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AN EXPERIMENTAL PROGRAM FOR "LOW-ABILITY" STUDENTS. SECOND
PROGRESS REPORT.

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STUDENTS UNDER 22 YEARS OF AGE WITH SCHOOL AND COLLEGE ABILITY TESTS SCORES OF 39 OR LESS WERE ENROLLED IN A SPECIAL "BLOCK" PROGRAM OF ENGLISH, PSYCHOLOGY, AND SPEECH. OF 110 STUDENTS IN THE FALL OF 1964, 30 HAD A C AVERAGE OR ABOVE, 91 COMPLETED THE SEMESTER, AND 75 REENROLLED IN THE NEXT TERM. TESTS SHOWED THAT THEY WERE IN THE LOWEST QUARTILE OF THE GENERAL POPULATION IN VERBAL ABILITY AND THEIR NONVERBAL ABILITY WAS ABOUT NORMAL. THEIR JOB POTENTIAL WAS BELOW THE JUNIOR COLLEGE SEMI-PROFESSIONAL LEVEL. THEY READ AT ABOUT EIGHTH-GRADE LEVEL AND HAD MAJOR ADJUSTMENT PROBLEMS. AS COMPARED WITH A CONTROL GROUP, THE BLOCK CLASS APPROACH RESULTED IN A MORE FAVORABLE ATTITUDE TOWARD THE COLLEGE, BETTER STUDENT RETENTION, AND A BETTER GPA. HOWEVER, GREAT VARIATIONS WERE NOTED IN THE GROUP. DETAILED RECOMMENDATIONS ARE GIVEN CONCERNING THE FUTURE NATURE OF THE PROGRAM. TABLES PRESENT DATA ON ABILITY, ACHIEVEMENT, STUDY HABITS, INTERESTS, AND ADJUSTMENT. A BIBLIOGRAPHY IS INCLUDED. (WO)

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LOS ANGELES CITY COLLEGE

"AN EXPERIMENTAL PROGRAM FOR 'LOW-ABILITY' STUDENTS"
(Second Progress Report)

Counseling Center Research
Study -- #66-1

UNIVERSITY OF CALIFORNIA
LOS ANGELES

JUL 04 1966

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Edwin A. Young
February, 1966

PREFACE

The intent of this report is to present the results of extensive "data gathering" on a second group of students of "low tested ability" at Los Angeles City College, a comparison of the second group with the first, some indices of the value of the program after one year, and recommendations beyond those made in the first reports. The data in this report is presented for the group as a whole, by sex, and by reading group. The raw data had also been grouped within each sex by reading level and racial/ethnic group, but time limitations precluded its analysis and presentation in this report.

The reader is directed to the Counseling Center Research Studies "#64-15," "#65-2," and the "Summary of #64-15" for more detailed information regarding this program. In these earlier studies will be found information on the background of the problem, objectives of the program, characteristics of the first student group and their comparison--on these characteristics--to those of "regular, non probationary" students, inter-relationships of selected test variables and grades, course content, and conclusions and recommendations arising out of the study on the first group.

Information regarding more detailed aspects of the program described herein, but not included in this report, would best be obtained from those persons responsible for its various phases.

The organization and administration of the program and the selection of the students was under the direction of Mr. Byron Holmes, Assistant Dean of Counseling and Guidance and Mr. Ben K. Gold, Counselor.

Course content and methods utilized in the courses were the responsibility of the following faculty members: Mrs. Madelon Haigh, Associate Professor of English (English 21); Dr. Harold Salisbury, Associate Professor of Speech (Listening Comprehension); Mr. Robert Whitten, Professor of Speech (Speech 31); Mr. Edwin Young, Assistant Professor of Psychology and Counselor (Psychology 30 and Testing Program).

Acknowledgements are due to many for their contributions to this study: to Mr. Ben Gold, who --- in addition to his assigned responsibilities in the program --- provided a "good ear" and very useful advice, while his work on the "First Progress Report" and his providing of statistical information helped lay a groundwork for the writing of this second report; to Mr. Marshall Eider, Associate Professor of Mathematics for his work in programming and carrying out some of the statistical work on the Bendix G-15 and the IBM 1620; to Mr. Ben Kuramoto, Tabulating Section Supervisor for handling the punching and sorting of cards for the computing operation; to Mrs. Evelyn McAughan for her tireless work in typing the report in its various phases and forms; to Mr. Frank Trueblood, Counselor, for his preparation of the masters of the charts and graphs;

PREFACE (continued)

to the Counseling Office Clerical Staff for their efforts on the "mounds" of tabulation done; to the members of the Counseling Staff, Faculty, and Administration for their ideas, support and encouragement of expression; and to the writer's wife whose patience and efforts allowed for the "extra-time" taken so frequently on this project.

Of immeasurable significance were the contributions of the students of the program and the faculty members (Mrs. Haigh, Dr. Salisbury, and Mr. Whitten) with whom the writer worked. Only interaction and involvement with the teachers and students--in process--could make one aware of the needs, undeveloped competences and potentials, and the frustrations and hopes, underlying the simple act of enrolling in and attending the junior college.

The writer's experience in this study has reinforced the ideas that (1) an "alienated" rather than a "positive" student involvement might be predicted as the result of the power system and means of achieving compliance utilized in the "traditional" junior college probationary procedure, (2) there is a need for a more meaningful goal orientation and reward system, (3) the present standardized achievement and personality tests and socio-economic status are not sufficient basis for the selection and allocation of students, the explanation of their behavior, the establishment of criteria or content of educational programs, (4) for the "culturally deprived" or "educationally deficient" (which terms need more explicit definition) within the present technology age, a mean must be found for first freeing the motivation of individuals -- followed by an analysis of realistic present and potential functioning level and -- later allocation to educational programs, (5) there is a necessity for intra-community confrontations regarding the realities of the problem and its alternate solutions and a commitment to a functionally integrated plan with broad perspective.

Only a very small fraction of the reality, complexity, and urgency of the problems faced by the students, faculty, college, and community as a whole can be expressed in written words and statistics. However, in a very small way, through this report, it is hoped that the reader who has not already done so will be encouraged to make the acquaintance of the members of his community.

Edwin A. Young

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I. INTRODUCTION

This is the third of a series of reports on an experimental program for "low tested ability" students at L.A.C.C. The previous two reports (L.A.C.C. Counseling Center Research Studies #64-15 and #65-2) were based on data gathered on the first group of students during the Spring, 1964.

This report describes a second group of students who participated in this program during the Fall of 1964. The discussion of the general problem and objectives of the program may be found in the first report. (L.A.C.C. Counseling Center Research Study #64-15). In addition, the first report compares these students with a sample of "regular" students on selected characteristics.

The purpose of this report is to:

1. Present further data, on another sample, of the "low tested-ability" junior college student at L.A.C.C.
2. Compare this data on the Fall 1964 group with that collected on the first block program (Spring 1964) in order to get some idea of the representativeness of the characteristics described.
3. Present statistical information on progress to date of the students in the first and second block program group.

The information in this report is presented to the end that it might (1) aid in developing a general understanding of the characteristics of these students and the potential and actual difficulties to be encountered by these students in a junior college setting and (2) have heuristic value in leading to further refined studies using more controlled, individualized, and specific methods to increase the learning and evaluate the progress of these students.

