariance Table #6

INDIVIDUAL

Psych 1A (2) Late compared with Psych 50 (6) Late

| <u>Factors</u> | <u>Sig.</u> | | <u>Not. Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 21.12 | 19.75 |
| 1 - 3 | | | 29.98 | 9.71 |
| 1 - 4 | | | 29.44 | 21.66 |
| 1 - 5 | 30.07 | 45.01 | | |
| 2 - 1 | | | 0.62 | -0.25 |
| 2 - 3 | | | 0.87 | -0.29 |
| 2 - 4 | | | 0.86 | 0.16 |
| 2 - 5 | | | 0.88 | 0.86 |
| 3 - 1 | 0.92 | 1.84 | | |
| 3 - 2 | 0.90 | 1.96 | | |
| 3 - 4 | 0.95 | 1.97 | | |
| 3 - 5 | 0.96 | 2.21 | | |
| 4 - 1 | | | 0.34 | 0.16 |
| 4 - 2 | | | 0.34 | 0.22 |
| 4 - 3 | | | 0.36 | 0.13 |
| 4 - 5 | | | 0.36 | 0.35 |
| 5 - 1 | 0.52 | 1.06 | | |
| 5 - 2 | 0.51 | -0.99 | | |
| 5 - 3 | 0.54 | -0.99 | | |
| 5 - 4 | 0.53 | -0.97 | | |

Summary of A Covariance

The Psych 1A students have significantly higher goal motivation and persistence scores when adjusted for counselor evaluation.

The Psych 50 students have a higher counselor evaluation when adjusted for academic achievement, goal motivation and attitude change.

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Covariance Table #7

INDIVIDUAL

Psych 1A (1) Early compared with Psych 1A (2) Late

| <u>Factor</u> | <u>Sig.</u> | | <u>Not. Sig.</u> | |
|---------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 14.09 | 0.51 |
| 1 - 3 | | | 20.00 | 17.26 |
| 1 - 4 | 19.65 | 22.17 | | |
| 1 - 5 | 20.06 | 20.65 | | |
| 2 - 1 | 0.41 | 0.61 | | |
| 2 - 3 | 0.58 | 0.76 | | |
| 2 - 4 | 0.58 | 0.99 | | |
| 2 - 5 | 0.59 | 0.94 | | |
| 3 - 1 | 0.61 | 1.55 | | |
| 3 - 2 | 0.60 | 1.37 | | |
| 3 - 4 | 0.63 | 1.65 | | |
| 3 - 5 | 0.64 | 1.76 | | |
| 4 - 1 | 0.23 | 0.29 | | |
| 4 - 2 | 0.23 | 0.25 | | |
| 4 - 3 | 0.24 | 0.31 | | |
| 4 - 5 | 0.24 | 0.37 | | |
| 5 - 1 | 0.34 | 0.70 | | |
| 5 - 2 | 0.34 | 0.64 | | |
| 5 - 3 | 0.36 | 0.81 | | |
| 5 - 4 | 0.36 | 0.79 | | |

Summary of A Covariance

The Psych 1A early students show a significantly higher score on all factors except for persistence when adjusted for academic achievement and goal motivation. Even on these items the scores favor the early student but are not high enough to be significant.

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Covariance Table #8

INDIVIDUAL

Psych 50 (5) Early compared with Psych 50 Control (12)

| <u>Factors</u> | <u>Sig.</u> | | <u>Not. Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | 14.25 | 33.45 | | |
| 1 - 3 | 20.23 | 32.47 | | |
| 1 - 5 | 20.29 | 24.05 | | |
| 2 - 1 | 0.42 | -0.49 | | |
| 2 - 3 | | | 0.58 | 0.04 |
| 2 - 5 | | | 0.59 | -0.16 |
| 3 - 1 | 0.62 | 1.06 | | |
| 3 - 2 | 0.61 | 1.29 | | |
| 3 - 5 | 0.65 | 1.32 | | |
| 5 - 1 | 0.34 | 1.14 | | |
| 5 - 2 | 0.35 | 1.28 | | |
| 5 - 3 | 0.36 | 1.31 | | |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

The Psych 50 students who were early and counseled individually show higher scores in persistence, goal motivation, and in counselor evaluation than did the control students. The control group showed a slightly higher achievement score when adjusted for persistence.

Covariance Table #9

INDIVIDUAL

Psych 50 (6) Late compared with Psych 50 Control (12)

| <u>Factors</u> | <u>Sig.</u> | | <u>Not Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 19.22 | -0.96 |
| 1 - 3 | | | 27.28 | -15.93 |
| 1 - 5 | | | 27.37 | -18.24 |
| 2 - 1 | | | 0.56 | - 0.12 |
| 2 - 3 | | | 0.79 | -0.55 |
| 2 - 5 | | | 0.80 | -0.59 |
| 3 - 1 | | | 0.84 | 0.83 |
| 3 - 2 | 0.82 | 0.86 | | |
| 3 - 5 | | | 0.87 | 0.68 |
| 5 - 1 | 0.47 | 0.62 | | |
| 5 - 2 | 0.47 | 0.63 | | |
| 5 - 3 | 0.49 | 0.55 | | |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

The only significant difference between these two groups was in the area of counselor evaluation when adjusted for persistence.

Covariance Table #10

GROUP_

Psych 50 (7) Early compared with Psych 50 Control (12)

| <u>Factor</u> | <u>Sig.</u> | | <u>Not. Sig.</u> | |
|---------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | 14.56 | 29.03 | | |
| 1 - 3 | | | 20.66 | 19.53 |
| 1 - 5 | 20.73 | 26.24 | | |
| 2 - 1 | 0.43 | -0.66 | | |
| 2 - 3 | | | 0.59 | -0.34 |
| 2 - 5 | | | 0.61 | -0.10 |
| 3 - 1 | | | 0.63 | 0.55 |
| 3 - 2 | 0.62 | 0.82 | | |
| 3 - 5 | 0.66 | 0.79 | | |
| 5 - 1 | | | 0.35 | -0.08 |
| 5 - 2 | | | 0.35 | 0.07 |
| 5 - 3 | | | 0.37 | 0.02 |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

The Psych 50 students, early and group counseled, showed a significantly higher persistence then the control group when adjusted for achievement and in goal motivation when adjusted for achievement and counselor evaluation. The control group shows a slightly higher achievement score when adjusted for persistence.

Covariance Table #11

GROUP

Psych 50 (8) Late compared with Psych 50 Control (12)

| <u>Factors</u> | <u>Sig.</u> | | <u>Not Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 21.38 | 6.43 |
| 1 - 3 | | | 30.35 | -19.21 |
| 1 - 5 | | | 30.44 | -11.75 |
| 2 - 1 | | | 0.63 | -0.47 |
| 2 - 3 | 0.88 | -0.98 | | |
| 2 - 5 | | | 0.89 | -0.72 |
| 3 - 1 | | | 0.93 | 0.87 |
| 3 - 2 | 0.92 | 1.02 | | |
| 3 - 5 | | | 0.97 | 0.76 |
| 5 - 1 | | | 0.52 | 0.05 |
| 5 - 2 | | | 0.52 | 0.11 |
| 5 - 3 | | | 0.54 | -0.04 |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

The Psych 50 students who were late and counseled in a group showed no significant difference from the control group except in goal motivation when adjusted for persistence.

Covariance Table #12

GROUP

Psych 1A (3) Early compared with Psych 1A (4) Late

| <u>Factors</u> | <u>Sig.</u> | | <u>Not. Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 13.27 | 5.68 |
| 1 - 3 | 18.83 | 32.39 | | |
| 1 - 4 | 18.49 | 21.36 | | |
| 1 - 5 | 18.89 | 46.71 | | |
| 2 - 1 | 0.39 | 0.61 | | |
| 2 - 3 | 0.54 | 1.14 | | |
| 2 - 4 | 0.54 | 1.17 | | |
| 2 - 5 | 0.55 | 1.63 | | |
| 3 - 1 | 0.58 | 1.02 | | |
| 3 - 2 | 0.57 | 0.86 | | |
| 3 - 4 | 0.59 | 1.19 | | |
| 3 - 5 | 0.60 | 1.44 | | |
| 4 - 1 | 0.21 | 0.31 | | |
| 4 - 2 | 0.21 | 0.27 | | |
| 4 - 3 | 0.22 | 0.39 | | |
| 4 - 5 | 0.23 | 0.49 | | |
| 5 - 1 | | | 0.32 | -0.26 |
| 5 - 2 | | | 0.32 | -0.31 |
| 5 - 3 | | | 0.34 | -0.09 |
| 5 - 4 | | | 0.34 | -0.12 |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

In all but the areas of counselor evaluation and persistence when adjusted for achievement, the Psych 1A early group shows significantly higher scores.

Covariance Table #13

GROUP

Psych 1A (4) Late compared with Psych 50 (8) Late

| <u>Factors</u> | <u>Sig.</u> | | <u>Not. Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 22.50 | -0.67 |
| 1 - 3 | | | 31.94 | -4.99 |
| 1 - 4 | | | 31.37 | 10.80 |
| 1 - 5 | | | 32.04 | 10.97 |
| 2 - 1 | | | 0.66 | 0.32 |
| 2 - 3 | | | 0.92 | -0.06 |
| 2 - 4 | | | 0.92 | 0.51 |
| 2 - 5 | | | 0.94 | 0.51 |
| 3 - 1 | 0.98 | 2.09 | | |
| 3 - 2 | 0.96 | 1.99 | | |
| 3 - 4 | 1.01 | 2.14 | | |
| 3 - 5 | 1.02 | 2.19 | | |
| 4 - 1 | | | 0.36 | 0.12 |
| 4 - 2 | | | 0.36 | 0.09 |
| 4 - 3 | | | 0.38 | 0.03 |
| 4 - 5 | | | 0.39 | 0.16 |
| 5 - 1 | | | 0.55 | 0.25 |
| 5 - 2 | | | 0.55 | 0.21 |
| 5 - 3 | | | 0.57 | 0.24 |
| 5 - 4 | | | 0.57 | 0.29 |

Summary of A Covariance

When these two groups were compared, the goal motivation of the Psych 1A students is the only factor of which a significantly higher score is present.

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Covariance Table #14

GROUP
Psych 1A (3) Early compared with Psych 50 (7) Early
Sig. Not Sig.

| <u>Factors</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
|----------------|---|------------------------------|---|------------------------------|
| 1 - 2 | 14.92 | -17.59 | | |
| 1 - 3 | | | 21.18 | -11.34 |
| 1 - 4 | | | 20.79 | 15.67 |
| 1 - 5 | | | 21.24 | 19.69 |
| 2 - 1 | 0.44 | 1.12 | | |
| 2 - 3 | | | 0.61 | 0.44 |
| 2 - 4 | 0.61 | 1.40 | | |
| 2 - 5 | 0.62 | 1.52 | | |
| 3 - 1 | 0.65 | 3.42 | | |
| 3 - 2 | 0.64 | 3.05 | | |
| 3 - 4 | 0.67 | 3.51 | | |
| 3 - 5 | 0.68 | 3.61 | | |
| 4 - 1 | | | 0.24 | 0.17 |
| 4 - 2 | | | 0.24 | 0.04 |
| 4 - 3 | | | 0.25 | 0.00 |
| 4 - 5 | | | 0.26 | 0.24 |
| 5 - 1 | | | 0.36 | 0.11 |
| 5 - 2 | | | 0.36 | -0.05 |
| 5 - 3 | | | 0.38 | -0.09 |
| 5 - 4 | | | 0.38 | 0.18 |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

The comparison of these two groups shows that the Psych 1A students have significantly higher scores in both achievement and goal motivation.

The Psych 50 students have a significantly higher persistence score when adjusted for achievement.

Covariance Table #15

GROUP

Psych 1A (3) Early compared with Psych 1A Control (11)

| <u>Factors</u> | <u>Sig.</u> | | <u>No. Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 9.69 | 7.64 |
| 1 - 3 | | | 13.77 | 8.89 |
| 1 - 5 | | | 13.81 | 9.49 |
| 2 - 1 | | | 0.29 | -0.03 |
| 2 - 3 | | | 0.39 | 0.08 |
| 2 - 5 | | | 0.40 | 0.13 |
| 3 - 1 | 0.42 | 0.51 | | |
| 3 - 2 | 0.42 | 0.54 | | |
| 3 - 5 | 0.44 | 0.61 | | |
| 5 - 1 | 0.24 | 0.26 | | |
| 5 - 2 | 0.24 | 0.29 | | |
| 5 - 3 | 0.25 | 0.31 | | |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

Both goal motivation and counselor evaluation were significantly higher for the early Psych 1A students counseled in groups as compared to the control Psych 1A students.

Covariance Table #16

GROUP

Psych 1A (4) Late compared with Psych 1A Control (11)

| <u>Factors</u> | <u>Sig.</u> | | <u>Not Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 11.52 | 1.96 |
| 1 - 3 | 16.35 | -23.51 | | |
| 1 - 5 | 16.40 | -37.22 | | |
| 2 - 1 | 0.34 | -0.64 | | |
| 2 - 3 | 0.47 | -1.05 | | |
| 2 - 5 | 0.48 | -1.49 | | |
| 3 - 1 | 0.50 | -0.51 | | |
| 3 - 2 | | | 0.49 | -0.31 |
| 3 - 5 | 0.52 | -0.81 | | |
| 5 - 1 | 0.28 | 0.53 | | |
| 5 - 2 | 0.28 | 0.59 | | |
| 5 - 3 | 0.29 | 0.40 | | |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

Counselor evaluation is significantly higher for the group counseled late Psych 1A students, but in the areas of persistence, goal motivation, and academic achievement the control students rated higher.

Covariance Table #17

INDIVIDUAL

Psych 1A (2) Late compared with Psych 1A Control (11)

| <u>Factors</u> | <u>Sig.</u> | | <u>Not Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | 12.64 | 14.99 | | |
| 1 - 3 | | | 17.95 | -5.92 |
| 1 - 5 | | | 17.99 | -9.67 |
| 2 - 1 | 0.37 | -0.85 | | |
| 2 - 3 | 0.52 | -0.86 | | |
| 2 - 5 | 0.53 | -1.03 | | |
| 3 - 1 | 0.55 | -0.79 | | |
| 3 - 2 | | | 0.54 | -0.50 |
| 3 - 5 | 0.58 | -0.89 | | |
| 5 - 1 | | | 0.31 | -0.21 |
| 5 - 2 | | | 0.31 | -0.08 |
| 5 - 3 | | | 0.32 | -0.25 |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

Except in the area of persistence when adjusted for achievement, the control students rated higher on both achievement and goal motivation than did the group counseled Psych 1A students.

Covariance Table #18

INDIVIDUAL

Psych 1A (1) Early compared with Psych 1A Control (11)

| <u>Factors</u> | <u>Sig.</u> | | <u>Not Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | 9.46 | 15.50 | | |
| 1 - 3 | | | 13.43 | 11.75 |
| 1 - 5 | | | 13.47 | 10.98 |
| 2 - 1 | | | 0.28 | -0.24 |
| 2 - 3 | | | 0.39 | -0.10 |
| 2 - 5 | | | 0.40 | -0.09 |
| 3 - 1 | 0.41 | 0.76 | | |
| 3 - 2 | 0.41 | 0.87 | | |
| 3 - 5 | 0.43 | 0.88 | | |
| 5 - 1 | 0.23 | 0.49 | | |
| 5 - 2 | 0.23 | 0.56 | | |
| 5 - 3 | 0.24 | 0.56 | | |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

Although there was no significant difference in the actual achievement of these two groups, the Psych 1A students who were early and counseled individually were significantly higher in counselor evaluation, in goal motivation, and in persistence when adjusted for achievement.

Covariance Table #19

PSYCH A

Psych A (9) Individual Late Counseling compared with Psych A (10) Group Late Counseling:

| <u>Factors</u> | <u>Sig.</u> | | <u>Not Sig.</u> | |
|----------------|---|--------------------------|---|--------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 50.78 | -12.79 |
| 1 - 3 | | | 72.08 | -23.75 |
| 1 - 4 | | | 70.79 | 16.64 |
| 1 - 5 | | | 72.30 | -39.36 |
| 2 - 1 | | | 1.49 | 0.27 |
| 2 - 3 | | | 2.08 | -0.38 |
| 2 - 4 | | | 2.08 | 0.87 |
| 2 - 5 | | | 2.12 | -0.81 |
| 3 - 1 | | | 2.21 | 1.22 |
| 3 - 2 | | | 2.18 | 1.10 |
| 3 - 4 | | | 2.28 | 1.59 |
| 3 - 5 | | | 2.31 | 0.91 |
| 4 - 1 | 0.82 | -0.96 | | |
| 4 - 2 | 0.82 | -1.01 | | |
| 4 - 3 | 0.86 | -1.09 | | |
| 4 - 5 | 0.87 | -1.14 | | |
| 5 - 1 | 1.24 | 1.64 | | |
| 5 - 2 | 1.24 | 1.58 | | |
| 5 - 3 | 1.29 | 1.54 | | |
| 5 - 4 | 1.29 | 1.76 | | |

Summary of A Covariance

The attitude change is significantly higher for those counseled by the group method, when adjusted for all other factors.

The counselor evaluation is significantly higher for those counseled by the individual method, when adjusted for all other factors.

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Covariance Table #20

PSYCH A STUDENTS

Psych A (9) Individual compared with Psych A Control (13)

| <u>Factors</u> | <u>Sig.</u> | | <u>Not Sig.</u> | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 44.97 | 7.37 |
| 1 - 3 | | | 63.83 | 2.11 |
| 1 - 5 | | | 64.02 | -12.79 |
| 2 - 1 | | | 1.32 | -0.02 |
| 2 - 3 | | | 1.84 | -0.14 |
| 2 - 5 | | | 1.88 | -0.53 |
| 3 - 1 | | | 1.96 | 1.25 |
| 3 - 2 | | | 1.93 | 1.27 |
| 3 - 5 | | | 2.04 | 1.18 |
| 5 - 1 | 1.09 | 1.63 | | |
| 5 - 2 | 1.09 | 1.65 | | |
| 5 - 3 | 1.14 | 1.65 | | |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 5 = Counselor Evaluation

Summary of A Covariance

The most significant difference between these groups was the consistently higher rating by the counselors of the Psych 1A individually counseled students. It is to be noted that these students were part of the Psych 50 students and not identified as Psych A students while in the project.

Covariance Table #21

PSYCH A STUDENTS

Psych A (10) Group compared with Psych A Control (13)

| <u>Factors</u> | Sig. | | Not Sig. | |
|----------------|---|------------------------------|---|------------------------------|
| | <u>Difference Required for Significance</u> | <u>Actual Difference</u> | <u>Difference Required for Significance</u> | <u>Actual Difference</u> |
| 1 - 2 | | | 37.53 | 20.16 |
| 1 - 3 | | | 53.27 | 25.86 |
| 1 - 5 | | | 53.43 | 26.57 |
| 2 - 1 | | | 1.10 | -0.29 |
| 2 - 3 | | | 1.54 | -0.24 |
| 2 - 5 | | | 1.57 | 0.27 |
| 3 - 1 | | | 1.65 | 0.03 |
| 3 - 2 | | | 1.61 | 0.17 |
| 3 - 5 | | | 1.71 | 0.27 |
| 5 - 1 | | | 0.92 | -0.02 |
| 5 - 2 | | | 0.91 | 0.07 |
| 5 - 3 | | | 0.95 | 0.11 |

Factor Legend

- 1 = Persistence
- 2 = Academic Achievement
- 3 = Goal Motivation
- 4 = Attitude Change
- 4 = Counselor Evaluation

Summary of A Covariance

There were no significant differences apparent in these two groups.

Summary Tables

A summary table has been prepared for each of the five factors used as criteria for comparison - persistence, academic achievement, goal motivation, attitude change (student's attitude about counseling), and counselor evaluation. For each factor the M , \sum of factor², and the σ has been computed for each group and subgroup studied.

Summary Table #1

PERSISTENCE FACTOR

| Group | Type of Counseling | N | Score | M | Σ of P ² | |
|------------|--------------------|------|---------|-----|----------------------------|---------|
| Total Pop. | ---- | 1617 | 327,582 | 202 | 83,908,064 | 105.36* |

Psychology:

| Major | Group # | Type of Counseling | N | Score | M | Σ of P ² | | |
|-------|----------|--------------------|----------|--------|----------|----------------------------|-------------|---------|
| I | 1 | 1A Early | Indv. | 199 | 45,975 | 231 | 12,517,774 | 97.93 |
| | 2 | 1A Late | Indv. | 95 | 18,611 | 195 | 4,570,833 | 101.00 |
| | | 1A Total | Indv. | 294 | 64,586 | 219 | 17,088,607 | 101.00 |
| II | 3 | 1A Early | Group | 186 | 41,911 | 225 | 11,212,272 | 98.54 |
| | 4 | 1A Late | Group | 119 | 21,328 | 179 | 4,998,479 | 100.00 |
| | | 1A Total | Group | 305 | 63,239 | 207 | 16,210,751 | 101.48 |
| III | 5 | 50 Early | Indv. | 88 | 19,487 | 221 | 5,145,207 | 98.69 |
| | 6 | 50 Late | Indv. | 41 | 6,809 | 166 | 1,511,293 | 97.67 |
| | | (50 & A Late | Indv.) | (49) | (7,997) | (163) | (1,734,832) | (94.97) |
| | 50 Total | Indv. | 137 | 27,484 | 200 | 6,880,039 | 101.49 | |
| IV | 7 | 50 Early | Group | 83 | 16,761 | 201 | 4,233,326 | 103.44 |
| | 8 | 50 Late | Group | 32 | 5,211 | 162 | 1,156,102 | 101.00 |
| | | (50 & A Late | Group) | (45) | (7,314) | (162.5) | (1,580,787) | (94.45) |
| | 50 Total | Group | 128 | 24,075 | 188 | 5,814,113 | 101.00 | |
| | 9 | A Late | Indv. | 8 | 1,188 | 148 | 223,539 | 83.07 |
| | 10 | A Late | Group | 13 | 2,103 | 162 | 424,685 | 89.66 |
| V | 11 | 1A | Control | 503 | 105,751 | 210 | 28,166,480 | 109.09 |
| VI | 12 | 50 | Control | 220 | 38,454 | 174 | 8,946,129 | 102.00 |
| | | (50 & A | Control) | (250) | (42,449) | (169.8) | (9,750,734) | (83.55) |
| | 13 | A | Control | 30 | 3,995 | 133 | 804,605 | 97.21 |

*This figure is high due to the formula used for coding which was arranged so that no score would be less than zero.

Summary Table #2

ACADEMIC ACHIEVEMENT FACTOR

| Group | Type of Counseling | N | Score | M | Σ of AA ² | \bar{c} |
|------------|--------------------|------|--------|------|-----------------------------|-----------|
| Total Pop. | ----- | 1617 | 10,722 | 6.63 | 86,515 | 3.09 |

Psychology:

| Major | Group # | Type of Counseling | Indv./Group | N | Score | M | Σ of AA ² | \bar{c} |
|-------|---------|--------------------|-------------|-------|---------|--------|-----------------------------|-----------|
| I | 1 | 1A Early | Indv. | 199 | 1,470 | 7.38 | 12,666 | 3.04 |
| | 2 | 1A Late | Indv. | 95 | 571 | 6.01 | 4,393 | 3.19 |
| | | 1A Total | Indv. | 294 | 2,041 | 6.90 | 17,059 | 3.24 |
| II | 3 | 1A Early | Group | 186 | 1,390 | 7.47 | 12,030 | 2.99 |
| | 4 | 1A Late | Group | 119 | 698 | 5.86 | 5,326 | 3.24 |
| | | 1A Total | Group | 305 | 2,088 | 6.84 | 17,356 | 3.19 |
| III | 5 | 50 Early | Indv. | 88 | 567 | 6.44 | 4,303 | 2.74 |
| | 6 | 50 Late | Indv. | 41 | 230 | 5.60 | 1,682 | 3.15 |
| | | (50 & A Late | Indv.) | (49) | (268) | (5.46) | (1,873) | (2.93) |
| | | 50 Total | Indv. | 137 | 835 | 6.09 | 6,176 | 2.84 |
| IV | 7 | 50 Early | Group | 83 | 485 | 5.84 | 3,541 | 2.94 |
| | 8 | 50 Late | Group | 32 | 166 | 5.18 | 1,118 | 2.89 |
| | | (50 & A Late | Group) | (45) | (228) | (5.06) | (1,520) | (2.89) |
| | | 50 Total | Group | 128 | 713 | 5.57 | 5,061 | 2.93 |
| | 9 | A Late | Indv. | 8 | 38 | 4.75 | 191 | 1.19 |
| | 10 | A Late | Group | 13 | 62 | 4.76 | 402 | 2.98 |
| V | 11 | 1A | Control | 503 | 3,610 | 7.17 | 30,626 | 3.08 |
| | 12 | 50 | Control | 220 | 1,302 | 5.91 | 9,416 | 2.81 |
| VI | | (50 & A | Control) | (250) | (1,435) | (5.74) | (10,247) | (2.84) |
| | 13 | A | Control | 30 | 133 | 4.43 | 831 | 2.89 |

Summary Table #3

GOAL MOTIVATION FACTOR

| Group | Type of Counseling | N | Score | M | Σ of GM ² | σ^2 |
|-------------------|--------------------|------|--------|-------|-----------------------------|------------|
| <u>Total Pop.</u> | <u>-----</u> | 1617 | 20,168 | 12.47 | 272,506 | 3.61 |

Psychology:

Group #

| | | | | | | | | |
|---------|----|--------------|----------|-------|-------|---------|----------|--------|
| Major I | 1 | 1A Early | Indv. | 199 | 2,873 | 14.43 | 42,989 | 2.80 |
| | 2 | 1A Late | Indv. | 95 | 1,194 | 12.56 | 16,090 | 3.42 |
| | | 1A Total | Indv. | 294 | 4,067 | 13.80 | 59,079 | 3.24 |
| II | 3 | 1A Early | Group | 186 | 2,630 | 14.14 | 38,766 | 2.92 |
| | 4 | 1A Late | Group | 119 | 1,512 | 12.70 | 20,754 | 3.63 |
| | | 1A Total | Group | 305 | 4,142 | 13.58 | 59,520 | 3.29 |
| III | 5 | 50 Early | Indv. | 88 | 985 | 11.19 | 12,075 | 3.48 |
| | 6 | 50 Late | Indv. | 41 | 429 | 10.46 | 4,917 | 3.29 |
| | | (50 & A Late | Indiv.) | (49) | (503) | (10.26) | (5,635) | (3.15) |
| | | 50 Total | Indiv. | 137 | 1,488 | 10.86 | 17,710 | 3.38 |
| IV | 7 | 50 Early | Group | 83 | 872 | 10.50 | 9,728 | 2.65 |
| | 8 | 50 Late | Group | 32 | 335 | 10.46 | 3,867 | 3.44 |
| | | (50 & A Late | Group) | (45) | (441) | (9.8) | (4,785) | (3.24) |
| | | 50 Total | Group | 128 | 1,313 | 10.25 | 14,513 | 2.90 |
| | 9 | A Late | Indv. | 8 | 74 | 9.25 | 718 | 2.03 |
| | 10 | A Late | Group | 13 | 106 | 8.15 | 918 | 2.14 |
| V | 11 | 1A | Control | 503 | 6,786 | 13.49 | 97,078 | 3.32 |
| VI | 12 | 50 | Control | 220 | 2,136 | 9.70 | 22,644 | 2.98 |
| | | (50 & A | Control) | (250) | | (9.48) | (24,606) | (2.93) |
| | 13 | A | Control | 30 | 236 | 7.86 | 1,962 | 1.94 |

Summary Table #4

ATTITUDE CHANGE - FACTOR

| Group | Type of Counseling | N | Score | M | Σ of AC ² | |
|------------|--------------------|-----|-------|------|-----------------------------|------|
| Total Pop. | ----- | 864 | 1,296 | 1.50 | 4,278 | 1.64 |

Psychology:

| Major | Group # | Type of Counseling | Group | N | Score | M | Σ of AC ² | |
|-------|---------|--------------------|--------|------|-------|--------|-----------------------------|--------|
| I | 1 | 1A Early | Indv. | 199 | 307 | 1.54 | 1,017 | 1.66 |
| | 2 | 1A Late | Indv. | 95 | 105 | 1.10 | 363 | 1.62 |
| | | 1A Total | Indv. | 294 | 412 | 1.40 | 1,318 | 1.59 |
| II | 3 | 1A Early | Group | 186 | 342 | 1.83 | 1,114 | 1.63 |
| | 4 | 1A Late | Group | 119 | 160 | 1.34 | 510 | 1.58 |
| | | 1A Total | Group | 305 | 502 | 1.63 | 1,624 | 1.64 |
| III | 5 | 50 Early | Indv. | 88 | 159 | 1.80 | 533 | 1.69 |
| | 6 | 50 Late | Indv. | 41 | 34 | .82 | 114 | 1.47 |
| | | (50 & A Late | Indv.) | (49) | (37) | (.75) | 123 | (1.41) |
| | | 50 Total | Indv. | 137 | 196 | 1.43 | 656 | 1.66 |
| IV | 7 | 50 Early | Group | 83 | 131 | 1.57 | 435 | 1.67 |
| | 8 | 50 Late | Group | 32 | 37 | 1.15 | 127 | 1.66 |
| | | (50 & A Late | Group) | (45) | (55) | (1.22) | (183) | (1.62) |
| | | 50 Total | Group | 128 | 186 | 1.45 | 618 | 1.66 |
| | 9 | A Late | Indv. | 8 | 3 | .37 | 9 | 1.00 |
| | 10 | A Late | Group | 13 | 18 | 1.38 | 56 | 1.54 |

No Control

Summary Table #5

COUNSELOR EVALUATION - FACTOR

| Group | Type of Counseling | N | Score | M | Σ of CE ² | |
|------------|--------------------|------|-------|------|-----------------------------|------|
| Total Pop. | ----- | 1617 | 4,617 | 2.85 | 18,347 | 1.82 |