II. PROCEDURE AND ORGANIZATION

A. Selection

In Fall 1964, one hundred ten (110) students were selected according to the same criteria utilized in Spring 1964 namely:

- 1) total SAT entrance examination raw score of 39 or below (11th national college freshmen percentile)
- 2) no previous college background
- 3) below 22 years of age
- 4) not educated primarily in a non-English speaking country

B. Academic Program

The academic program was enlarged over that of the Spring 1964 group. Instead of 6 units and 10 hours, these students were required to enroll in a 9 unit, 15 hours a week block program comprising:

English 21	3 units	(English Fundamentals)
Psychology 30	3 units	(Introduction to Psychology)
Speech 31	3 units	(Communication Skills-Speech)

In addition, all students were required to enroll in a Physical Education activity course and were permitted to enroll in up to 3 units of selected non-transfer courses.

Difficulties in working with the large group led to the varying of class size and scheduling in the English and Psychology sections. The speech program remained unchanged throughout the semester. These changes are indicated below:

<u>Weeks</u>	<u>Course</u>	<u>Hours/Week*</u>	<u>Class Size</u>	<u>Total Hrs./Wk. In Block Prog.</u>	<u>Unit Cred. in Blk. Prog.</u>	<u>Total Uts. in Blk. Prog.</u>	<u>Total No. Students</u>
1-1964	Psychology	5	110	15	3	9	110
	English	5	110				
	Speech	3	37				
	Listening	1	110				
- 5	Diction	1	110	14	3	9	110
	Elect. (incl. PE)	2-5	110				
	Psychology	3	110				
	English	3	110				
- 10	Speech	3	37	15	3	9	110
	Listening	1	110				
	Diction	1	110				
	Library	1	37				
- 20	Elect. (incl. P.E.)	2-5	110	15	3	9	110
	Psychology	3	55				
	English	2	110				
	Speech	3	37				
- 20	Listening	1	110	15	3	9	110
	Diction	1	110				
	Elect. (incl. PE)	2-5	110				
	Group Guidance	1	10				

All students were required to remain in all block program courses for the semester. They could not drop one of these courses without withdrawing from school.

* See Section II D. Counseling

C. Data Collection

Information was obtained about this group by the use of tests and questionnaires in the same general areas as in the previous semester, namely:

1. academic potential
2. vocational potential
3. motivational characteristics
4. present goals and activities, previous background, and family background

Our experience with the Spring, 1964 group led to some specific changes in data collection with the Fall, 1964 group. The larger size of the group made time and personnel limitations a crucial factor. In addition, the following tests were not used for the reasons given (based on experience with the first group):

- 1) The SRA Verbal form as a measure of mental ability did not appear to contribute information not already available in the SCAT.
- 2) The Modified Form of the Study of Values had a very time consuming scoring procedure, particularly with a large group, and the norms available on this form were not applicable.
- 3) The Full Range Picture Vocabulary test produced a very narrow range of scores, limiting its value as a predictor or differentiator.
- 4) The Diagnostic Phonics Survey was difficult to administer to a large group and resulted in misunderstandings on the part of students as to what they were to do.
- 5) The Listening Comprehension test was used by the Speech department and information regarding it may be obtained from that department.
- 6) The Cooperative English test was not used in the same manner by the English instructors during this semester. Indications are that the scores followed the pattern set by those in the Spring 1964 group.

The following adjustments and additions were made to the Fall 1964 testing program:

- 1) The Raven Progressive Matrices was administered on an untimed basis to reduce the time factor in performance. Lapsed time was recorded for each person.

- 2) The questionnaires were revised with some undiscriminating items removed. They were also shortened so that students could mark their answers on IBM cards which were later punched and tallied on the IBM 1620.
- 3) The Honney Problem check list for college students was used to get information on problems in specific areas to aid in the future development of appropriate and meaningful counseling programs.
- 4) A questionnaire to get information about attitudes toward the instructor, college, and class, at the end of the semester, was used.

D. Counseling

Counseling was provided to this group as it was to the previous one by:

- 1) course instructors
- 2) college counselors in academic, vocational, and personal areas
- 3) California State Department of Employment counselors on vocational planning based on the G.A.T.B.

In addition, group guidance was provided to some students. Each group had 10 students meeting, one hour a week, with a group leader from the NDEA Group Guidance Institute of the Department of Education at the University of Southern California. Confidentiality was maintained. Three group leaders were available, therefore 30 students participated. The one hour a week was 'released time' from the psychology class.

E. Composition of Group

The composition of the 110 members of group at the beginning of the semester appeared to be as follows:

SEX	NEGRO	CAUCASIAN	MEXICAN-AMERICAN	ORIENTAL	TOTAL
Males	34	9	6	3	52
Females	38	12	6	2	58
TOTAL	72	21	12	5	110

By the end of the semester, the group had 91 students. The group was divided in high and low groups at the 6th week, based only upon reading and grammar test performance measured at the beginning of the semester. The dividing line was approximately "88 and above" and "88 and below." The composition of these sub-groups by race and sex is indicated below.

Sex	Negro		Caucasian		Mexican-American		Oriental		T O T A L		Total Group
	High	Low	High	Low	High	Low	High	Low	High	Low	
MALE	9	19	3	5	1	3	1	2	14	29	43
FEMALE	19	11	8	3	4	1	0	2	31	17	48
TOTAL	28	30	11	8	5	4	1	4	45	46	91

There was no attempt made to equate the high and low groups on race or sex. It appears, however, although the high and low groups are approximately the same size with regards to race, the males tend to predominate in the low groups while the females predominate in the high groups.

III. FINDINGS FROM TESTING AND QUESTIONNAIRES

In this report, as in the earlier reports on this program, caution must be exercised so as not to make unwarranted inferences or conclusions from the information presented. The attempt here is primarily to present descriptive information.

The findings will be presented here so as to generally parallel the order of presentation of variables in the first report, where possible.

Analysis of data in the first progress report reflected possible differences in performance on these measures by sex and reading level, the information in most instances will be presented here by the total group, males as a group, females as a group, high reading group, and low reading group.

It must also be noted that the high group has a higher proportion of females than males, while the low group has a higher proportion of males. Therefore, when high group and females are alike in performance it may represent, in analysis, a reading or a sex difference or both.

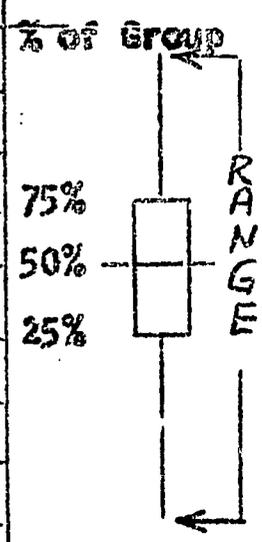
A. Academic Potential

1. Aptitude

a. General Aptitude Test Battery, "G" Score:

TABLE 1: GATB "G" Score (Norms: Working population)

Centile	Total	Male	Female	High	Low	
99						
98						
96						
93						
89						
84	(7)	(1)		(1)		A*
77						
69	(3)	(2)	(1)	(1)	(2)	B*
60	(2)	(1)	(1)		(2)	
50	(6)	(5)	(1)	(4)	(2)	C*
40						
31						
23						
16						
11						
7						
4						
2						
1						
N	92	42	50	46	46	
Median Centile	27	31	29	29	27	
Upper Quartile	38	48	37	39	39	
Lower Quartile	20	22	19	22	15	



*A = Min. score required = Prof. or Grad. School
 *B = Min. score required = 4 yr. college
 *C = Min. score required = 2 yr. college

Table 1 indicates that the average student places approximately the 27th centile compared with the working population on the "G" scale. This scale combines verbal, numerical and spatial performance and is considered to be a measure of scholastic aptitude. The numbers in parenthesis indicate the number of persons at that level, i.e., 12 of 92 (13%) score at 2 year college level or above, 9 males and 3 females so score. At the upper level of GATB scores--reading level is not distinguishable.

- b. SRA Non-verbal: Table 2 indicates that the group as a whole places within the average range of the general population in this measure of mental ability, which does not require the use of verbal or quantitative symbols. This is a timed test.

Males and females do not differ in this respect. However, the average person in the high group exceeds 73% of the population in this ability, while the average in the low group compares with the average in the general population.

- c. Raven Progressive Matrices: Table 3 reflects the distribution of scores on this untimed test of abstract and systematic reasoning. The average score of the total group exceeded that of about 20% of the junior college norm group. This same score compares favorably, on the other hand, with the average score of a general population group. While males and females do not appear to differ appreciably, the high reading group appears to perform at a slightly higher level than the lower reading group. The results on this test tend to support those on the SRA Non-verbal test.

Although the students were not timed on this test, lapsed time was recorded on their paper when finished. The average time to complete the test was 29 minutes. (Table 4). Females and high group members also averaged 29 minutes, while males and low group members took 2 to 4 minutes longer.

TABLE 2 - SRA NON-Verbal (Norm = General Population - National)

Centile	Total	Male	Female	High	Low
99					
90					
80					
70					
60					
50					
40					
30					
20					
10					
1					
N	81	40		40	81
Median	65	62		73	59
Q 3	81	81		85	80
Q 1	50	29		49	19

Table 3: Raven Progressive Matrices

(Norms: L.A. City Schools Junior College Students)

Raw Score	Total Group	Male	Female	High	Low	Centile
59 +						99
56 - 58						95
55						90
53 - 54						80
52						70
50 - 51						60
49						50
48						40
46 - 47						30
43 - 45						20
38 - 42						10
33 - 37						5
13 - 32						1
N	92	43	49	46	46	
Median Centile	23	23	23	27	18	
Upper Quartile %ile	35	30	35	40	35	
Lower Quartile %ile	12	17	17	15	9	

TABLE 4: Raven Progressive Matrices -- Lapsed Time (minutes)

Time (minutes)	TOTAL Group	Male	Female	High	Low
13 - 15					
16 - 18					
19 - 21					
22 - 24					
25 - 27					
28 - 30					
31 - 33					
34 - 36					
37 - 39					
40 - 42					
43 - 45					
46 - 48					
49 - 51 (62)					
N	92	43		46	46
Median Time	29	32		29	33
Upper Quartile	26	26		26	27
Lower Quartile	35	36		35	38

In the first progress report the same test was used but with a 30 minute time limit. The relationship between score and lapsed time was checked on the present group. The scores of those taking 30 minutes or less were compared with scores of those taking 31 minutes or more. The following results were obtained.

	TIME TO COMPLETE TEST	
	30 minutes or less	31 minutes or more
N	58	48
Median Score	42	46
Upper Quartile	46	47
Lower Quartile	37	41
Range	57 to 14	57 to 14

The above information and a scattergram plotted for this data (not included in report) suggests that time may be a factor in the performance of the students on this test.

2. Achievement

a. California Reading Achievement Test - Vocabulary (Table 5)

The average score of the total group, as well as the male and female sub-groups, placed at grade level 9.6 at the beginning of the semester. 3/4 of the students in each of these groups placed at or below the 810 level. While the high groups average exceeded the low group average by only .5 grade level (9.7 to 9.2) over 3/4 of the high group exceeds the lower 1/2 of the low group. Post-test score will be referred to in a later section.

b. California Reading Achievement Test - Comprehension (Table 6)

The average score of the total group, as well as the male and female sub-groups, placed at the lower half of the 9th grade level. As in vocabulary, the high group slightly exceeded the low group in average score (9.4 to 8.9) but over 3/4 of the high group exceeded the lower 1/2 of the low group. Post-test scores will be referred to in a later section.

Centile	Grade	Total Group		Pre Test		Post Test		Pre Test		Post Test	
		Pretest	Posttest	Male	Female	Male	Female	High	Low	High	Low
	14.0										
60	13.8										
	13.6										
	13.4										
	13.3										
50	13.1										
	12.9										
	12.8										
	12.6										
40	12.5										
	12.3										
	12.1										
30	11.8										
	11.5										
	11.2										
20	11.0										
	10.8										
	10.6										
	10.4										
	10.2										
	10.0										
10	9.9										
	9.7										
	9.6										
	9.4										
	9.2										
	8.9										
5	8.5										
	8.2										
2	7.9										
1	7.7										
	7.5										
	7.3										
	7.0										
	6.9										
				41		41		41		41	
Median				9.6		10.2		9.7		11.0	
Upper Quartile				10.4		11.2		10.6		11.8	
Lower Quartile				8.2		8.2		9.2		9.9	

TABLE 6 - California Reading Achievement (Comprehension) Pre-and Post-Test Scores
 Norm: College Freshman - National

Title	Grade	Total Group		MALE - FEMALE				High Pre Test		Low Post Test	
		Pre-Test	Post-Test	Pre-Test		Post Test		High	Low	High	Low
				Male	Female	Male	Female				
	13.1										
50	13.0										
	12.8										
	12.7										
	12.6										
	12.4										
40	12.3										
	12.1										
30	11.9										
	11.6										
	11.3										
	11.1										
	10.9										
	10.7										
	10.6										
	10.4										
10	10.2										
	10.1										
	9.9										
	9.8										
	9.6										
	9.5										
	9.4										
5	9.2										
	9.1										
	9.0										
2	8.9										
1	8.8										
	8.7										
	8.6										
	8.4										
	8.3										
	8.1										
	7.9										
	7.7										
	7.5										
	7.3										
	7.1										
		84	84	41	43	41		41	43	41	43
Median				9.4		9.6		9.4		10.7	
Q 3				9.9		10.7		9.9		11.1	
Q 1				8.4		9.0		9.0		9.6	

TABLE 7 - SIA Reading Placement Test - Warm UIC Psychology

ID No	Grades	Total Group		Pre Test		Post Test		Pre Test		Post Test	
		Pre Test	Post Test	Male	Female	Male	Female	High	Low	High	Low
79	12.5										
74	12.2										
67	11.9										
61	11.6										
53	11.3										
46	11.0										
40	10.7										
33	10.4										
28	10.2										
23	9.9										
20	9.6										
16	9.3										
13	9.0										
10	8.8										
8	8.5										
7	8.3										
5	8.1										
4	7.8										
3	7.6										
2	7.4										
1	7.2										
	7.0										
	6.8										
	6.5										
	6.3										
	6.1										
	6.0										
	5.8										
N				40		40		44		44	
Median				8.3		9.0		9.3		9.6	
Q 3				9.0		10.2		9.9		10.2	
Q 1				7.8		8.3		8.3		9.0	

c. Critical Reading (SRA Reading Placement Test) (Table 7)

On the untimed test of reading comprehension, the total group, as well as the male and female sub-groups averaged in the area of grade (8.3 to 8.5). The high group averages 1.5 years above the low group (9.3 to 7.8). 90% of the high group equaled or exceeded the lower half of the low group. Post-test scores will be referred to in a later section.