Psychology:

| | | <u>Group #</u> | | | | | | |
|------------|----------|-------------------------|------------------|--------------|--------------|---------------|----------------|---------------|
| Major I | 1 | 1A Early | Indv. | 199 | 637 | 3.20 | 2,599 | 1.68 |
| | 2 | <u>1A Late</u> | <u>Indv.</u> | <u>95</u> | <u>221</u> | <u>2.32</u> | <u>813</u> | <u>1.79</u> |
| | | 1A Total | Indv. | 294 | 858 | 2.92 | 3,412 | 1.76 |
| II | 3 | 1A Early | Group | 186 | 548 | 2.94 | 2,116 | 1.66 |
| | 4 | <u>1A Late</u> | <u>Group</u> | <u>119</u> | <u>355</u> | <u>2.98</u> | <u>1,379</u> | <u>1.65</u> |
| | | 1A Total | Group | 305 | 903 | 2.96 | 3,495 | 1.65 |
| III | 5 | 50 Early | Indv. | 88 | 355 | 4.03 | 1,635 | 1.54 |
| | 6 | 50 Late | Indv. | 41 | 133 | 3.24 | 581 | 1.94 |
| | | <u>(50 & A Late</u> | <u>Indv.)</u> | <u>(49)</u> | <u>(169)</u> | <u>(3.45)</u> | <u>(757)</u> | <u>(1.91)</u> |
| | 50 Total | Indv. | 137 | 524 | 3.82 | 2,392 | 1.70 | |
| IV | 7 | 50 Early | Group | 83 | 226 | 2.72 | 834 | 1.64 |
| | 8 | 50 Late | Group | 32 | 85 | 2.65 | 341 | 1.93 |
| | | <u>(50 & A Late</u> | <u>Group)</u> | <u>(45)</u> | <u>(123)</u> | <u>(2.73)</u> | <u>(495)</u> | <u>(1.95)</u> |
| | 50 Total | Group | 128 | 349 | 2.73 | 1,329 | 1.72 | |
| | 9 | A Late | Indv. | 8 | 36 | 4.50 | 176 | 1.41 |
| | 10 | A Late | Group | 13 | 38 | 2.92 | 154 | 1.82 |
| V VI | 11 | 1A | Control | 503 | 1,312 | 2.60 | 5,100 | 1.84 |
| | 12 | 50 | Control | 220 | 587 | 2.66 | 2,275 | 1.81 |
| | | <u>(50 & A</u> | <u>Control.)</u> | <u>(250)</u> | <u>(671)</u> | <u>(2.68)</u> | <u>(2,619)</u> | <u>(1.82)</u> |
| | 13 | A | Control | 30 | 84 | 2.80 | 344 | 1.94 |

GENERAL CONCLUSIONS

Based Upon Analysis of Covariance

The Psych 1A students who entered the project during the summer of 1965 (early) and were counseled by individual techniques until they left American River were rated higher by the counselors in their growth toward maturity than were those counseled by group techniques. Did the counselors feel they knew these students better, therefore could rate them more highly?

The students counseled by group methods showed a greater positive change of attitude about counseling than did those counseled by individual methods.

As there was no difference between these two groups on persistence, academic achievement, and goal motivation the only conclusion which can be drawn is that for Psychology 1A students it makes no difference whether they are counseled individually or in groups.

However, it is to be noted that differences do become apparent when either of the project groups is compared with the control students. Both of the project groups - individual and group counseled - show a higher rating in goal motivation and counselor evaluation than did the control students. Those students counseled individually also showed a higher persistence score when adjusted for achievement. It would seem then that when special attention is paid to counseling, no matter what methods are chosen, that Psych 1A students can benefit.

The Psych 50 students who entered the project during the summer of 1965 (early) and were counseled by individual methods were also rated higher by the counselors in their growth toward maturity. There were no other differences noted between the group and individually counseled students.

However, when the Psych 50 students who were counseled individually were compared to the Psych 50 control students, they showed higher scores in persistence, goal motivation, and counselor evaluation of growth toward maturity. Those counseled by group methods also showed similarly high scores in persistence and goal motivation. The control students, when compared to both project groups, had slightly higher achievement scores.

Again the special attention through counseling given to both Psych 50 project groups, irrespective of method, brought about increased goal motivation, growth toward maturity and in persistence.

Based Upon Means and Standard Deviations

Both Psych 1A and Psych 50 students counseled by individual techniques show higher means and smaller standard deviations on persistence than do the students counseled by group methods, but both project groups show higher means and smaller standard deviation scores than do the control groups.

On academic achievement the group counseled Psych 1A students show a higher mean and smaller standard deviation score than do those counseled by individual methods while the opposite is true for the Psych 50 students. Both Psych 1A project groups achieved better academically than the control group. This was not true however of the Psych 50 students where the group counseled project students did not reach the achievement level of the control students. This strongly suggests that students of lower ability or less adequate backgrounds upon admission to college need more individual assistance if they are to meet the academic standards of the college.

Goal Motivation

As was true for persistence, the Psych 1A and Psych 50 project groups had higher means than did the control students of like ability - with the exception of the standard deviation for the individually counseled Psych 50 students, the standard deviations were also smaller when compared to the control.

Attitude Change

There was no information available on the control students on this item so the comparisons are between the project groups only. The Psych 1A group counseled shows a greater change in favorable attitude toward counseling than did the students counseled individually. However, just the opposite was true for the Psych 50 students. This again suggests that the general ability level of the student may indicate the type of counseling to be used.

Counselor Evaluation

The evaluations of the counselors concerning the growth in maturity of the students was much higher in each case for the students counseled individually - yet it is to be noted that they also gave slightly higher ratings to the group counseled students than to the control students. The higher the mean in each case, the smaller the standard deviation indicating a consistency on the part of the counselors. It is also to be noted that the changes were in direct relationship to the ability levels of the students when they entered. The students with less ability at admission received the highest ratings in growth toward maturity as seen by the counselors.

Specific Recommendations

1. Every effort be made to continue to provide as much counseling time as possible for all students. When more counseling time is provided, irrespective of methods, gains are found in persistence, academic achievement, goal motivation, attitude regarding counseling, and growth toward maturity as evaluated by the counselors.
2. More staff time be devoted to training and planning for the development of additional group counseling procedures for the Psych 1A students.
3. Assignment of fewer counselees to the Psych 50 and Psych A counselors so that more individual work becomes possible for the students who truly need this type of assistance.
4. Careful study by a total college committee of the information which accidentally came to light regarding the total performance of those students who are admitted to the college at the end of the admission period. (Called Late Students throughout this report.). It is suggested that if these late applicants are to be accepted that both curriculum and counseling changes must be made.

REFERENCES

At the time the study was begun in 1965 and until the spring of 1967, a careful check of the literature revealed a paucity of information related to the comparison of group and individual counseling at any level of education. Nothing at all was uncovered at the junior college level. The following list of references were those the staff members surveyed and felt had some relevance to the study being undertaken.

Books

1. Berne, Eric, The Structure and Dynamics of Organizations & Groups, Philadelphia: Lippincott, 1963.
2. Kemp, C. Gratton, Perspectives on the Group Process: A Foundation for Counseling with Groups, Boston: Houghton Mifflin, 1964.
3. Liften, Walter M., Working with Groups: Group Process and Individual Growth, New York: Wiley & Sons, 1961.
4. Rosenbaum, Max and Berger, Milton, (Editors) Group Psychotherapy and Group Functions, New York: Basic Books, 1963.
5. Schaffner, Bertram, Group Processes, Transactions of the Fifth Conference, October 12-15, 1958, Princeton, New Jersey, New York, Josiah Macey Jr. Foundation, 1960.
6. Stewart, Lawrence H. and Warnath, Charles F' The Counselor and Society - A Cultural Approach, Boston: Houghton Mifflin, Co, 1965.
7. Wagner, R. F., Successful Devices in Guidance and Counseling, Portland, Maine: J. Weston Walch, 1963.
8. Warters, Jane, Group Guidance; Principles and Practice, New York, McGraw Hill Book Co., 1960.

Journal Articles

- Baehr, George, "The Comparative Effectiveness of Individual Psychotherapy Group Psychotherapy and a Combination of These Methods," Journal of Counseling Psychology, 1954, 18, 179.
- Broedel, John - Ohlsen, Merle, "The Effects of Group Counseling in Gifted Underachieving Adolescents." Journal of Counseling Psychology, 1960, 7, 163.
- Chestnut, William J., "The Effects of Structured and Unstructured Group Counseling on Male College Students' Underachievement," Journal of Counseling Psychology, 1965, 12 (4), 383-394.
- Cohn, B. and others, "Group Counseling, An Orientation," Personnel & Guidance Journal 42:355-8, Volume 14, December, 1963.
- Combs, Charles F., et. al. "Group Counseling: Applying The Technique," The School Counselor, Vol. 11 #1, October, 1963.
- Ford, Donald H. (Pennsylvania State University), "Group and Individual Counseling in Modifying Behavior," Personnel Guidance Journal, 1962, 40 (9) 770-773.
- Froelich, Clifford P. "Must Counseling Be Individual?" Educational Psychological Measurement, 1958, 18, 681-689.
- Goldman, L., "Group Guidance: Content and Process," Personnel & Guidance Journal, Fall, 1962, 40, 518-522.
- Hewer, Vivian H., "Group Counseling, Individual Counseling, and a College Class in Vocations," Personnel Guidance Journal 1959 37, 660-665.
- Hill, Arthur H., "Motivation and Academic Counseling," Journal of Counseling Psychology, 1966, 13(4), 447-453.
- Kemp, C. G., "Behaviors in Group Guidance (Socio process) and Group Counseling (Psyche process)," Journal Counseling Psychology, 1963, 10, 373-377, Volume 14, Personnel Inc., Group Work Winter.
- Kinzer, J. R., (comment by); "Evaluation of the Group Counseling Procedure" Journal Counseling Psychology, 11:152-9, Volume 14, Summer, 1964.
- Kirkbride, V. R., "Group Approaches to Student Personnel Services in Higher Education," National Association Women Deans and Counselors Journal, 24:127-31, Volume 12 (July, 1959-Jan, 1961) April, 1961.
- Lefton, Mark, "On Research and Intergroup Relations", Theory Into Practice, 2:166-71; June, 1963.
- Merenda, Peter and Rothney, John, "Evaluating The Effects of Counseling Eight Years After," Journal of Counseling Psychology, 1958, 5, 163-68.

Journal Articles (Continued)

- Chlsen, M. M., (with comment) "Comparison of Individual and Multiple Counseling for Test Interpretation Interviews", Journal Counseling Psychology, Volume 14, 10:126-35, Summer, 1963.
- Pepinsky, H. B. (with comment) "Effect of Behavioral Counseling in Group & Individual Settings on Information-Seeking Behavior", Journal Counseling Psychology, 11:324-35, Volume 15, Winter, 1964.
- Smith, Anthony J., "A Developmental Study of Group Processes," Journal of Genetic Psychology, 97: 29-39, September, 1960.
- Spielberger, C. D., et. al., "Group Counseling and the Academic Performance of Anxious College Freshmen," Journal Counseling Psychology 9:195-204, Volume 13 (July, 1961-June, 1963) Fall, 1962.
- Woal, S. J., "Project in Group Counseling in a Junior High School," Personnel & Guidance Journal, 42:611-13, Volume 14, Fall, 1964.
- Wright, E. Wayne "Multiple Counseling: Why? When? How?" Personnel Guidance Journal, 1959, 37, 551-557.
- Wright, E. Wayne, "A Comparison of Individual & Multiple Counseling For Test Interpretation Interviews," Journal of Counseling Psychology, 1963, 10 (2) 126-134.

Dissertations

1. Clements, Thomas Hubbard - USC - 1963
"A Study To Compare The Effectiveness of Individual and Group Counseling Approaches With Able Underachievers When Counselor Time is Held Constant."
2. Duncan, Helen G. - University of Florida - 1963
"The Effect of Group Orientation on the Outcomes of Vocational Counseling."
3. Feldman, Leonard - U.C. Berkeley - 1957
"Multiple Counseling: Factors Related to Improved Self Knowledge."
4. McKinney, Max Russell - Oregon State - 1963
"An Assessment of the Effectiveness of Small Group Counseling on Selected Eighth Grade Junior High School Students Having Moderate Emotional Programs."
5. Speegle, Philip J. - North Texas State University - 1963
"The Effectiveness of Two Techniques of Counseling With Students On Academic Probation."
6. Von Klack, Karl - Boston University - 1966
"An Investigation of Group and Individual Counseling As Remedial Methods for Working With Junior High School Underachieving Boys."

APPENDIXES

A. Forms used in Project

1. Given to all students who entered ARC during the two "project" weeks in July, 1965.
2. Given to all students enrolled in the project psychology classes. This included the students who registered in July and in early September.
3. Given to all students who preregistered in July and entered classes in September. Refer to page 30 for summary of material.
4. Given to all project students who withdrew during the first year - if they cleared their withdrawal through the Counseling Center.
5. Rating sheet used by counselors to develop material for Factor V in study.
6. Questionnaire sent to all project and control students who withdrew prior to the end of the study.
7. Questionnaire and conference request form used with all project and control students still registered during the Spring semester, 1967.

B. Letters and Conference Request form used with questionnaire

1. Sent to students who "disappeared" during a semester.
2. Sent to students who left at the conclusion of a semester.
3. Sent to students who withdrew through the proper channels during a semester.
4. Sent to all project and control still enrolled Spring semester, 1967.

C. Data Processing Forms and Coding

1. Basic Data Sheet.
2. Sample of Data Processing Card.
3. Major Curriculum Fields used in Factor III - Goal Motivation.
4. Coding for change of Major used in Factor III.

D. Applications

1. NDEA - Title V - April, 1965.
2. NDEA - Title V - February, 1966.
3. NDEA - Title V - February, 1967.

Date _____

NAME _____ Date of Birth _____
(last) (first) (middle) (month) (day) (year)

Sex: (circle one) M F Marital Status: single married divorced widowed
(circle one)

1. Name of high school attended _____
2. Did you graduate from high school? (circle one) yes no
3. What academic major do you intend to complete? _____
4. Vocational Information:
 - a. For what job or vocation are you preparing? _____
 - b. What jobs have you held in the past? _____
 - c. Do you intend to work while attending ARJC? (circle one) yes no
 - d. If your last answer was yes, at what job will you be working? _____
5. Parent's Education and Occupation:
 - a. Circle the highest school grade completed by your father:
7 8 9 10 11 12 13 14 15 16 Highest degree held: _____
 - b. Circle the highest school grade completed by your mother:
7 8 9 10 11 12 13 14 15 16 Highest degree held: _____
 - c. State your father's occupation _____

DO NOT WRITE BELOW THIS LINE

1 2 3 4 5 6
Group

1 2 3 4 5 6 7 8 9
Major

1 2 3 4 5
Matriculation Record

1 2 3 4 5 6 7 8 9
Blue Slip Record

1 2 3 4 5
Disq. Petitions

1 2 3 4 5 6 7 8 9
Stated Vocational Goal

1 2 3 4 5 6 7 8 9
Vocational Experience
(prior)

1 2 3 4 5 6 7 8 9
Vocational Experience
(concurrent)

1 2 3 4 5 6 7 8 9
Father's Occupation

Code #

1 2 3 4 5 6 7 8 9
Subsequent Majors

1 2 3 4 5 6 7 8 9
Cumulative Status

1 2 3 4 5
Health Group

1 2 3 4 5 6 7 8 9
Health Contacts

1 2 3 4 5 6 7 8 9
Adjusted Vocational Goal

1 2 3 4 5 6 7 8 9
Date of Birth

S M D W M F
Marital Status Sex

1 2 3 4 5 6 7 8 9
High School

1 2 3 4 5 6 7 8 9
Father's Education

1 2 3 4 5 6 7 8 9
Mother's Education

1 2 3 4 5 6 7 8 9
Extra Curricular

1 2 3 4 5 6 7 8 9
Termination

TESTS: SCAT V _____

Q _____

Eng. Coop _____

1 2
Grad.