B. Vocational Potential

1. Academic Potential (Table 1, Page 6)

Of the total group, 1% (one student) scores at a minimum level suggesting potential for graduate college work, 3% (3 students) score at a minimum level for 4 years of college, and 9% (9 students) show potential for completing junior college. That is, only 13% (12 students) show potential for completing 2 or more years of college. 9 students were male, while 3 were female. However, 6 each were in the high and low groups.

The remaining 87% (80 students) do not show potential on this test for even 2 years of college. However, 30% (28 students) are within 1/2 standard deviation of the junior college potential cutoff score so that motivation and guidance might aid them in completing 1-2 years. Of these 28 students, there were 13 males, 15 males, and 14 each in the high and low groups.

2. Aptitude Measures (Table 8)

Several bits of information appear to be worth pointing out here relative to the GATB aptitude scores.

- a) the aptitude profiles, in general, of all groups (total, by sex, and by reading level) appear to be similar.
- b) the average person for all groups appears below the working population average in "G" (combination of V, N, and S), Verbal, Numerical, Spatial, and Finger Dexterity.

TABLE 8 (Continued)

General Aptitude Test Battery

M = Male

H = High

F = Female

Raw Score	P Form Perception		Q Clerical Perception		K Motor Coordination		F Finger Dexterity		M Manual Dexterity		CENTILE	
	M	F	M	F	M	F	M	F	M	F		
145											99	
140											98	
135											96	
130											93	
125											89	
120											84	
115											77	
110											69	
105											60	
100											50	
95											40	
90											31	
85											23	
80											16	
75											11	
70											7	
65											4	
60											3	
55											2	
50											1	
N	42	46	76	72	42	46	46	70	42	46	42	43
Med. Scale Sc.	102/103	98	103	102	108	108	109	108	112	112	105	105
3 Scale Sc.	113/114	112	114	110	109	116	116	110	109	122	121	117
1 Scale Sc.	92/93	85	91	94	94	90	95	88	82	88	99	97

- c) The average person in all groups appears to be average or above average in Form Perception, Clerical Perception, Motor Coordination, and Manual Dexterity.
- d) The median score and majority of individuals on all measures are within + or - one standard deviation of the working population mean. In most measures the group medians are within 1/2 standard deviation of the norm mean. (Significantly not so with regard to G and V).
- e) The mid 50% and mid 80% of the groups appear to have a larger spread of scores on the Spatial factor than do the same groups on the other reasoning aptitudes of "G", V, N), perhaps indicative of potential for learning for some of the upper group.

3. Occupational Aptitude Patterns (OAP's) Table 9.

The OAP number represents a group of occupations having the same critical scores on the same 3 aptitudes. In general, the smaller the OAP number, the higher the occupational level. Where "G" is indicated, a "G" of the level shown is the minimum required for the jobs in that OAP. Where "G" is now shown, it is not a critical factor for that OAP.

There were no students in this group who appear qualified for an OAP utilizing a Professional or graduate degree (A) or a Bachelor's degree (B). Some few students (2-5%) appear qualified for OAP's requiring 2 years college academic potential (C), while about 2/5 (39%) appear to be within 1/2 standard deviation below the 2 year college potential level. (D). The remaining students (approximately 55%) are more than 1/2 standard deviation below the 2 year college potential level in terms of the academic ability required for the OAP indicated.

OAP#	Percent					Occu	
	None	Male		High	Low		
All							
None	5	2	8	4	7	-	
A	1					125	
B	2					115	
	3					110	
C	4		7		2	105	
	5	5	7	4	4	105	
	6					100	
	7	2	2	2	4	100	
	8	3	5	2	7	100	
D	9	16	20	12	15	17	95
	10	18	28	10	15	22	95
	11	18	26	12	17	20	95
	12	15	20	10	15	15	95
	13	22	24	20	30	13	90
	14	22	26	18	15	28	90
	15	30	38	24	24	37	90
	16	39	47	32	33	46	90
17	61	64	58	59	63	85	
18	66	64	68	72	61	80	
19	66	68	64	65	68	80	
20	74	68	78	83	65	80	
21	65	71	60	63	68	80	
22	65	64	66	65	65	75	
23	17	14	20	20	15	--	
24	33	38	28	30	35	--	
25	49	57	42	48	50	--	
26	49	57	42	41	57	--	
27	50	57	44	46	54	--	
28	75	80	70	74	71	--	
29	58	59	56	50	65	--	
30	61	64	58	54	68	--	
31	74	76	74	74	76	--	
32	71	71	70	70	72	--	
33	65	64	66	63	68	--	
34	59	59	58	54	63	--	
35	67	66	68	67	68	--	
Inc.	4		8	7	2	--	
Total Number	92	42	50	46	46		

TABLE 9 -
Percent of students Failing in Occupational Aptitude Patterns based on GATB

In general, the sub-groups do not appear to be significantly different. That is, while the sub-group may differ in reading level and grades, such a difference is not necessarily reflected in occupational potential by the Department of Employment standards. A big question needs further looking into if this be the case---"In what way is scholastic potential and/or performance related to eventual job potential for this level group?" Does this relationship exist or is it attenuated by the nature of tests, the criterion on the job, the OAP structure, etc.?

C. Motivational

1. Edwards Personal Preference Schedule. The needs reflected in this schedule are as follows:

- | | | |
|-----|-----|---|
| 1) | ach | - achievement : to do ones best |
| 2) | def | - deference: to follow others and do what's expected |
| 3) | ord | - order: to have things in order and arranged |
| 4) | exh | - exhibition: to be the center of attention |
| 5) | aut | - autonomy: to be independent of others |
| 6) | aff | - affiliation: to participate in groups and form strong attachments |
| 7) | int | - intrareception: to enslyze ones motives and behavior of others |
| 8) | suc | - succorance: to have others provide help |
| 9) | dom | - dominance: to be regarded as a leader and stand for point of view |
| 10) | aba | - abasement: to accept blame, feel inferior |
| 11) | nur | - nurturance: to help others in trouble |
| 12) | chg | - change: to do new and different things |
| 13) | end | - enducance: to keep at task till finished |
| 14) | het | - heterosexuality: interest in opposite sex |
| 15) | agg | - aggression: to get angry, blame, critize, attach other viewpoints |

TABLE 10: - Shows the percent of each group of students having scores comparing with those in the upper 16%, mid 68%, and lower 16% of the norm group (college).