NAME _____ Date _____
(first) (last) (middle)

Sex: (circle one) M F Age _____ Date of Birth _____
(month) (day) (year)

1. Do you know what your college major will be?

1. _____yes

2. _____no

a. if yes, state major _____

b. Why did you choose this major? _____

2. Have you attended college previously?

1. _____yes

2. _____no

a. if yes, state college attended _____

b. if yes, why did you leave?

a. _____disqualified

b. _____lack of finances

c. _____parents moved

d. _____found employment

e. _____lack of interest

f. _____no transportation

g. _____illness

h. _____marriage

i. _____change of personal/vocational goals

j. _____military service

k. _____other _____

3. Type of transportation utilized at present time:

1. _____own car

2. _____parents

3. _____friends

4. _____car pool

5. _____public

6. _____other _____

4. For which of the following reasons did you decide to attend college?

- 1. _____ interest in professional work
(teacher, doctor, engineer, etc.)
- 2. _____ interest in technical, vocational or
business programs. (draftsman, mechanic,
secretary, etc.)
- 3. _____ unable to find employment
- 4. _____ parents insistence
- 5. _____ can't be successful without a college education
- 6. _____ other _____

5. For which of the following reasons did you decide to attend ARJC? Check in order of importance (1,2,3) as many as 3 items.

- 1. _____ parents live in AR district
- 2. _____ reputation for good instruction
- 3. _____ reputation for school spirit
- 4. _____ opportunity for student activities & leadership
- 5. _____ reputation for good counseling
- 6. _____ not qualified for a 4 year school
- 7. _____ financial reasons (not expensive)
- 8. _____ course of study I want is offered.
- 9. _____ uncertain about college major (shopping around)
- 10. _____ other _____

6. If you had your choice would you have attended a college other than ARJC?

- 1. _____ yes
- 2. _____ no

if yes, state name of college _____

7. Who has influenced your decision to attend college?

- 1. _____ myself
- 2. _____ parents
- 3. _____ teachers
- 4. _____ counselors
- 5. _____ adult friends
- 6. _____ student friends
- 7. _____ relatives
- 8. _____ advertisements (TV, etc)
- 9. _____ employer
- 10. _____ other _____

8. Do you feel your high school has prepared you for college?

1. _____yes

2. _____no

if no, check the most appropriate items in order of importance (1,2,3).

a. _____poor instruction

b. _____inadequate selection of courses in high school

c. _____poor counseling

d. _____inadequate student activities

e. _____students not serious about school work

f. _____other_____

9. Has your high school counselor given you the help you needed?

1. _____yes

2. _____no

if yes, check the most appropriate items in order of importance (1,2,3)

a. _____personal problems

b. _____choosing a college

c. _____choosing a major

d. _____choosing a vocation

e. _____finding employment

f. _____scholastic problems

g. _____understanding myself

h. _____helped me stay in school

i. _____in making friends

j. _____other_____

if no, check the most appropriate items in order of importance(1,2,3)

a. _____I did not seek assistance

b. _____personality conflict

c. _____counselor too busy

d. _____counselor lacked information

e. _____counselor did not understand me

f. _____counselor did not understand my problem

g. _____had no time to see counselor

h. _____counselor was a man

i. _____counselor was a woman

j. _____counselor was too old

k. _____counselor was too young

l. _____counselor always told me what to do

(continued page 4)

- m. _____ counselor never told me what to do
- n. _____ other _____

10. Whom did you rely upon most of the time for assistance during high school?

- 1. _____ myself
- 2. _____ parents
- 3. _____ principal
- 4. _____ dean of men/women
- 5. _____ counselor
- 6. _____ teacher
- 7. _____ relative
- 8. _____ adult friend
- 9. _____ student friend
- 10. _____ employer
- 11. _____ no one
- 12. _____ other _____

11. Do you feel that school counselors generally can be of assistance?

- 1. _____ yes
- 2. _____ no

if yes, check the most appropriate items in order of importance (1,2,3) for which you would seek assistance if a problem should come up.

- a. _____ personal problem
- b. _____ help in course selection
- c. _____ help in selection of major
- d. _____ help with study techniques
- e. _____ help in selecting 4 year college or univ.
- f. _____ educational problem
- g. _____ vocational problem
- h. _____ financial problem
- i. _____ problem with parents
- j. _____ problem with teacher
- k. _____ problem with employer
- l. _____ sex problem
- m. _____ religious problem
- n. _____ racial problem
- o. _____ housing problem
- p. _____ transportation problem
- q. _____ physical health problem

(continued on page 5)

r. _____ mental health problem

s. _____ other _____

12. Do you have a problem now for which you would like assistance?

1. _____ yes

2. _____ no

if yes, check the items for which assistance is needed:

a. _____ physical health problem

b. _____ mental health problem

c. _____ husband/wife problem

d. _____ boyfriend/girlfriend problem

e. _____ parent/guardian problem

f. _____ educational problem

g. _____ vocational problem

h. _____ sex problem

i. _____ personal problem

j. _____ religious problem

k. _____ racial problem

l. _____ financial problem

m. _____ housing problem

n. _____ transportation problem

o. _____ other _____

13. Do you usually feel that older adults do not understand you?

1. _____ yes

2. _____ no

14. Do you usually feel that students your age do not understand you?

1. _____ yes

2. _____ no

15. Do you feel you will get a good education at ARJC?

1. _____ yes

2. _____ no

(continued on page 6)

if yes, check the most appropriate items in order of importance (1,2,3)

- a. _____ high quality instruction
- b. _____ good library facilities
- c. _____ numerous student activities
- d. _____ good classroom facilities
- e. _____ good counseling facilities
- f. _____ free time to study
- g. _____ no pressure from home
- h. _____ less daily pressure from teachers
- i. _____ less outward pressure for attendance
- j. _____ wide choice of courses
- k. _____ wide choice of majors
- l. _____ high personal motivation
- m. _____ other _____

16. Do you have a definite vocational goal?

- 1. _____ yes
- 2. _____ no

if yes, state goal _____

17. What course that you have taken, do you feel has been of greatest interest and value? _____

COUNSELING PROJECT QUESTIONNAIRE

I. Did you feel that when you planned your program during the summer you were helped to understand

YES NO

- How to use the ARJC Catalog _____
- How to use the Schedule of Classes _____
- The importance of prerequisites in planning a schedule _____
- Graduation requirements for ARJC _____
- Major requirements for the transfer school which you have selected _____
- The difference between a required course and an elective course _____
- How to locate your class rooms _____

II. Do you feel that the psychology, English, and mathematics courses in which you were placed are appropriate to your current level of achievement?

Are you concerned about the greater difficulty of college courses?

III. What sources of information did you find most helpful in planning your class program:

CHECK ONE

- ARJC Catalog _____
- 4 year college catalog _____
- friend _____
- orientation lecture _____
- discussion with ARJC counselor _____
- discussion with high school counselor _____
- other _____

IV. Rate the ARJC counselor who signed your green preregistration schedule:

CHECK TWO

- Friendly _____
- Unfriendly _____
- Interested _____
- Indifferent _____
- Busy _____
- Helpful _____
- Knowledgeable _____
- Lacked information _____

V. To whom will you go for help if a problem arises while you are a student at ARJC?

American River Junior College 9/65
NDEA Terminal Questionnaire

NAME _____ DATE _____
(first) (last) (middle)

Sex: (circle one) M F Age _____ Date of Birth _____
(mo., day, yr.)

1. Were you generally pleased with ARJC?

1. _____yes

2. _____no

If yes, check the appropriate items:

- a. _____pre-registration counseling
- b. _____registration
- c. _____course instruction
- d. _____post-registration counseling
- e. _____instructors
- f. _____counselors
- g. _____students
- h. _____facilities (student-center, library, classrooms, etc.)
- i. _____student activities
- j. _____other _____

If no, check the appropriate items that were of major concern to you:

- a. _____pre-registration counseling
- b. _____registration
- c. _____course instruction
- d. _____post-registration counseling
- e. _____instructors
- f. _____counselors
- g. _____students

(continued page 2)

-2-

h. ___ facilities (student-center, library,
classrooms, etc.)

i. ___ student activities

j. ___ other _____

2. Check the appropriate item (s) for reason (s) for withdrawal from
ARJC.

a. ___ graduation

b. ___ moving away from district

c. ___ military service

d. ___ lack of finances

e. ___ transportation problems

f. ___ disqualification

g. ___ change in vocational goals

h. ___ accepted full-time employment

i. ___ courses not available

j. ___ transfer to another school

k. ___ poor instruction

l. ___ poor counseling

m. ___ poor student activities

n. ___ other _____

3. Are you planning to transfer to another college or university?

1. ___ yes

2. ___ no

If yes, name college _____

4. Have you decided on a college major?

1. ___ yes

2. ___ no

If yes, state major _____

-3-

5. Do you plan to teach school?

1. ___yes

2. ___no

If yes, what grade level? _____

6. Are you withdrawing from ARJC to work?

1. ___yes

2. ___no

If yes, do you have a job?

1. ___yes

2. ___no

If yes, what kind of work? _____

7. Do you feel that your course work at ARJC has helped you toward your educational objectives?

1. ___yes

2. ___no

8. Do you feel that your counselor has been helpful?

1. ___yes

2. ___no

If yes, check the appropriate items in which your counselor was most helpful.

a. ___preplanning courses

b. ___help with educational problems

c. ___help with vocational problems

d. ___help with financial problems

e. ___help with withdrawal

f. ___help with instructors

g. ___help with marriage problems

h. ___help with problems concerning boy/girl
friend

(continued page 4)

-4-

- i. help with family problems
- j. help with study methods
- k. other _____

If no, check the appropriate items.

- a. lacked information
- b. lacked time
- c. was unfriendly
- d. was too permissive
- e. was too authoritarian
- f. was inconsistent
- g. was insincere
- h. was not trustworthy
- i. other _____

9. Did you ever seek help or advice from your counselor while at AR?

- 1. yes
- 2. no

10. Was your counselor available for giving help or advice when you needed it?

- 1. yes
- 2. no

11. How many units have you completed while at ARJC?

- 1. none
- 2. 1-6
- 3. 7-12
- 4. 13-20
- 5. 21-30
- 6. 31-40

(continued page 5)

-5-

7. ____41-50
8. ____51-60
9. ____over 60

12. Were you involved in any student activities while at ARJC?

1. ____yes
2. ____no

If yes, please list the activities

13. Were you involved in the work-study program while at ARJC?

1. ____yes
2. ____no

14. Were you employed off campus while attending ARJC?

1. ____yes
2. ____no

If yes, how many hours per week did you work?

1. ____ 1-10
2. ____11-20
3. ____21-30
4. ____31-40
5. ____over 40

What kind of work did you do?

Who was your employer?

15. Was your employer sympathetic with your desire to attend college?

1. yes

2. no

16. Were your parents (husband/wife) sympathetic with your desire to attend college?

1. yes

2. no

AMERICAN RIVER COLLEGE

Group _____

Form V

NDEA Counseling Project
Counselor Evaluation Sheet

Individual _____

Date _____

Name of Student _____

Still Enrolled _____

W/D Date _____

At the time of my last contact the above named student in my opinion:

Check most appropriate statement

Was quite immature in ability to make meaningful personal decisions when he entered AR and continues to be immature in this regard.

Was quite immature in ability to make meaningful personal decisions when he entered AR, but has grown in his ability to make, and take responsibility for personal decisions.

Was able to make meaningful personal decisions when he entered AR, but needed reassurance that his choices were acceptable and still does.

Was able to make meaningful personal decisions when he entered AR, but no longer needs reassurance about them.

Was very mature in ability to make meaningful personal decisions when he entered AR, but has made no noticeable growth in this area since matriculation.

Was very mature in ability to make meaningful personal decisions when he entered AR, and has continued to grow in this regard as his knowledge and experience have grown.

Do not know student well enough to evaluate on above.

Counselor _____

Date _____

AMERICAN RIVER COLLEGE

1967

SURVEY

FORMERLY ENROLLED STUDENTS

NAME _____

DATE _____

SEX (CIRCLE ONE) M F AGE _____

DATE OF BIRTH _____
(MONTH, DAY, YEAR)

1. WHEN DID YOU LAST ATTEND ARC? _____
(DATE)

2. DID YOU WITHDRAW DURING A SEMESTER? _____

DID YOU LEAVE AT END OF SEMESTER? _____

3. WILL YOU PLEASE CHECK BELOW THE REASON(S) FOR LEAVING --

_____ A. MOVED AWAY FROM DISTRICT

_____ B. MILITARY SERVICE -- DRAFTED

_____ C. MILITARY SERVICE -- VOLUNTEERED

_____ D. TRANSFERRED TO ANOTHER SCHOOL (_____)
NAME OF SCHOOL

_____ E. HEALTH

_____ F. MARRIED

_____ G. ACCEPTED FULL TIME EMPLOYMENT

_____ H. LACK OF FINANCES

_____ I. TRANSPORTATION PROBLEMS

_____ J. POOR SCHOLASTIC STANDING

_____ K. COMPLETED EDUCATIONAL OBJECTIVE

1. DEVELOP SKILLS FOR JOB _____ 2. EARNED CERTIFICATE _____ 3. A.A. DEGREE _____

_____ L. CHANGED VOCATIONAL GOALS

_____ M. COURSE(S) NOT AVAILABLE

_____ N. DISSATISFIED WITH INSTRUCTION

_____ O. DISSATISFIED WITH COUNSELING

_____ P. DISSATISFIED WITH STUDENT ACTIVITIES

_____ Q. DISSATISFIED WITH SELF

_____ R. OTHER _____

4. WHAT WAS YOUR MAJOR WHEN YOU LEFT ARC? _____

CVER

5. WHAT ARE YOU DOING NOW?

ATTENDING SCHOOL _____

HOMEMAKER _____

MILITARY SERVICE _____

EMPLOYED, PART TIME _____ AS A _____

EMPLOYED, FULL TIME _____ AS A _____

6. DO YOU FEEL THAT THE COURSE WORK WHICH YOU TOOK AT ARC IS HELPING YOU IN YOUR PRESENT ACTIVITY?

YES _____ NO _____ UNCERTAIN _____

7. DO YOU FEEL THAT THE COURSE WORK WHICH YOU TOOK AT ARC WILL HELP YOU IN THE FUTURE?

YES _____ NO _____ UNCERTAIN _____

8. DO YOU FEEL THAT YOUR ARC COUNSELOR WAS HELPFUL TO YOU?

YES _____

NO _____

IF YES, CHECK BELOW.

IF NO, CHECK BELOW.