At the 5% level of significance the required difference between the percent of students in the groups being compared for the 16% and 68% norm group categories is approximately as follows:

TABLE 10 - Percent of Students by Groups Falling in the Upper Middle and Lower Ranges of the National College Freshman Norm Group

	MALE	HIGH	MALE	HIGH	MALE	HIGH	MALE	HIGH	MALE	HIGH
	ACH		DEF		ORD		EXH		AUT	
UPPER 16%	25	18	43	21	43	39	13	18	7	15
MID 68%	57	63	55	65	55	59	68	63	70	63
LOWER 16%	18	19	2	11	2	7	19	19	23	21
N	49	46								
Median	40		73		71		37		52	
Upper Q	74		93		88		72		68	
Lower Q	22		52		54		21		22	
% of Norm GP	AFT		DNT		SUC		DON		ABA	
UPPER 16%	7	9	4	9	12	13	2	15	36	31
MID 68%	77	70	87	74	82	78	57	59	62	60
LOWER 16%	16	22	9	17	7	8	41	26	2	9
N										
Median	45		45		50		21		79	
Upper Q	54		57		72		32		92	
Lower Q	28		25		42		9		53	
% of Norm GP	NUR		CNS		END		NET		AGG	
UPPER 16%	16	17	16	26	36	15	9	13	27	26
MID 68%	73	70	75	70	64	83	57	63	62	65
LOWER 16%	7	13	9	4	0	2	34	29	11	9
N										
Median	63		64		75		27		72	
Upper Q	75		78		89		53		88	
Lower Q	37		50		51		9		40	

Norm Group Categories	Comparing Total w/Norm	Comparing Sub-group w/Norm	Comparing Sub-group w/sub-group
16%	8%	11%	15%
68%	10%	14%	19%
16%	8%	11%	15%

Table II shows the need areas in which the groups appear to be significantly different from the college norm group of the test author. A plus (+) indicates that the percent of the group in that category significantly exceeds that of the norm, whereas a minus (-) indicates that the percent of the group falling in that category is significantly less than the percent of the norm group in the same category.

The group as a whole appears to have an above average need for deference, order, abasement, change, endurance, and aggression; below average need for affiliation, dominance, and heterosexual interests; and an excessively average need for intraception.

Both males and females tend to have high needs for order and abasement and a low need for heterosexual interests compared with the norm group. The males alone have an above average need for deference, endurance, and aggression; a below average need for dominance, and an excessively average need for intraception and succorance compared with the norm group. The females alone have an above average need for change, a below average need for affiliation, and an excessively average need for endurance compared with the norm group.

Although not shown in table form, the males compared with the females have a greater need for deference, affiliation, and endurance and a lesser need for dominance and change.

**TABLE 11: Edwards Personal Preference Schedule:
Comparison of all groups against College Norms.**

	Male		High		Male		High		Male		High		Male		High										
	T	M	F	H	L	T	M	F	H	L	T	M	F	H	L	T	M	F	H	L					
	ACH				DEF				ORD				EXH				AUT								
NORM	T	M	F	H	L	T	M	F	H	L	T	M	F	H	L	T	M	F	H	L	T	M	F	H	L
UPPER 16						+	+			+	+	+			+										
MID 68																									
LOWER 16						-	-			-	-	-			-										
	AFF				INT				SUC				DOM				ABA								
NORM	T	M	F	H	L	T	M	F	H	L	T	M	F	H	L	T	M	F	H	L	T	M	F	H	L
UPPER 16						-	-									-				-	+	+			+
MID 16						+	+			+	+	+			+										
LOWER 16																+	+			-	-	-			-
	NUR				CHG				EHD				HET				AGG								
NORM	T	M	F	H	L	T	M	F	H	L	T	M	F	H	L	T	M	F	H	L	T	M	F	H	L
UPPER 16						+					+	+			+						+	+			
MID 68															+										
LOWER 16						-				-	-	-			-	+	+			+	-				-

Compared with the norm group both highs and lows have above average need for order and abasement. In addition, lows have above average need for deference and endurance and below average need for heterosexual interests. Lows compared with highs have more need for order, deference, and endurance and less interest in the opposite sex.

2. Kuder Preference Record

Table 13 (page 25) shows the percent of students in each group whose scores fall within each quintile on adult norms on this inventory of occupational interest.

The following (Table 12) indicates the areas in which the groups appear to have higher than average and lower than average interests relative to the norm group (Quintile I median = high; Quintile IV-V median = low)

TABLE 12 - Interest areas in which groups have higher (H) or lower (L) averages than norm groups (adult)

	Outdoor	Mech.	Comput.	Scient.	Persuas.	Art	Liter.	Mus.	Soc. Serv.	Clerical
Total	L	L	H	L				H		H
Male	L	L	H	L		H				H
Female	L	L			H			H	H	
High	L	L		L	H			H	H	H
Low	L	L	H							

3. Survey of Study Habits and Attitudes (Table 14)

The total groups' reported study habits appear slightly, but consistently, poorer than the norm group. The female and the low group appear to be weaker than the males and high group.

TABLE 13 - Percent of Students by Groups Falling in Quintile Ranges on National Adult Norms (Kuder Preference Record)

Quintile	Outdoor		Mechanical		Computational		Scientific		Persuasive												
	Tot. M	H L	Tot. M	H L	Tot. M	H L	Tot. M	H L	Tot. M	H L											
I	75	77	12	0	24	28	11	2	18	13	26	11									
II	52	75	11	11	30	39	17	10	20	23	26	11									
III	13	13	21	18	22	13	23	17	33	20	36	16									
IV	30	31	25	27	20	23	16	21	27	20	22	26									
V	50	42	38	44	5	9	7	29	28	7	8	6									
N	91	40	51	47	44	91	40	51	47	44	91	40	51	47	44						
Median	IV	IV	IV	IV	II	III	IV	IV	IV	III	III	IV	IV								
Upper Q	IV	III	III	III	II	I	II	III	II	II	II	I	I								
Lower Q	V	V	V	V	IV	IV	IV	V	V	IV	IV	IV	IV								
Centile	Artistic		Literary		Musical		Social Service		Clerical												
	Tot. M	H L	Tot. M	H L	Tot. M	H L	Tot. M	H L	Tot. M	H L											
I	32	17	15	32	28	26	30	25	18	39	32	16	35	23	26	23					
II	18	28	15	8	23	28	18	23	20	26	22	23	21	18	23	25	17				
III	32	23	23	15	24	30	20	22	23	19	15	27	24	27	22	23	25				
IV	5	14	30	34	15	13	18	19	24	16	17	23	18	10	10	17	14				
V	13	13	20	11	5	11	5	12	15	10	13	11	11	10	12	9	11				
N	91	40	51	47	44	91	40	51	47	44	91	40	51	47	44	91	40	51	47	44	
Median	II	III	III	III	IV	II	III	III	III	II	II	III	III	II							
Upper Q	I	II	II	I	I	I	I	I	II	I	I	I	I	I	I	I	I	I	I	I	I
Lower Q	III	IV	IV	IV	V	V	V	V	V	IV	IV	IV	IV	IV	IV	IV	IV	IV	IV	IV	IV

TABLE 14 - TEST: Survey of Study Habits & Attitudes

NORM: College Freshmen (Nations!)

CENTILE	Total GP	Male	Female	High	Low
99					
98					
95					
90					
80					
70					
60					
50					
40					
30					
20					
10					
5					
2					
1					

N		44	49	46	17
Median		40		42	37
Upper Quartile		70		59	45
Lower Quartile		28		24	21

4. Mooney Problem Check List

The student was required to react to 330 statements of problems found among college students. These 330 items are divided into 11 categories of 30 items each. The students underlined those items which he considered to be of concern to himself, then reviewed the underlined items and circled those underlined items that were of most significant concern. A total is taken of each--the underlined and the circled items in each category. The categories for which there are scores are as follows:

1. Health and Physical Development (HPD)
2. Finances, Living Conditions, and Employment (FLE)
3. Social and Recreational Activities (SRA)
4. Social-Psychological Relations (SPR)
5. Personal - Psychological Relations (PPR)
6. Courtship, Sex and Marriage (CSM)
7. Home and Family (HF)
8. Morals and Relation (MR)
9. Adjustment to College Work (ACW)
10. The Future: Vocational and Educational
11. Curriculum and Teaching Procedures
12. Grand Total of Problems Reacted to

The category scores will be described in terms of total problems (those underlined) and of more serious problems (those circled in addition to being underlined.)

a. More serious problems

In terms of the problems circled, the group as a whole, males, females, high, and low average 8 problems each (Table 15). However, the range of the frequency distribution of problems is greater for the females.