I FEEL THAT MY COUNSELOR WAS HELPFUL WITH:

I FEEL THAT MY COUNSELOR:

- _____ A. SELECTION OF COURSES
- _____ B. EDUCATIONAL PROBLEMS
- _____ C. VOCATIONAL PROBLEMS
- _____ D. FINANCIAL PROBLEMS
- _____ E. WITHDRAWAL
- _____ F. INSTRUCTORS
- _____ G. MARRIAGE PROBLEMS
- _____ H. PROBLEMS CONCERNING BOY/GIRL FRIEND
- _____ I. FAMILY PROBLEMS
- _____ J. HELP WITH STUDY METHODS
- _____ K. OTHER _____

- _____ A. LACKED INFORMATION
- _____ B. LACKED TIME
- _____ C. WAS UNFRIENDLY
- _____ D. WAS TOO PERMISSIVE
- _____ E. WAS TOO AUTHORITARIAN
- _____ F. WAS INCONSISTENT
- _____ G. WAS INSINCERE
- _____ H. WAS NOT TRUSTWORTHY
- _____ I. DID NOT SEEK HELP FROM COUNSELOR
- _____ J. OTHER _____

9. WERE YOU GENERALLY PLEASED WITH ARC?

YES _____ NO _____

10. DO YOU PLAN TO RETURN?

YES _____ NO _____ IF YES, WHEN? _____ (DATE)

COMMENTS: _____

AMERICAN RIVER COLLEGE

SURVEY

1967

CURRENTLY ENROLLED STUDENTS

THANK YOU FOR ANSWERING THE CALL SLIP. FOR TWO YEARS WE HAVE BEEN STUDYING DIFFERENT APPROACHES TO JUNIOR COLLEGE COUNSELING UNDER AN NDEA GRANT. WE STARTED THE STUDY WITH A GROUP OF 1800 STUDENTS. YOU ARE ONE OF THE 800 WHO ARE STILL ENROLLED, THEREFORE YOUR OPINION IS VERY IMPORTANT TO THE CULMINATION OF THE STUDY. WILL YOU PLEASE REACT TO THE FOLLOWING QUESTIONS? THE INFORMATION WILL NOT BE PROCESSED UNTIL AFTER YOU HAVE LEFT THE COLLEGE IN JUNE.

NAME _____ DATE _____

SEX (CIRCLE ONE) M F AGE _____ DATE OF BIRTH _____
(MONTH, DAY, YEAR)

1. HAVE YOU BEEN IN CONTINUOUS ENROLLMENT SINCE YOU STARTED IN SEPTEMBER, 1965? DO NOT COUNT SUMMER '66.

YES _____ NO _____

2. HAVE YOU HAD THE SAME COUNSELOR SINCE YOU STARTED IN SEPTEMBER, 1965?

YES _____ NO _____

3. WAS THIS COUNSELOR YOUR PSYCHOLOGY INSTRUCTOR?

YES _____ NO _____

4. IF YOU CHANGED COUNSELORS, WAS IT

AT YOUR REQUEST _____

AT THE COUNSELOR'S REQUEST _____

BECAUSE COUNSELOR LEFT _____

OTHER _____

5. DO YOU FEEL THAT YOUR ARC COUNSELOR WAS HELPFUL TO YOU?

YES _____

NO _____

IF YES, CHECK BELOW.

IF NO, CHECK BELOW.

I FEEL THAT MY COUNSELOR WAS HELPFUL WITH:

I FEEL THAT MY COUNSELOR:

_____ A. SELECTION OF COURSES

_____ A. LACKED INFORMATION

_____ B. EDUCATIONAL PROBLEMS

_____ B. LACKED TIME

_____ C. VOCATIONAL PROBLEMS

_____ C. WAS UNFRIENDLY

_____ D. FINANCIAL PROBLEMS

_____ D. WAS TOO PERMISSIVE

_____ E. WITHDRAWAL

_____ E. WAS TOO AUTHORITARIAN

_____ F. INSTRUCTORS

_____ F. WAS INCONSISTENT

_____ G. MARRIAGE PROBLEMS

_____ G. WAS INSINCERE

_____ H. PROBLEMS CONCERNING BOY/GIRL FRIENDS

_____ H. WAS NOT TRUSTWORTHY

_____ I. FAMILY PROBLEMS

_____ I. DID NOT SEEK HELP FROM COUNSELOR

_____ J. HELP WITH STUDY METHODS

_____ J. OTHER _____

_____ K. OTHER _____

OVER

6. DO YOU FEEL THAT THE COURSE WORK WHICH YOU TOOK AT ARC WILL HELP YOU IN THE FUTURE?

YES _____ NO _____ UNCERTAIN _____

7. WERE YOU GENERALLY PLEASED WITH ARC?

YES _____ NO _____

8. WHAT DO YOU PLAN TO DO NEXT YEAR?

CONTINUE AT AMERICAN RIVER COLLEGE _____

TRANSFER TO A 4 YEAR SCHOOL _____

WHICH ONE? _____

ENTER MILITARY SERVICE _____

WHICH BRANCH? _____

GO TO WORK _____

WHICH FIELD? _____

BECOME A HOUSEWIFE _____

OTHER _____

COMMENTS _____

have you had the same counselor since Fall 1965? _____

If not, who is your new counselor? _____

If you have not been in continuous enrollment since Fall of 1965, why did you leave school? _____

What did you do while you were out of school? _____

What was your major in fall of 1965? _____

What is your major now? _____



AMERICAN RIVER COLLEGE

4700 COLLEGE OAK DRIVE, SACRAMENTO, CALIFORNIA 95841

KENNETH D. BOETTCHER, *President*
ROBERT E. ALLERTON, *Dean of Student Personnel*
DOUGLAS W. BURRIS, *Dean of Instruction*
C. MAX McDONALD, *Dean of Administration*

Dear _____:

As a former ARC student, we need your help. One of the best ways that a college can improve its services to its current and future students is to contact former students. We are especially interested in the reactions of the students who withdrew during a semester. By studying your reason for withdrawal and how you now feel about your experience at ARC, we may be able to make changes which will help other students.

Will you please take a few minutes, complete the enclosed survey sheet and return it to us in the enclosed envelope? All of us will be indebted to you for your help.

Very sincerely,

(Mrs.) Lorine A. Aughinbaugh
Coordinator of Counseling and
Admissions

LA:rc
Enclosures



AMERICAN RIVER COLLEGE

4700 COLLEGE OAK DRIVE, SACRAMENTO, CALIFORNIA 95841

KENNETH D. BOETTCHER, *President*
ROBERT E. ALLERTON, *Dean of Student Personnel*
DOUGLAS W. BURRIS, *Dean of Instruction*
C. MAX McDONALD, *Dean of Administration*

Dear _____:

As a former ARC student, your help is needed. One of the best ways that a college can improve its services to its current and future students is to contact former students. We are especially interested in students who left at the end of a semester but who did not continue with us long enough to graduate. Perhaps you left because you had accomplished the goal you set out to reach when you first registered, or because you moved out of the area, or because you transferred to another school. On the other hand, you may have left because we were not meeting your needs. By studying your reason for leaving, and how you now feel about your experience at ARC, we may be able to make changes which will help other students.

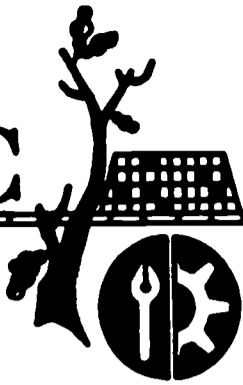
Will you please take a few minutes, complete the enclosed survey sheet and return it to us in the enclosed envelope? All of us will be indebted to you for your help.

Very sincerely,

(Mrs.) Lorine A. Aughinbaugh
Coordinator of Counseling and
Admissions

LA:rc
Enclosures

ARC



AMERICAN RIVER COLLEGE

4700 COLLEGE OAK DRIVE, SACRAMENTO, CALIFORNIA 95841

KENNETH D. BOETTCHER, *President*
ROBERT E. ALLERTON, *Dean of Student Personnel*
DOUGLAS W. BURRIS, *Dean of Instruction*
C. MAX McDONALD, *Dean of Administration*

Dear _____:

When you withdrew from American River College, you were kind enough to complete a terminal interview for us. We are continuing to study the information which was included on the form and would like to enlist your assistance again. We are particularly interested in your present employment or school activity and how you now feel about your ARC experience.

Will you please take a few minutes to complete the enclosed survey sheet and return it to us in the enclosed envelope? All of us will be indebted to you for your help.

Very sincerely,

(Mrs.) Lorine A. Aughinbaugh
Coordinator of Counseling and
Admissions

LA:rc
Enclosures

AMERICAN RIVER COLLEGE

Mail to:

CONFERENCE REQUEST

Instructor

Period

Student's Name

May _____, 1967
Date

You are requested to come to my office in the Administration Building across from the Counseling desk on May _____, 1967. before 4:30 p.m.

Mrs. Lorine A. Aughinbaugh
Coordinator of Counseling &
Admissions

| NAME | GROUP | BIRTH DATE | # SEM. | CUM. UNITS | CUM. UNITS COMPLTD. | CUM SPA. | 1 W/D SEM. | 1 LEFT SEM. | 1 RET. SEM. | STANDING | | | | | SCA | |
|----------------------|-------|------------|--------|------------|---------------------|----------|------------|-------------|-------------|----------|----|----|----|----|-----|----|
| | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | V | Q |
| ABANSON, MARY E. | 1 | 10/1/47 | 2 | 26.5 | 26.5 | 2.0 | -- | 2 | -- | 0 | 6 | -- | -- | -- | 30 | 81 |
| ABBOTT, PAMELA | 3 | 5/19/47 | 4 | 29.5 | 29.5 | 1.8 | -- | -- | -- | 0 | 0 | 0 | 6 | -- | 69 | 81 |
| ADAIR, KAREN | 1 | 9/26/47 | 4 | 57.0 | 57.0 | 2.6 | -- | -- | -- | 0 | 0 | 0 | 0 | -- | 69 | 30 |
| ADAMS, JACLYN J. | 1 | 9/14/47 | 3 | 5.0 | 0.0 | 0.0 | -- | 2 | 4 | 0 | 0 | -- | 6 | -- | 64 | 21 |
| ADORNO, JOSEPH | 1 | 12/30/47 | 4 | 65.0 | 65.0 | 2.5 | -- | -- | 6 | 0 | 0 | 0 | 0 | -- | 69 | 71 |
| AGIULAR, ISABEL J. | 1 | 6/25/47 | 4 | 61.0 | 61.0 | 2.2 | -- | -- | -- | 0 | 0 | 0 | 6 | -- | 38 | 41 |
| AIMES, KIP L. | 6 | 7/21/47 | 1 | 11.5 | 0 | 0 | 1 | -- | -- | 1 | -- | -- | -- | -- | 22 | 21 |
| ALEXANDER, JOANNE | 3 | 3/23/47 | 4 | 60.0 | 60.0 | 3.2 | -- | -- | -- | 0 | 0 | 0 | 0 | 0 | 95 | 81 |
| ALKONS, JAMES J. | 3 | 11/19/46 | 3 | 30.5 | 30.5 | 3.0 | -- | 2 | 4 | 1 | 0 | -- | 0 | 0 | 74 | 81 |
| ALLEN, ROBERT H. | 1 | 9/15/36 | 4 | 47.0 | 47.0 | 2.5 | -- | -- | -- | 1 | 7 | 0 | 6 | -- | 81 | 81 |
| ALVAREZ, JOSEPH T. | 2 | 5/27/47 | 1 | 11.5 | 11.5 | 1.5 | -- | 1 | -- | 1 | -- | -- | -- | -- | 43 | 81 |
| ALVAREZ, LOUISE L. | 4 | 3/14/47 | 1 | 8.5 | 0 | 0 | 1 | -- | -- | 1 | -- | -- | -- | -- | 43 | 81 |
| ANDERSON, ELEANOR J. | 4 | 3/18/38 | 4 | 39.0 | 39.0 | 2.8 | -- | -- | -- | 0 | 0 | 0 | 0 | 0 | 69 | 81 |
| ANDERSON, GREG C. | 2 | 1/20/47 | 1 | 12.5 | 0 | 0 | 1 | -- | -- | 1 | -- | -- | -- | -- | 68 | 81 |
| ANDERSON, JACKIE J. | 5 | 5/16/47 | 4 | 35.5 | 35.5 | 2.4 | 4 | -- | -- | 0 | 0 | 0 | 0 | -- | 12 | 81 |

| A | N | I | N | G | SCAT | | | BEG. COURSE F65 | END. COURSE S67 | 1 W/D REAS | 1 LEFT REAS | BEG. MAJ. F65 | REAL OR UNRL | END MAJ S67 | REAL OR UNRL | CURRENT STATUS | CHANGE IN ATTITUDE | /COURS. EVALUATION |
|---|---|---|---|---|------|----|-----|-----------------|-----------------|------------|-------------|---------------|--------------|-------------|--------------|----------------|--------------------|--------------------|
| | | | | | V | Q | SEX | | | | | | | | | | | |
| | | | | | 30 | 81 | F | 45 | 45 | -- | 28 | 20 | 4 | 04 | 0 | 10 | 3 | 4 |
| | | | | | 69 | 81 | F | 10 | 00 | -- | -- | 19 | 4 | 2 | 0 | 20 | 2 | 5 |
| 0 | | 0 | | | 69 | 35 | F | 45 | 45 | -- | -- | 22 | 3 | 21 | 4 | 20 | 1 | 4 |
| 0 | | | | | 64 | 11 | F | 60 | 63 | -- | 25 | 83 | 4 | 32 | 0 | 21 | -- | 4 |
| 0 | | 0 | | | 69 | 73 | M | 45 | 45 | -- | 13 | 70 | 4 | 83 | 4 | 20 | 1 | 5 |
| 0 | | 0 | | | 38 | 44 | F | 75 | 79 | -- | 13 | 13 | 4 | 21 | 4 | 20 | -- | 2 |
| | | | | | 22 | 28 | M | 54 | 54 | 08 | -- | 62 | 2 | 21 | 3 | 27 | 3 | 1 |
| 0 | | 0 | | | 95 | 82 | F | 66 | 63 | -- | 13 | 51 | 4 | 55 | 4 | 20 | 3 | 3 |
| 0 | | | | | 74 | 31 | M | 21 | 23 | -- | 08 | 50 | 4 | 04 | 0 | 20 | 4 | 3 |
| 7 | | 0 | | | 81 | 72 | M | 45 | 45 | -- | 13 | 84 | 4 | 72 | 4 | 20 | 3 | 3 |
| | | | | | 43 | 52 | M | 60 | 60 | -- | -- | 86 | 0 | 86 | 9 | -- | -- | 1 |
| | | | | | 43 | 1 | F | 66 | 66 | 27 | -- | 62 | 3 | 62 | 3 | -- | -- | -- |
| 0 | | 0 | | | 69 | 4 | F | 66 | 66 | -- | -- | 83 | 3 | 83 | 3 | 20 | 1 | 4 |
| | | | | | 68 | 52 | M | 60 | 60 | 6 | -- | 12 | 4 | 12 | 4 | -- | -- | -- |
| 0 | | 0 | | | 12 | 31 | F | 54 | 54 | -- | 10 | 51 | 1 | 88 | 1 | 1 | 3 | 5 |