In terms of the categories of problems, (Table 16) the area of Adjustment to College Work ranks first for all. 25% of the total group, males and females noted 5 or more problems in this area. While the high and low groups have the same median number of problems in this area, the low group upper quartile tended to have problems than that of the high group upper quartile. Personal-Psychological problems rank second consistently, if not significantly.

TABLE 15 - Hooney Problem Checklist: Grand Total of Circled Problems (most significant) and Total Underlined Problems

No. Prob. Circled						Total Prob. Underlined					
Freq.	Total	Male	Female	High	Low	Freq.	Total	Male	Female	High	Low
61+						126-130					
59-60						121-125					
57-58						116-120					
55-56						111-115					
53-54						106-110					
51-52						101-105					
49-50						96-100					
47-48						91-95					
45-46						86-90					
43-44						81-85					
41-42						76-80					
39-40						71-75					
37-38						66-70					
35-36						61-65					
33-34						56-60					
31-32						51-55					
29-30						46-50					
27-28						41-45					
25-26						36-40					
23-24						31-35					
21-22						26-30					
19-20						21-25					
17-18						16-20					
15-16						11-15					
13-14						6-10					
11-12						1-5					
9-10						0					
7-8											
5-6											
3-4											
1-2											
0											
N	91	42	49	46	45	N	91	42	49	46	45
Mdn.	8	8	8	8	8	Mdn.	37	33	41	35	38
Q 3	4	17	19	16	20	Q 3	57	52	62	56	56
Q 1	17	2	5	4	5	Q 1	23	22	28	20	26

b. Total number of problems

In terms of the grand total of all problems underlined (Table 15) the group as a whole averaged 37 problems with the low and female groups averaging slightly more than the high and male groups/

The categories in which the problems appear to be the greatest are again in Adjustment to College Work and Personal-Psychological Relations (Table 17). Females tend to have slightly more problems in Social-Psychological Relations, Personal-Psychological Relations, and Home and Family categories. Highs tend to average slightly more problems in Social-Psychological Relations than lows.

GP STOPS	HPD	FLE	SRA	SPR	PPR	CSM	HF	MR	ACM	FVE	CTP
21+	M										
20											
19											
18											
17											
16											
15											
14											
13											
12											
11											
10											
9											
8											
7											
6											
5											
4											
3											
2											
1											
0											
N	→	TOTAL	= 91	MALE	42	FEMALE	49	HIGH	46	LOW	45
Mod	2 2	2 3	3 3	2 4	4 5	2 1	1 2	2 2	2 2	3 3	1 1
Q3	3 6	5 5	6 5	6 6	7 7	4 4	4 5	4 4	10 10	6 6	2 4
Q1	1 1	1 0	2 1	2 1	3 2	0 0	1 0	1 0	5 5	1 0	0 0

correlation between the groups

A Murray-Krusem checklist was taken on the Block program student during the succeeding semester (Spring 1965) to check the representativeness of the sample.

1) Categories and Number of Problems

The medians, upper quartiles and lower quartiles are indicated below for the Fall 1964 and Spring 1965 groups. At this point only male and female distributions have been taken on the Spring 1965 group. Therefore, only these are shown (Table 18).

TABLE 18: Comparison of males and females on Murray Problem Checklist in Fall 1964 and Spring 1965

Males	Fall 1964 (N=42)										Spring 1965 (N=58)										Total			
	HPD	FLE	SRA	SPR	FPR	CSM	HE	IR	ACW	FVE	GTP	64	65	64	65	64	65	64	65	64		65		
Total Prob.	54	65	64	65	64	65	64	65	64	65	64	65	64	65	64	65	64	65	64	65	64	65		
Median		2		5		5		3		5		2		3		2		11		4		2		51
Q 3		4		7		7		6		6		4		5		5		17		7		4		64
Q 1		1		2		3		1		2		1		1		1		8		2		1		30
Female Prob.																								
Median		1		2		1		0		1		0		1		1		5		2		1		18
Q 3		2		3		3		2		2		2		2		2		7		3		1		27
Q 1		0		0		1		0		0		0		0		0		2		0		0		8
Females	Fall 1964 (N=45)										Spring 1965 (N = 44)													
Total Prob.																								
Median		4		3		6		5		7		3		4		4		10		6		1		53
Q 3		6		6		9		9		11		7		7		6		14		8		4		83
Q 1		2		1		2		2		4		1		2		2		7		3		0		38
Female Prob.																								
Median		1		2		1		1		2		1		1		1		4		2		0		19
Q 3		2		3		4		3		4		2		4		3		6		4		1		33
Q 1		0		0		0		0		1		0		0		0				1		0		9

It can be seen that although the Spring 1965 group was noted more problems in general and in the various categories, the relative importance of the categories is the same. This relative similarity also exists in the male and female comparison.

2) Major Specific Problems

The number of students marking each item in each category was tallied. The percent of the students marking the most frequently picked items in each category was computed for the Fall 1964 and Spring 1965 groups. (Table 20)

In general the Spring 1965 group showed more consensus than the Fall 1964 group about the most frequently marked problem, in that a larger percent of the Spring 1965 group had that problem in common. It will be noted that for the circled items (most significant problems) males and females of both semesters found the same items of most importance in 6 of the 11 categories. Among the total problems underlined the same specific problems in each category were marked by the males in 3 and by the females in 9 of the 11 categories.

3) Desire for Counseling

The students were asked to answer the question, "If the opportunity were offered, would you like to talk over any of these problems with someone on the college staff?" The percent answering "yes" is indicated below.

TABLE 19: Percent Desiring Counseling

Semester	Male			Female		
	Yes	No	Blank	Yes	No	Blank
Fall 1964	76%	24%	0%	70%	38%	2%
Spring 1965	64%	22%	14%	68%	23%	9%

TABLE 20 - BLOCK PROGRAM - FALL 1964 & SPRING 1965: Mooney Problem Checklist

Only circled and underlined for males and females: FALL 1964 - 42 males, 49 females: SPRING 1965: 44 females