MAJOR CURRICULUM FIELDS TO BE LISTED ON APPLICATION FOR ADMISSION

TRANSFER

| <u>Code</u> | <u>Major</u> |
|-------------|--|
| 10 | Business Administration |
| 30 | Engineering |
| 40 | Physical Education |
| 41 | Recreation |
| 42 | Medicine |
| 43 | Nursing |
| 44 | Dentistry |
| 45 | Pharmacy |
| 46 | Other |
| 50 | Art |
| 51 | English |
| 52 | Journalism |
| 53 | Dramatic Arts & wpeech |
| 54 | Spanish |
| 55 | French |
| 56 | German |
| 49 | Russian |
| 57 | Home Economics |
| 58 | Literature & Philosophy |
| 59 | Music |
| 70 | Life Science (includes Forestry) |
| 71 | Mathematics |
| 72 | Physical Science |
| 73 | Earth Science (Geology) |
| 80 | Anthropology |
| 81 | Economics |
| 82 | Geography |
| 83 | History & Political Science (Liberal Arts and General Education) |
| 84 | Psychology |
| 85 | Sociology |
| 01 | Transfer - Evening |
| 03 | Transfer - Undeclared Day Part-Time |
| 04 | Transfer - Undeclared Day Full-Time |

TERMINAL

| <u>Code</u> | <u>Major</u> |
|-------------|---------------------------------------|
| 11 | Bookkeeping & Accounting |
| 12 | Business Data Processing |
| 13 | General Office Training |
| 14 | Industrial Business Supervision |
| 15 | Real Estate |
| 16 | Retail Merchandising |
| 17 | Small Business Management |
| 19 | Legal Secretary |
| 20 | General Secretarial |
| 21 | General Business |
| 22 | Advertising |
| 23 | Agri - Bus. |
| 48 | Recreation Leadership |
| 60 | Dietician Aide (Food Service) |
| 61 | Home Management |
| 62 | Art |
| 63 | Language & Literature |
| 64 | Music |
| 65 | Theatre Arts |
| 66 | Interior Design & Furnishings |
| 67 | Home & It's Furnishings |
| 68 | Modern Women |
| 69 | Dressmaking & Alterations |
| 79 | Home Management |
| 74 | Life Science |
| 75 | Math & Physical Science |
| 76 | Tech - Nat. Rec. Mgmt. |
| 86 | General Education |
| 87 | Social Science |
| 88 | Institutional Group Work |
| 33 | Land Surveying |
| 90 | Auto Body Mechanics |
| 91 | Automated Electronic Control Tech. |
| 92 | Electronic Communications Tech. |
| 93 | Drafting Technology |
| 94 | Heavy Equipment Mechanics |
| 95 | Fire Science |
| 96 | TV Servicing |
| 98 | Horticulture |
| 97 | Const. Supv. & Inspection |
| 02 | Terminal Evening |
| 03 | Term - Undecl. Day Part Time |
| 04 | Term - Undecl. Day Full Time |
| | <u>CERTIFICATE PROGRAMS</u> |
| 05 | Auto Body |
| 06 | Welding |
| 07 | Real Estate |
| 08 | Industrial Supervision |
| 09 | Fire Science |
| 00 | Accounting |

CODING FOR CHANGE OF MAJOR

| <u>Rating Code</u> | | | |
|--------------------|-----|-----------|---|
| 9 | 1-4 | Large + | A rating of 9 indicates a major gain in realistic motivation. |
| | 2-4 | | |
| | 1-3 | | |
| 8 | 2-3 | Medium + | A rating of 8 indicates some gain in realistic motivation |
| | 0-4 | | |
| | 0-3 | | |
| 7 | 3-4 | Small + | A rating of 7 indicates small gain in realistic motivation |
| | 0-2 | | |
| | 1-2 | | |
| 6 | 4-4 | No gain + | A rating of 6 indicates the individual had and continues to have, a realistic goal with no change. |
| | 3-3 | | |
| | 4-0 | | |
| | 3-0 | | |
| 4 | 1-0 | No gain - | A rating of 4 indicates the individual had, and continues to have, an unrealistic goal or no goal at all. |
| | 2-0 | | |
| | 0-0 | | |
| | 2-2 | | |
| 3 | 4-3 | Small - | A rating of 3 indicates a small loss in the realism of the goal. |
| | 3-2 | | |
| 2 | 2-1 | Medium - | A rating of 2 indicates a larger loss in the realism of the goal. |
| | 4-2 | | |
| | 3-1 | | |
| 1 | 4-1 | Large - | A rating of 1 indicates a change from no stated goal or a realistic goal to an unrealistic goal. |
| | 0-1 | | |

1.0 APPLICATION TO THE SUPERINTENDENT OF PUBLIC INSTRUCTION - DIRECTOR OF THE DEPARTMENT OF EDUCATION OF THE STATE OF CALIFORNIA FOR FUNDS FOR GUIDANCE, COUNSELING, AND TESTING PROGRAMS UNDER THE PROVISIONS OF TITLE V, PART A, OF THE NATIONAL DEFENSE EDUCATION ACT OF 1958, (PUBLIC LAW 85-864), AS AMENDED.

Submitted by: American River Junior College

Address: 4700 College Oak Drive
Sacramento, California 95841

Telephone Number: 483-1341

Personnel: (1) Lorine A. Aughinbaugh
Coordinator of Counseling
American River Junior College

(2) Lorine A. Aughinbaugh
Coordinator of Counseling
American River Junior College

Date of Application: April 1, 1965

Certification and signature of the Chief Administrative Officer:

I hereby certify that, if this application is approved, the project described therein with any approved amendments will be carried on in accordance with the specifications of the application and the regulations contained in the Manual of Information and Instructions on Applications for Funds, Title V-A, National Defense Education Act of 1958 (Public Law 85-864) for the 1965-66 Fiscal Year.

Kenneth D. Boattcher
Superintendent

2.0

WHEREAS, the Congress of the United States, by Title V, Part A, of the National Defense Education Act of 1958 (Public Law 85-864) has declared it to be a national responsibility to provide financial assistance to the schools of the States in the guidance, counseling, and testing of secondary school youth, and

WHEREAS, pursuant to said Title and Act, funds have been made available to the State of California for reallocation to school districts and offices of county superintendents of schools within the State in accordance with agreements with said districts and offices for the purpose of improving and strengthening guidance, counseling, and testing services to secondary school youth, and

WHEREAS, this governing board desires to avail itself of the opportunity for such financial assistance,

NOW THEREFORE, be it resolved that George A. Rice its Assistant Superintendent-Business is hereby authorized and directed to prepare and submit an application for participation in said program of financial assistance and to prepare and submit any and all reports required by the State of California or the Government of the United States in the administration of said program, and

BE IT FURTHER RESOLVED that said district officer is hereby authorized and directed to expend or cause the expenditure of funds of this district for the aforesaid purpose in amounts agreed to pursuant to said program, and in accordance with applicable Federal and State laws and regulations.

I hereby certify the foregoing to be a full, true, and correct copy of a resolution duly adopted by the governing board of the American River Junior College District of California at a regularly scheduled meeting of said board held at American River Junior College on June 7, 1962.

Kenneth D. Boettcher
Secretary, Governing Board

3.0 Guidance Program Objectives

3.1 The basic objective of the guidance program at American River Junior College is to help implement the guiding philosophy of the institution. This philosophy expresses a belief "in the intrinsic worth of the individual" and a belief that "education in a free society should provide training skills appropriate to the individual's abilities, and an environment in which to develop those attitudes toward life and society which result in a higher degree of mental, emotional, and social maturity."

The Board of Trustees has approved and financially supports a guidance program which makes it possible for every student to be assigned to a credentialed counselor. The responsibilities assigned to the counselor by the Board of Trustees include the following:

- a) Study the needs, interests, abilities, achievements, and aptitudes of each counselee in order to assist the college in fulfilling its obligations to the students.
- b) Inform students of the opportunities open to them in college and community.
- c) Interpret test results to counselees.
- d) Assist each counselee to plan a long-term program in harmony with his potentialities and opportunities.
- e) Prepare and keep up to date, a cumulative counseling record for each counselee.
- f) Relay to instructors pertinent information regarding counselees.
- g) Periodically analyze the achievement records of each counselee and initiate interviews, follow-up, and remedial procedures where appropriate.
- h) Counsel with students who come for help with personal, social, vocational or educational problems.
- i) Cooperate in developing an effective occupational information service for students.
- J) Make referral recommendations when deemed advisable.

3.2

The tremendous increase in junior college enrollment and the shortage of qualified guidance personnel has forced many colleges into more and more group processes in counseling. The immediate objective of the American River guidance program is to launch a two year study beginning in the summer of 1965 to determine if the addition or substitution of group processes at the junior college level is more or less effective than individual counseling.

Method to be followed:

- a) Beginning in the summer of 1965, 10% of all new students will be processed and handled until withdrawal or graduation by individual counseling only - this will include:

1/2 hour individual planning session in summer
no orientation in psych classes (both 50 & 1A to be used)
no recommendation by counselor for
group counseling in
study skills
vocational selection
personal problems

These areas will be handled on an individual basis as time permits.

(Psych 70 will be limited to 120 students - all other candidates will be processed into regular "50" classes and provided individual counseling.)

All scheduling on individual basis.

- b) Also beginning in the summer of 1965, 10% of all new students will be processed and handled until withdrawal or graduation with intensive group counseling - (Personal individual counseling will not be refused, if requested, but multiple counseling groups will be strongly recommended.) This will include:

orientation group
small group scheduling
orientation in psychology classes (50,1A,70 to be used)
urging toward Psych 51 and Psych 85 when needed.
experience of all students in 3 group sessions as part of psychology class with strong recommendation to continue in a multiple group second semester.

- c) Other 80% of students will be processed as at present.
- d) Follow up of all students will be conducted for four semesters - report and summary to be written following spring semester '67.

- 3.3. Financial assistance is needed immediately, April-June 30, 1965
- a) to develop the criteria for evaluation of the proposed study,
 - b) to develop the forms and questionnaires to be used,
 - c) to select tests, if appropriate, to be administered before and after the group or individual experience
 - d) to plan the collection, storing and ultimate use of data within the limitations of district owned data processing equipment,
 - e) to develop flow charts so that control can be maintained at all times of students involved in the experimental groups,
 - f) to develop instruction sheets and guides for the staff members involved in the project.

4.0 Proposed Project

| <u>Project Activities</u> | <u>Project Objectives</u> | <u>Kinds of Information to be Obtained</u> |
|---|--|--|
| a) Develop criteria for evaluation | to study individual versus group processes in guidance | No. of withdrawals; no. of graduates; no. of students reaching goals stated at time of entrance; stability of goals; GPA'S, attitude of students, etc. |
| b) Develop forms and questionnaires to be used in project | | At registration - at point of termination - either withdrawal or graduation |
| c) Selection of appropriate tests | | Ability, personality and motivational tests to be considered |
| d) Develop personnel data cards for all students in both groups to be machine processed | | Biographical, achievement, and special information |
| e) Develop control charts | | Special scheduling and registration each semester may be necessary for the experimental groups. |
| f) Develop guides and manual for staff participants | | The success of the project will depend upon the completeness of the orientation and support of participating staff members. |

4.1 Expansion of proposed project

People to be used -

Counselors:

Dr. Parks Whitmer
Mrs. Nancy Walker
Mr. Jack Fiedler
Miss Liallian Gallichio
Mr. Chuck Borowiak
Mr. Dick Parker
Mrs. Lorine Aughinbaugh

Clerical:

Mrs. Bettie Hertzler
1 to be employed if necessary

Time Table -

All preparatory work must be done before July 1, 1965
Summer counseling for students new to the college
will begin on July 6, 1965

5.0 Current Guidance Personnel

| Names of Guidance Personnel Assigned to Pupil Counseling and/or Supervision of Pupil Counseling | (A) Number of Scheduled Counseling Periods | (C) Number of Scheduled Teaching Periods | (D) Type of Credential |
|---|---|---|---------------------------|
| Lorine Aughinbaugh | 40 | -- | PP - Life |
| Project Director | | | |
| Charles Borowiak | 12 | 6 | PP - 66 (B) |
| Harry Cole | 12 | 6 | PP - 66 (E) |
| Ernest Dahl, Ed.D. | 13 | 5 | PP - 67 (B) |
| Jack Fiedler | 13 | 5 | PP - 66 (A) |
| Clarence Gallacher | 12 | 6 | PP - 67 (A) |
| Lillian Gallichio | 13 | 5 | PP - 66 (B) |
| Jeanne Good, Ph.D. | 13 | 5 | PP Sp65 (C) |
| Dan Lefkow | 13 | 5 | PP - 69 (A) |
| Glenn Mapes | 12 | 6 | PP - 69 (A) |
| Geraldine McCracken | 12 | 6 | PP - 66 (A) |
| Herbert Milikien | 12 | 6 | PP - 66 (E) |
| Mary Lou Neasham | 13 | 5 | PP - 66 (A) |
| Richard Parker | 13 | 5 | PP - 68 (A) |
| Alfred Phillips | 12 | 6 | PP - 66 (B) |
| Elizabeth Robinson | 12 | 6 | PP Sp.65(C) |
| Janeth Shadley | 5 | 10 | PP - 66 (B) |
| Will Solomon | 11 | 7 | PP - 66 (A) |
| Nancy Walker | 12 | 6 | PP - 67 (A) |
| Audrey Weills | 12 | 6 | PP - 67 (A) |
| Parks Whitmer, Ed.D | 5 | 10 | PP - 66 (A) |
| Dan Lyles | 8 | 2 | PP - 65 (A) |
| Division Chairman, Psychology | | | |
| TOTAL | 280 | 124 | |

5.1 Counselor-student ratio

5.11 Number of full-time equivalent positions assigned to counseling and/or supervision of counseling 14 2/3

5.12 Enrollment in College 3861

5.13 Counselor-student ratio supported by local funds 1:270

5.14 Qualifying counselor-student ratio 1:600

5.2 Clerk-student ratio supported by local funds only

5.21 Number of adult clerical workers paid by local funds 2 2/3

5.22 Clerk-student ratio supported by local funds 1:1455

5.23 Number of adult clerical workers paid by NDEA funds none

6.0 Budget Summary

| 1 1964-65 Budget | 2 Budget Categories | 3 Project Budget | 4 Local Funds | 5 Request. Funds |
|------------------------|---|------------------------|---------------------|------------------------|
| \$80,880.00 | Professional Staff | \$3208.00 | \$1033.00* | \$2175.00 |
| | Salaries Part-time Consultant | 300.00 | 300.00 | |
| 10,542.00 | Clerical Staff | 525.00 | 275.00 | 250.00 |
| 1,049.00 | Test Materials | 468.00 | 350.00 | 118.00 |
| 1,298.00 | Materials Test Services | | | |
| \$93,769.00 | | \$4501.00 | \$1958.00* | \$2543.00 |
| <u>Total</u> | <u>Project Beginning and Ending Dates: April 15-June 30</u> | <u>Total</u> | <u>Total</u> | <u>Total</u> |

6.1 Budget Computation

| Column 2 | Column 3 | Column 4 | Column 5 |
|--|-----------|-----------|-----------|
| Professional Staff Salaries 435 Hours at \$5.00 per hour | \$3208.00 | | \$2175.00 |
| Professional Staff Salaries 3 weeks of staff time (6/12-6/30) | | \$1022.00 | |
| IBM Consultant 2 weeks salary | 300.00 | 300.00 | |
| Clerical Staff 2 weeks part time and 90 hours student help | 525.00 | | 250.00 |
| | | 275.00 | |
| Test Materials 700 IPAT - MATS | 468.00 | | 118.00 |
| 700 Allport-Study of Values; Wrenn's Study Skills and, Mooney Problem Check List | | 350.00 | |

** Additional local funds will be expended after July 1, 1965 to cover the professional, clerical, and test service expenditures which will occur when the project actually starts:

| | |
|--|-------------------|
| Estimate Professional Staff 4 members - 2 weeks = | \$1,200.00 |
| Clerical Staff 1 1/2 clerks - 2 weeks = | 180.00 |
| Testing Services | 80.00 |
| | <u>\$1,460.00</u> |

1.0 APPLICATION TO THE SUPERINTENDENT OF PUBLIC INSTRUCTION - DIRECTOR OF THE DEPARTMENT OF EDUCATION OF THE STATE OF CALIFORNIA FOR FUNDS FOR GUIDANCE, COUNSELING, AND TESTING PROGRAMS UNDER THE PROVISIONS OF TITLE V, PART A, OF THE NATIONAL DEFENSE EDUCATION ACT OF 1958 (PUBLIC LAW 85-864), AS AMENDED.

Submitted by: Los Rios Junior College District

Address: 2011 Arden Way
Sacramento, California 95825

Telephone Number: 927-3881

Personnel: (1) Full name, title and address of persons in charge of guidance services:

A -- Lorine Aughinbaugh, Coordinator of Counseling,
American River Junior College
4700 College Oak Drive
Sacramento 41, California

Full name, title and address of the guidance persons assigned to direct the Title V-A project.

A -- Mrs. Lorine Aughinbaugh
Coordinator of Counseling
American River Junior College

Date of Application: February 28, 1966

Certification and signature of the Chief Administrative Officer:

I hereby certify that, if this application is approved, the project described therein with any approved amendments will be carried on in accordance with the specification of the application and the regulations contained in the Manual of Information and Instruction on Application for Funds, Title V-A, National Defense Education Act of 1958 (Public Law 85-864) for the 1966-67 Fiscal Year.

George A. Rice, Jr.
Assistant Superintendent - Business
Los Rios Junior College District

RESOLUTION

2.0 WHEREAS, the Congress of the United States, by Title V, Part A, of the National Defense Education Act of 1958 (Public Law 85-864) has declared it to be a national responsibility to provide financial assistance to the schools of the States in the guidance, counseling, and testing of youth in the elementary and secondary schools and junior colleges, and

WHEREAS, pursuant to said Title and Act, funds have been made available to the State of California for reallocation to school districts and offices of county superintendents of schools within the State in accordance with agreements with said districts and offices for the purpose of improving and strengthening guidance, counseling, and testing services to the youth in these schools, and

WHEREAS, this governing board desires to avail itself of the opportunity for such financial assistance,

NOW, THEREFORE, be it resolved that George A. Rice, Jr., its Assistant Superintendent-Business, is hereby authorized and directed to prepare and submit an application for participation in said program of financial assistance and to prepare and submit any and all reports required by the State of California or the Government of the United States in the administration of said program, and

BE IT FURTHER RESOLVED that said district officer is hereby authorized and directed to expend or cause the expenditure of funds of this district for the aforesaid purpose in amounts agreed to pursuant to said program, and in accordance with applicable Federal and State laws and regulations.

I hereby certify the foregoing to be in full, true and correct copy of a resolution duly adopted by the governing board of the Los Rios Junior College District of California at a regularly scheduled meeting of said board held at Sacramento, California on February 16, 1966.

Walter T. Coultas, Superintendent
Los Rios Junior College District and
Secretary, Los Rios Junior College
District Board of Trustees

ASSURANCE OF COMPLIANCE

(Due to the passage of the Civil Rights Act of 1964, the following statement must be included with each NDEA Title V-A application.)

The Assurance of Compliance with Title VI of the Civil Rights Act of 1964, date March 10, 1965, which this school district (or county office) has on file in the Fiscal Office, State Department of Education, applies to the application submitted herewith. (Registration No. 14-8123.)

(Signed) George A. Rice, Jr.

Assistant Superintendent-Business

Los Rios Junior College District

February 28, 1966

Date

3.0 Guidance Program Objectives (Junior College)

3.1 Broad Objectives of Guidance Program:

The stated objectives of the Los Rios Junior College District counseling and guidance program are: "Vocational, education, personal, and health counseling directed toward personal efficiency, identification of aptitudes, and self realization and realistic self-appraisal by students." (This is an excerpt from the educational policy statement adopted by the Board of Trustees of new Los Rios Junior College District on June 30, 1965.)

The long-range objectives of the Los Rios counseling program include not only more effective on-campus counseling, but an increased amount of group counseling at the high school level, and closer integration of high school and four-year college counseling with that of the junior colleges.

3.2 Immediate Objectives of Guidance Program for 1966-67:

To develop special programs of counseling and guidance which will attract a maximum number of high school graduates with ability to profit by college attendance to the colleges of the Los Rios district; and to assist students to succeed, once they have entered junior college, by improved programs of counseling.

The proposed project covered by this application would test new pilot programs in the areas of group and individual counseling and specialized counseling for probationary students; and stimulate stepped-up collaboration with feeder high schools of the district in channeling able but non-college-oriented students to junior college.

A related objective will be the development of a large-scale program of student financial aid under the Higher Education Act of 1965. We have applied for Federal Aid for (1) Educational Opportunity Grant, (2) NDEA Student loan, and (3) college work study programs, and these must be integrated with the counseling and guidance program in 1966-67.

3.3 Specific Objectives of the Proposed Project:

The American River Junior College study, a continuation of a project assisted by an earlier NDEA grant in Spring, 1965, is aimed at testing the efficacy of group versus individual counseling methods in comparable groups of students. The final results will influence the future counseling program in all colleges in the Los Rios District.

Summary - The specific objective of this project is:

To improve counseling methods by testing types of counseling situations (such as individual versus group counseling) as they actually work with different types of students. The proposed project has built in an objective means of evaluating the results obtained (It is a continuation of pilot studies financed by NDEA in the past.)

Relationship to Major Purposes of NDEA Title VI:

- 1) To advise students regarding courses of study, particularly in junior college, which are best suited to their abilities, aptitudes and skills - the project involves counseling of this type.
- 2) To advise students as to the type of educational program they should pursue, the vocation they should train for and enter, and job opportunities in various fields; the project involves counseling in this area.

The project will raise to a higher level than ever before the ability of district counseling and guidance personnel to:

- 1) Impress on the student, both in college and even before he graduates from high school the importance of understanding educational and career opportunities and requirements;
- 2) Help the student to achieve as much as possible both in college and in the development of his career or livelihood;
- 3) Interpret student needs for expanded or modified curricula or educational activities.

4.0 Description of the Project

A - APJC Study of Individual versus Group Counseling

Background

On April 1, 1965 an application was submitted by American River Junior College for funds to develop a counseling project which would study individual versus group processes in guidance. A grant of \$2,543 was made under Title V, Part A, of the National Defense Education Act of 1958 (Public Law 85-864).

During May and June, 1965, staff was employed to work out the philosophy, approach, staffing, forms, etc. to be used in July when a two-year study of individual versus group counseling was to be started.

The actual project began the week of July 19-23, 1965, when 360 students, new to the college, were scheduled for half-hour individual appointments with counselors. Purpose of the appointments was to answer students' questions about the college and to work out suggested study lists for the fall semester. The following week, July 26-30, an additional 360 students, also new to the college and roughly comparable in makeup to the first 360, were scheduled for group orientation to the college and for group planning of study lists. The project was organized so that those who started with individual counseling will continue with this type of assistance until they leave or graduate, after four or five semesters. Those who started with the group process are and will be handled as members of groups for all counseling activities.

During July, the 720 students were given Forms #1 and 2 (see appendix) to complete. The material from Form 1 was set up so that it could be card punched for machine scoring. Form 2 was developed to ascertain key student attitudes particularly about counseling, upon entry to college.

In September, 1965, at the time of registration, the students in the project were given Form 3 in an attempt to get an evaluative reaction to the counseling experience they had during July.

These sheets were not signed but were color coded so that replies from students having had individual or group counseling could be separated conveniently.

A terminal questionnaire was also given to each student as a part of his final interview. An effort is being made now to reach the few students who did not bother to "process out". (See Form 4, Appendix)

During the first semester each student in the project was given the following tests: California Psychological Inventory, Mooney Problem Check List, SRA Verbal Form, Cooperative General Culture Test, Form A, Gordon's Survey of Interpersonal Values, Allport-Vernon-Lindzey Study of Values, Kuder - both Vocational and Personal.

The tests are now being scored and the results returned to the counselors to use in either the individual or the group counseling process.

No funds were requested for the year 1965-66 for the project because it was felt that this would be a year of data collecting. However, a good deal of time has been spent by the project director, and the clerical staff in her office, in the checking of forms, administering and scoring of tests, locating students, and storing of materials in preparation for the tabulation and statistical analysis of the data during 1966-67.

Needs for 1966-67

Financial assistance from NDEA will be needed during 1966-67 to take the following additional steps:

- A. Record test information and develop a test profile for each student.
- B. Record course units and grade point averages for each student.
- C. Key punch all data in preparation for data processing.
- D. Work with data processing and statistical consultants to determine most effective way of analyzing the data, to determine whether differences exist between the two methods of counseling in terms of successful adjustment in junior college.
- E. Contact students who left at end of the 2nd, 3rd, and 4th semesters to complete terminal interview information.
- F. Conduct one Saturday workshop in the fall and one in the spring for the counselors involved in the individual and group counseling. The time spent will be compensated at the regular district extra-duty rate.
- G. Write a preliminary report in June, 1967, based upon data collected and processed to date. The study itself cannot be concluded and the final report written until after the close of the fifth semester - which means Spring, 1968.

(Many students attend junior college for five semesters before graduating or transferring to a senior institution. As the evaluative criterial include either continuation in college and the major chosen, or successful job placement, the continuation of the study during the fifth semester becomes essential.)

It is anticipated that an application for additional funds to complete the project will be made for fiscal year 1967-68.

4.2 Outline of Proposed Project

Part A-ARJC Study of Individual versus Group Counseling

| <u>Column 1</u> <u>Project Activities</u> | <u>Column 2</u> <u>Project Objectives</u> | <u>Column 3</u> <u>Kinds of Evidence to be</u> <u>obtained for evaluation</u> <u>purposes</u> |
|--|--|--|
| Record test information and develop a test profile for each student. - - - | To evaluate back- grounds of two groups of students. - - - | Test scores of the two groups to be compared (individual versus group counseling.) - - - |
| Key punch all data to prepare for processing. - - - | To facilitate cross-tabulations. - - - | Statistical comparison of two groups while holding variable factors constant. - - - |
| Analyze data in detail. - - - | To evaluate results. - - - | To test comparative results, statistically. - - - |
| Follow up study of students who left college before completion. - - - | To secure informa- tion on dropouts. - - - | To compare dropout group with those who stayed in college. - - - |
| Conduct two work- shops for counselors. - - - | To train those work- ing with subjects. - - - | - - - |
| Write a preliminary report on findings as of June, 1967. - - - | To make results of study widely available for other colleges. - - - | - - - |

5.0 Current Counseling Guidance Personnel

| | A | B | C |
|---|-------------------------------------|-----------------------------------|---------------------------------|
| Names of Guidance Personnel Assigned to Student Counseling and/or Supervision of Student Counseling | Scheduled Counseling Time in F.T.E. | Scheduled Teaching Time in F.T.E. | Type of Credential ² |
| <u>American River Junior College</u> | | | |
| Project Director: | | | |
| *Lorine Aughinbaugh Coordinator of Counseling | 1.0 | 0.0 | A |
| Other Personnel (Counselors) | | | |
| Dr. Parks Whitmer Division Chairman-Counseling | .4 | .6 | A |
| *Charles Borowiak | .4 | .6 | B |
| Harry Cole | .4 | .6 | B |
| Ernest W. Dahl | .4 | .6 | B |
| *Frances Dressler | .4 | .6 | C |
| John C. Fiedler | .4 | .6 | A |
| *Clarence Gallacher | .4 | .6 | A |
| *Lillian Gallichio | .4 | .6 | A |
| *Jeanne Good | .4 | .6 | C |
| Mary Ellen Hutchinson | .2 | .8 | B |
| Andrew Kadie | .4 | .6 | A |
| Daniel Lefkow | .4 | .6 | A |
| Glenn C. Mapes | .4 | .6 | A |
| Clarence Martin | .4 | .6 | C |
| *Joseph Martin | .4 | .6 | B |
| Geraldine McCracken | .4 | .6 | A |
| *Mary Lou Neasham | .4 | .6 | A |
| Richard Norman | .4 | .6 | B |
| *Richard E. Parker | .4 | .6 | A |
| *Alfred W. Phillips | .4 | .6 | B |
| *Elizabeth Robinson | .4 | .6 | B |
| Janeth Shadley | .4 | .6 | B |
| Will Solomon | .4 | .6 | A |
| *Nancy Walker | .4 | .6 | A |
| Mavis Wright | <u>.4</u> | .6 | A |
| TOTAL (Column A) | 10.8 | | |

Scheduled time for pupil counseling or supervision of pupil counseling at the junior college, Fall semester.

2 Types of Guidance Credentials General Pupil Personnel Services Credential:

- A. Clear
- B. Postponement

Designated Services Credential, Pupil Personnel Specialization:

- C. Clear
- D. Postponement

*Counselors in NDEA Project

6.0 Budget Summary (Junior College)

| 1966-67 Budget** | Budget Categories | 3 Project Budget | 4 Local Funds | 5 Requested Funds |
|---------------------|---|------------------------|---------------------|-------------------------|
| 275,000 | Professional Staff | 37,282 | 7,770 | 29,512.00 |
| - - - - | Salaries | | | |
| | Part-time Consultant* | 1,220 | 610 | 610.00 |
| 33,264 | Clerical Staff | 9,097.50 | 3,015 | 6,082.50 |
| - - - - | Professional | 450.00 | 75 | 375.00 |
| - - - - | Travel | - - - - | - - - - | - - - - |
| | Purchase | - - - - | - - - - | - - - - |
| | Equip- ment | - - - - | - - - - | - - - - |
| - - - - | Rental | - - - - | - - - - | - - - - |
| | Test Materials | - - - - | - - - - | - - - - |
| | Test Services | - - - - | - - - - | - - - - |
| | Material- ials | | | |
| | Educ-Occupational Information | - - - - | - - - - | - - - - |
| Total | Project Beginning July 1, 1966 and Ending Date June 30, 1967 | 48,049.50 | 11,470.00 | 36,579.50 |

* One-half of the consultant's fee up to a maximum of \$50.00 per day and one-half of the consultant's travel expenses may be paid from Title V-A funds.