Circled problems (most significant)	Underlined problems	
	Males	Females
<p>getting enough sleep 12</p> <p>getting enough sleep 21</p>	<p>Overweight 14</p> <p>Not getting enough sleep 23</p>	<p>Not getting enough sleep 38</p> <p>Not getting enough sleep 41</p>
<p>Wanting vacation job 14</p> <p>Wanting part-time job now 17</p> <p>Wanting part-time job now 29</p>	<p>Needing part-time job now 24</p> <p>Needing part-time job now 36</p>	<p>Needing part-time job now 36</p> <p>Work for all expenses 35</p> <p>Needing part-time job now 47</p>
<p>Wanting to improve my mind 17</p> <p>Wanting to improve my mind 33</p>	<p>Wanting to improve my mind 16</p> <p>Trouble keeping conversation going 16</p> <p>Wanting to improve my mind 30</p>	<p>Wanting to improve my mind 41</p> <p>Wanting to improve my mind 62</p>
<p>Extreme loneliness 7</p> <p>Hard to talk about loneliness 10</p> <p>Shy or timid 7</p>	<p>Shy or timid 14</p> <p>Wanting more pleasing personality 14</p> <p>Speaking or acting without thinking 20</p>	<p>Extreme feeling of loneliness 22</p> <p>Feelings too easily hurt 26</p>
<p>Wanting things 11</p> <p>Wanting temper 16</p> <p>Wanting cut unimportant 14</p>	<p>Nervousness 22</p> <p>Nervousness 18</p> <p>Loosing temper 18</p>	<p>Feeling easily hurt 34</p> <p>Not thinking 36</p> <p>Not impressing people 30</p> <p>Worrying about impressing people 43</p>
<p>Wanting suitable mate? 14</p> <p>Not interested in love 12</p> <p>Not interested 10</p>	<p>Ever find suitable mate? 8</p> <p>No one I like to date 8</p> <p>Wonder if my marriage will succeed 16</p> <p>Afraid of losing my love 14</p> <p>Not far go w/opposite sex 14</p>	<p>Ever find suitable mate? 25</p> <p>Ever find suitable mate? 19</p> <p>How far go with opposite sex 17</p> <p>Think too much about sex 17</p>

TABLE 20 - BLOCK PROGRAM - Fall 1964 & Spring 1965: Mooney Problem Checklist (continued)

Category	Circled problems (most significant)		Underlined problems	
	Males	Females	Males	Females
Home & Family	Criticized by parents	7	Parents separated	18
	Worry about member of family	14	Can't discuss certain problems at home	31
Moral & Religious	Feel I don't really have a home	14	Not going church often enough	28
	Don't tell parents every-thing	10	Can't forget mistakes	22
Adjustment to college work	Not going church often enough	9	Can't forget mistakes	41
	Can't forget mistakes	9	Weak vocabulary	67
Future: Vocational & Educational	Not going church often enough	19	Get low grades	72
	Can't forget mistakes	19	Wonder if I'll be successful in life	59
Classroom teaching Procedures	Weak vocabulary	30	Wonder if I'll be successful in life	36
	Not know how to study effect.	45	Hard to study in living quarters	33
Future: Vocational & Educational	Wonder if I'll be successful in life	24	Hard to study in living quarters	41
	Wonder if I'll be successful in life	33		

PROGRAM - Fall 1964 & Spring 1965: Mooney Problem Checklist (continued)

Underlined problems (most significant)		Underlined problems	
Males	Females	Males	Females
%	%	%	%
7	14	18	28
14	20	31	34
10	20	31	34
9	8	28	24
9	34	22	24
19	34	41	43
19	34	41	43
30	22	67	50
45	39	72	50
24	20	59	52
33	36	36	57
8	10	33	28
26	23	41	34

Underlined problems (most significant)

Underlined problems

Males

Females

%

%

7

14

18

28

14

20

31

34

10

20

31

34

9

8

28

24

9

34

22

24

19

34

41

43

19

34

41

43

30

22

67

50

45

39

72

64

24

20

59

52

33

36

36

57

8

10

33

28

26

23

41

34

D. Questionnaire Data (Fall 1964 Block Program)

- 1. Age, Sex, Marital Status, Residence**
- 2. Educational Objectives**
- 3. Job Consideration**
- 4. Financial Resources**
- 5. Extra Curricular Activities**
- 6. Expectations of College**
- 7. Previous Schooling**
- 8. Family Background**

All areas above described during both the Spring 1964 and Fall 1964 semester. The two groups are essentially alike except where specifically noted. Some areas questioned during the Spring semester were not checked during the Fall semester--due primarily to time limitations. The reader is directed to the earlier report for information in these areas.

1. Age, Sex, Marital Status, Residence

- a. The modal age for the group was 18, with one third of the males between 19 and 21 while only one fifth of the females fell in this older range.
- b. Of the total group 53% were male. (62% in Spring, 1964).
- c. Of the total group about 80% are unattached (70% of females and 80% of males). The remainder were "going steady" or otherwise attached. 2-3% were married.
- d. Almost all were taking 9-11 units with 20% of males and 12% females taking over 12 units.
- e. A little over 50% had both parents living in Los Angeles County, while 20% had neither parent here. Where one parent resided here, it was more often the mother. 75% lived with their parent (s) while 20% lived with a relative.
- f. 40-50% had 2 or 3 persons other than themselves living at their present residence while about 25% had 5 or more persons so living.
- g. About one third felt their health was better than most other students, while about 5% felt it was worse.

2. Educational Objectives

- a. A decision on a major field of study had been made by 70% with another 20% indicating only a possible major. About half of the total group had decided on their major within the last year, with 40% of males and 20% females doing so within the last six months. More females tended to have made a decision on their major over a year ago.

Educational Objectives (continued)

- b. About 60% of both groups said they decided on their major without influence of others. About 20% were influenced by a parent or relative, with the influence more likely for the female than the male. An educator was influential in about 10% of the cases for both groups.
- c. 75% of the students indicate that their parents or guardians approved of their vocational choice, with parents of females tending to approve slightly more often than those of males.
- d. As a group, about 50% of the students experienced at least a fair amount of difficulty in deciding on a major. 60% of males experienced this difficulty as compared with 40% females. About two thirds were considering only 1 or 2 majors when they chose their field of study, with 50% considering 2 majors only.
- e. Over 50% would have liked to have had 3 or 4 years of college education, with over 40% wanting 4 years. Slightly over 25% wanted 1 or 2 years of college with 22% wanting 2 years. 20% wanted one or more years of graduate work.

In terms of the number of years of education they thought were required for the jobs they hoped to get upon graduation, 50% of females as compared with 30% of males stated 2 years. 25% of females compared with 40% of males, felt their job goal required 4 years of college. 20% of females and 30% of males stated that 1 or more years of graduate work were required.

- f. 80% of the total group felt that they were "fairly" (46%) or "very" (34%) certain that they would complete the amount of education they felt was required for their job goal with males slightly more certain than females. About 25% of both sexes preferred, in the

Educational Objectives (continued)

long run, an academic life, 25% a business life and a little over 20% (30% of males) a professional life. 5% preferred an occupational life goal as either a trained technician or craftsman or in some aspect of creative arts.

g. The chosen vocations of these students were indicated as follows: N=89

<u>F I E L D</u>	<u>P E R C E N T</u>
PROFESSIONAL	
Medical	14
Teaching	13
Fine Arts	12
Social Work	8
Law	3
Ministry	1
Research	1
Total Professional	52%
BUSINESS	
Secretarial	16
Executive	2
Owner, partner, manager	2
Sales	1
Total Business	21%
OTHER	
Technician	9
Government	2
Homemaking	2
Forestry	1
Military	1
Non-specified	12
Total Other	27%
TOTAL	100%

h. The goal of almost 40% of the females 15 years from now was to be a married career woman with children, while another 30% wanted to be a

Educational Objectives (continued)

housewife with one or more children. This same relative ranking held for both high and low group females, although the low group had a slightly smaller percent in each of the above categories and a slightly larger percent preferring no children or uncertain as to what they would like in this respect.

3. Job Considerations

- a. The groups ranked the following items (out of a possible ten) in terms of their importance in any job or profession that they would consider entering.