** Estimated from 1965-66 actual figure.

6.1-A BUDGET Computation, American River Junior College

Budget Summary, ARJC Study, 1966-67

| <u>Budget Categories</u> | <u>Project Budget</u> | <u>Local Funds</u> | <u>Requested Funds</u> |
|---|-----------------------|---|------------------------|
| Professional Staff | 3,902.00 | 2,372.00 | 1,530.00 |
| C & G Part-Time Consultant | 720.00 | 360.00 | 360.00 |
| Salaries: Clerical Staff | 5,597.50 | 2,415.00 | 3,182.50 |
| <u>Budget Computation:</u> | | | |
| <u>Professional Staff Salaries - Total</u> | 3,902.00 | | |
| 1/6 Release time - Project Director* | | 2,372.00 | |
| Two Training Workshops for project counselors (10 counselors @ 36.00 each) | | | 720.00 |
| Report Writing & Analysis Time (1.35 x 6.00 per hour) | | | 810.00 |
| <u>Consultant - Part-time</u> | 1,440.00 | | |
| IBM Consultant (10 days 36.00 per day) | | 360.00 | 360.00 |
| Statistical Consultant (10 days 36.00 per day) | | 360.00 | 360.00 |
| <u>Clerical Staff Time</u> | 5,597.50 | | |
| Clerk II (new position) | 4,380.00 | 2,190.00 | 2,190.00 |
| Student Help (Reg.) (Student Help-Work Study) (1 hour per project student at \$1.25 per hour) | 487.50 | 225.00 (450.00) | 262.50 |
| IBM Operator (40 hours - \$4.00 per hour) | 160.00 | | 160.00 |
| Key Punch Operator (80 hours-\$1.50 per hour) | 120.00 | | 120.00 |
| TOTAL | 10,489.50 | 5,507.00 (+ 450.00) work study | 4,982.50 |

* District will have one additional counselor beyond normal growth load to assist ARJC coordinator of counseling (releasing 1/6 of her time from other duties) and to further lower the counselor-student ratio. The \$2,372 figure represents portion of additional counselor's salary to be used to offset released time of coordinator of counseling.

NOTE: Travel, equipment and materials to be supplied by college.

APPLICATION TO THE SUPERINTENDENT OF PUBLIC INSTRUCTION--
DIRECTOR OF THE DEPARTMENT OF EDUCATION OF THE STATE OF
CALIFORNIA FOR FUNDS FOR GUIDANCE, COUNSELING, AND TESTING
PROGRAMS UNDER THE PROVISIONS OF TITLE V, PART A, OF THE
NATIONAL DEFENSE EDUCATION ACT OF 1958 (PUBLIC LAW 85-864), AS
AMENDED.

1.0 Identification of Applying Agency:

Level Covered by Application:

Junior College X

Submitted by: Los Rios Junior College District

Address: 2011 Arden Way
Sacramento, California 95825

Telephone Number: 484-8291

Personnel: (1) Full name, title and address of persons in charge
of guidance services:

A--Lorine Aughinbaugh, Coordinator of Counseling,
American River College, 4700 College Oak Drive,
Sacramento, California 95841

B--Paul Gould, Coordinator of Counseling,
Sacramento City College, 3835 Freeport
Boulevard, Sacramento, California 95822

(2) Full name, title and address of the guidance persons
assigned to direct the Title V-A project:

Part A--Mrs. Lorine Aughinbaugh (See above)

Part B--Paul Gould (See above)

Date of Application: February 28, 1967

Certification and signature of the Chief Administrative Officer:

I hereby certify that, if this application is approved, the
project described therein with any approved amendments will be carried
on in accordance with the specification of the application and the
regulations contained in the Manual of Information and Instruction on
Applications for Funds, Title V-A, National Defense Education Act of
1958 (Public Law 85-864) for the 1967-68 Fiscal Year.

George A. Rice, Jr.
Assistant Superintendent-Business
Los Rios Junior College District

RESOLUTION

2.0 WHEREAS, the Congress of the United States, by Title V, Part A, of the National Defense Education Act of 1958 (Public Law 85-864) has declared it to be a national responsibility to provide financial assistance to the schools of the States in the guidance, counseling, and testing of youth in the elementary and secondary schools and junior colleges, and

WHEREAS, pursuant to said Title and Act, funds have been made available to the State of California for reallocation to school districts and offices of county superintendents of schools within the State in accordance with agreements with said districts and offices for the purpose of improving and strengthening guidance, counseling, and testing services to the youth in these schools, and

WHEREAS, this governing board desires to avail itself of the opportunity for such financial assistance,

NOW THEREFORE, be it resolved that George A. Rice, Jr., its Assistant Superintendent-Business, is hereby authorized and directed to prepare and submit an application for participation in said program of financial assistance and to prepare and submit any and all reports required by the State of California or the Government of the United States in the administration of said program, and

BE IT FURTHER RESOLVED that said district officer is hereby authorized and directed to expend or cause the expenditure of funds of this district for the aforesaid purpose in amounts agreed to pursuant to said program, and in accordance with applicable Federal and State laws and regulations.

I hereby certify the foregoing to be a full, true and correct copy of a resolution duly adopted by the governing board of the Los Rios Junior College District of California at a regularly scheduled meeting of said board held at Sacramento, California on February 15, 1967.

Walter T. Coultas, Superintendent
Los Rios Junior College District and
Secretary, Los Rios Junior College
District Board of Trustees

2.1

ASSURANCE OF COMPLIANCE

The Assurance of Compliance with Title VI of the Civil Rights Act of 1964, date March 10, 1965, which this school district (or county office) has on file in the Fiscal Office, State Department of Education, applies to the application submitted herewith. (Registration No. 14-8123.)

(Signed) George A. Rice, Jr.

Assistant Superintendent-Business

Los Rios Junior College District

February 28, 1967

3.0 Guidance Program Objectives (Junior College)

3.1 Broad Objectives of Guidance Programs:

The stated objectives of the Los Rios Junior College District counseling and guidance program are: "Vocational, educational, personal efficiency, identification of aptitudes, and self-realization and realistic self-appraisal by students." (This is an excerpt from the educational policy statement adopted by the Board of Trustees of the Los Rios Junior College District on June 30, 1965.)

3.2 Immediate Objectives of Guidance Program for 1967-68:

To develop special programs of counseling and guidance which will attract a maximum number of high school graduates with the ability to profit by college attendance to the colleges of the Los Rios District; and to assist students to succeed, once they have entered junior college, by improved programs of counseling and instruction.

3.3 Specific Objectives of the Proposed Project:

A. The American River College study is as follows:

1. The completion of a two year study begun in the summer of 1965 aimed at testing the efficacy of group versus individual counseling methods in comparable groups of students. The final results will influence the establishment of counseling programs in the new colleges planned for the district and the continuation or elimination of procedures in on-going programs.

4.0 Description of the Projects

A.1 ARC Study of Individual versus group Counseling

Background:

On April 1, 1965 a grant of \$2,543 was made under Title V-Part A, of the National Defense Education Act of 1958 (Public Law 85-864) to develop a counseling project which would study individual versus group processes in guidance. Staff was employed during May and June, 1965 to work out the philosophy, approach, staffing, forms, etc., to be used during the two year study (1965-67).

No funds were requested for the school year 1965-66 for it was felt that the regular staff could absorb the extra work and time involved in processing and counseling students in parallel programs.

Funds were requested for 1966-67 and a federal grant of \$3,570 was approved and made under Title V, Part A, of the National Defense Education Act of 1958 (Public Law 85-864). The total project budget was \$9,197. These funds were to be used to employ professional and clerical staff to collect data and to begin the writing and analysis necessary to evaluate the two methods of counseling. The collection of data is progressing and it is anticipated that enough will have been done to start the preliminary report during June, 1967 as planned.

Needs for 1967-68:

1. An additional 240 students joined the original groups as set up in July, 1965 when school opened the following September. This happened as students were scheduled into the experimental classes which we had hoped to keep "pure", but which an increase in enrollment did not make possible. This group can be used to evaluate the effectiveness of the original group or individual contact in the summer in contrast to the two year group or individual program, exclusive of summer "orientation" contact. We would like to study these two groups.
2. An early survey seems to indicate that students from both groups returned in greater number than the total population. We would like to study a control group. (i.e., students who entered in 1965 and went through the normal program of counseling) so that comparison can be made between the "special" and "normal" counseling groups to see if this "Hawthorne" effect does, in truth, exist.
3. As more than half of the students who complete a two year program in the junior college do so after five semesters, not four, it becomes important to complete the total study in the spring of 1968 instead of at the end of June, 1967.

4.0 A.1 Continued:

4. It is necessary to contact the 900+ (project and control) students who have withdrawn since the project began to determine their reasons for withdrawal if we are to make a complete comparison of the two types of counseling. This cannot be completed until after the beginning of fall semester, 1967 when it will become apparent who have returned to finish and who have "given up" before completion.
5. Finalize the data processing and statistical analysis with the assistance of a consultant.
6. Write the final report at the close of fall semester, 1967.

4.3 Outline of Proposed Project

Part 1 -ARC Group versus Individual Counseling Study

Column 1 Project Activities

Column 2 Project Objectives

Column 3 Kinds of evidence to be obtained for evaluation purposes

Record and tabulate information: CPA, major, realistic goals, academic status, persistence, etc. for additional 240 students added to original project

To make additional cross-tabulation possible

Progress of these students to be compared with original group and with control

Record information as listed above on 927 control students

To set up a control against which to make recommendations

Progress of these students to be compared with all project students by total and designated groups

Continue the contact of all students who have withdrawn (project and control) by mail or personal contact

Compare reasons for withdrawal given by the project and control students

To study effectiveness of two methods of counseling as opposed to regular procedure

Analyze data in detail with help of consultant

To evaluate results

To test comparative results, statistically

Conduct final workshop for review of data with participating counselors

To prepare recommendations for procedural changes if data warrants such recommendations

Statistical evidence that one program has significant advantages over the other

Write final report

To make study available to other colleges in district

5.0 Current Guidance Personnel (Junior College)

| | A | B | C | D |
|---|--------------------------------------|---|---|--------------------|
| Names of Guidance Personnel Assigned to Student Counseling and/or Supervision of Student Counseling | Scheduled Counseling Time in F.T.E.* | Scheduled Counseling Time Now Paid by NDEA in F.T.E.* | Scheduled Counseling Time Now Paid by Other Federal Progr. in F.T.E.* | Type of credential |

American River College

Project Director:

| | | | | |
|--|-------------------|--|--|---|
| *Lorine Aughinbaugh Coordinator of Counseling | Full time Adm. | | | A |
|--|-------------------|--|--|---|

Other Personnel (Counselors):

| | | | | |
|---|-----|--|--|---|
| Dr. Parks Whitmer Division Chairman-Counseling | 5.5 | | | A |
|---|-----|--|--|---|

| | | | | |
|------------------------------------|-----|--|--|---|
| *Dr. Jeanne Good Head Counselor | 5.5 | | | C |
|------------------------------------|-----|--|--|---|

| | | | | |
|-------------------------|-----------|--|--|---|
| *Borowiak, Charles | .4 | | | A |
| Brown, Paul | .4 | | | C |
| Cole, Harry | .4 | | | A |
| Dahl, Ernest | .4 | | | A |
| *Dressler, Frances | .4 | | | C |
| Fiedler, John | .4 | | | A |
| *Gallacher, Clarence | .4 | | | A |
| *Gallichio, Lillian | .4 | | | A |
| Herwig, Robert | .4 | | | A |
| Hutchison, Mary Ellen | .2 | | | A |
| Johns, Thomas | .4 | | | A |
| Kadie, Andrew | .4 | | | A |
| Koller, William | .4 | | | A |
| Lefkow, Daniel | .4 | | | A |
| Mapes, Glenn | .4 | | | A |
| *Martin, Joseph | .3 | | | A |
| McCracken, Geraldine | .4 | | | A |
| *Neasham, Mary Lou | .4 | | | A |
| Norman, Richard | .4 | | | A |
| *Phillips, Alfred | .4 | | | A |
| Rasor, Richard | .4 | | | C |
| *Robinson, Elizabeth | .4 | | | A |
| Shadley (Aldrich) Janet | .2 | | | A |
| Solomon, Will | .4 | | | A |
| Tallmon, Robert | .4 | | | A |
| Toutonghi, Michael | .4 | | | A |
| *Wiley, Helen | .4 | | | A |
| Wright, Mavis | <u>.2</u> | | | A |

| | | | | |
|-----------------------------|------|--|--|--|
| Total (Column A) | 11.1 | | | |
| *Counselors in NDEA Project | | | | |

5.1 Counselor-student ratio

A. American River College

5.11

Number of full-time equivalent positions assigned to counseling and/or supervision of counseling which are supported by local funds.

11.1
full-time
equivalents

5.12

Enrollment in junior college (Use the full-time graded enrollment as reported to the State as of October 1966)

3,898
full-time
graded
enrollment

Grade 13 3,075

Grade 14 737

5.13

Counselor-student ratio supported by local funds (Divide the entry in Section 5.12 by the entry in Section 5.11)

1:350
Counselor-
student
ratio
maintained
in 1966-67

5.2 Clerk-student ratio supported by local funds only

5.21

Number of adult clerical workers paid by local funds, assigned to guidance activities, in terms of the number of full-time equivalents

2,125

5.22

Clerk-student ratio supported by local funds (Divide the entry in Section 5.12 by the entry in Section 5.21)

1:1329
clerk-
student
ratio

6.0 Budget Summary (Junior College) ARC - Project 1

| <u>1</u> 1967-68 Budget | <u>2</u> Budget Categories | <u>3</u> Project Budget | <u>4</u> Local Funds | <u>5</u> Requested Funds |
|-------------------------------|--|-------------------------------|----------------------------|--------------------------------|
| | <u>Salaries</u> | | | |
| | <u>Professional Staff</u> | 240 | | 240 |
| | Report Writing & Analysis Time 40 Hours-\$6.00 per hr. | | | |
| | Workshop Project (11 Counselors \$36.00 each) | 396 | | 396 |
| | Consultant Statistical (2 days) | 200 | 100 | 100 |
| | Data Processing (2 days) | 96 | 96 | |
| | <u>Clerical Staff-Temp.</u> | | | |
| | Clerk II - 1500 hrs. | 3,398 | 1,133 | 1,165 |
| | Student Help (Reg.) 100 hours -\$1.25 | 125 | 125 | |
| | Key Punch Operator 80 hours - \$1.50 | 120 | 120 | |
| | IBM Operator 30 hours - \$4.00 | 120 | | 120 |
| | <u>Travel</u> | | | |
| | Consultant Statistical | 20 | 10 | 10 |
| | <u>Paper & Postage</u> | | | |
| | (Contact W/D Students | <u>150</u> | <u>150</u> | <u> </u> |
| | Total | 4,865 | 1,734 | 3,131 |

Project Beginning and Ending Dates - July 1, 1967 - April 1, 1968

6.0 Budget Summary

Los Rios District

| 1967-68 | Budget-Categories | | Project Budget | Local Funds | Requested Funds |
|---|-------------------|--------------------|----------------|-------------|-----------------|
| A. <u>American River</u> Project 1 | Salaries | Professional Staff | 932 | 196 | 736 |
| | | Clerical Staff | 3,763 | 1,378 | 2,385 |
| | Travel | Consultant | 20 | 10 | 10 |
| | Materials | Paper & Postage | 150 | 150 | |
| Total for Project 1 | | | 4,865 | 1,734 | 3,131 |