	<u>TOTAL</u>	<u>MALE</u>	<u>FEMALE</u>	<u>HIGH</u>	<u>LOW</u>
(1) opportunity to be helpful to others and/or useful to society in general	1	2	1	1	1
(2) chance of above average income	3	3	2	2	3
(3) stable, secure future	3	1	3	3	
(4) can get along with the kinds of people with whom working	2				2

There appears to be a consistent interest in two areas--financial (2) and (3) and human relations (1) and (4).

- b. There was consensus among 50% or more of all groups that the factors least important in job consideration for them were either "avoidance of work under relative high pressure" or "relative freedom from supervision from others," the former being considered slightly less important than the latter.

4. Financial Resources

The primary source of financial support for over 80% of the total group was parents (46%) or job (35%). More females (51%) than males (41%) and more of the high group (62%) than the low group (35%) received parental support. More males (41%) than females (29%) and more low group (48%) than high group (20%) considered their jobs as the most important source of income.

Of the total group 42% did not work. However, 58% of females compared with 24% of males and 52% of the high group compared with 38% of the low group did not work. Many worked 16 or more hours per week: 38% of males, 17% of females, 20% of highs and 27% of lows.

Between 60-65% of all groups expected to spend between \$300-600 for the semester on tuition, board, room, books, clothing, recreation, transportation, etc.

In comparing the Fall 1964 with the Spring 1964 group, slightly more are working some hours, slightly less are working longer hours, and they expect to spend more.

5. Extra Curricular Activities

Most of the members of all groups, 60-70% were in no extra curricular on campus activities. 20% were in one or two.

Slightly over 50% are engaged in some off campus activities, with most of those involved being in between one and three activities.

6. Expectation of College

- a. Over 90% of all groups expected to find a "fair amount" to a "great deal" of competition for grades. However, more males than females expected a "great deal" of competition, while more low than high group members expected "only a little."

- b. Major activities expected to give the most personal satisfaction in school during the first semester were in order: "my studies," "getting to understand myself better," and "getting acquainted with a large variety of students." Among the subgroups, the third choice of males differed slightly from females in that males slightly prefer, "getting acquainted..." and "parties, social life, and dating" while females slightly prefer, "study" and "close friendships."
- c. A major problem was anticipated in "studies" for all groups. Second and third level problems were well distributed over the 10 alternatives presented. The edge, if any, for second and third problems tended toward, "getting acquainted with a variety of students," "getting acquainted with faculty members," and "close friendships."
- d. About 50% of all groups felt that the most important reason for going to college was "to get training for a job or career," while 60% felt that going to college to "become a well rounded person" was least like their idea of college.

"Developing an interest in ideas and knowledge and developing intellectual ability" and "trying to understand myself better, search for meaning and purpose in life, and learn how to improve society" are intermediate in ranking with the former ranking slightly higher, as purpose of college, in their view.

- e. The reason for attending L.A.C.C. varied greatly, but the main tendencies were in order:
- (1) offers a course of study I want
 - (2) grades too low to enter another college
 - (3) recommended by high school counselor, teacher, or principal

7. Previous Schooling

- a. Almost 50% of all students had lived in California for 10 years or more, although for males and low group members the figure is 40% against 55% for females and the high group. About two thirds of all students had been in California 3 years or more. About 25% had lived in California 1 year or less, with 20% of males and lows and 30% of females and highs having this recency of arrival.

The figures on the length of time living in Los Angeles follow the same relationship indicated above for California but a few percentage points less in terms of length of time in Los Angeles.

- b. About 90% attended no more than 2 high schools, with almost 80% attending only one. Very slightly more of the low group than the high group attended two high schools.

About 75% of all students attended no more than 2 elementary schools. However, about 45% attended only one. Almost 20% attended 3 or more elementary schools.

It appeared that the tendency to change elementary schools is greater among the females and highs while the males and lows tends to change more frequently at the high school level. All had credit for high school graduation.

- c. About 50% of males and lows as against 37% of females and highs lived in cities of over 2,000,000 during their high school days. Another one third lived in cities of 500,000 to 2,000,000, with slightly more females and highs from smaller cities. Almost all are from urban areas.

- d. About 85% graduated from public high schools and 10% more from parochial schools. About 90% graduated from coeducational schools.
- e. By student statements, about 75% graduated from racially integrated and 25% graduated from racially segregated schools. No male-female distinction shows here although slightly more of the highs than lows stated that they were from integrated schools. (Fall 1964 as compared with Spring 1964 showed more from integrated high schools.)
- f. About 15% were in graduating classes of either 700 or more or of 100 or less. The remaining 70% were divided evenly between classes of 100-400 and 400-700, with females tending (2:1) to be from the larger and males tending (1:2) to be from the smaller.
- g. About 30% of all students didn't know what percent of their graduating class went to college. Of those who did know, about 40% indicated that up to one half of their class went to college and another 40% indicated that between one half and three fourths went to college. One male-female difference appeared: 25% of males answering against 3% of females answering, indicated that between 0-25% of their class went to college.
- h. Almost 40% of all students didn't know their rank in their graduating class. Of the remaining 60%, almost 45% ranked themselves in the upper half, about 14% in the upper quarter, and 15% not in the top half.
- i. The ranking of subjects enjoyed most in high school were as follows:

	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>High</u>	<u>Low</u>
English	4		1		
Music	3		2	1	
Physical Education					1
Science	1	2	2	2	
Shop or Commercial					2
Social Science	2	1		1	

The ranking of subjects enjoyed least in high school were;

	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>High</u>	<u>Low</u>
Mathematics	1 (34%)	1 (27%)	1 (45%)	1 (43%)	1 (28%)
English	2 (16%)	2 (22%)		2 (15%)	2 (16%)
Social Science			2 (20%)		

- j. Students judgments of courses in which they had the best and poorest preparation were well distributed but the main choice in these categories were: Shop or commercial as the area of best preparation (about 20%) for all groups except the high group who chose English. English was area of poor preparation (25-30%) except for high group which chose mathematics (with English a close second).
- k. All things considered, (not just academic preparation preparation) about 60% were "quite" or "very" satisfied with their high school. The remaining were "not very" or "fairly" satisfied, with more males than females tending to be "not very" satisfied.

8. Family Background

- a. Almost 90% stated both parents were living. Where only one was living, it was the mother. About 50% of the parents were living together, while about 40% were divorced or separated. Where the parents were separated the students lived mostly or always with the mother (in 70-80% of the cases). In the Fall 1964 group as compared with the Spring 1964 group, 20% more have both parents living but 20% more are divorced or separated.
- b. About 50% of the fathers were skilled or semiskilled workers. The next most prevalent "fathers occupations" were unskilled and clerical. Less than 9% were in professional, executive, owner category.
- c. Three quarters of the total groups mothers worked at some time during the student's life. Over 30% of the mothers were working before the student was born and began working again soon thereafter---slightly more of female's mothers so doing than male's mothers. However, about 50% of both male's and female's mothers were working by the time the students were 6-8 years old. 20-25% of the mothers did not work---

with slightly less of the low group mothers not working. About 45% of the mothers did not stop working.

About 33% of the mothers of all students were in unskilled or semi-skilled occupations, with another 10-15% in clerical fields. 40% of the mothers of low group students, as compared with 25% of the mothers of high group students, were in unskilled and semi-skilled jobs.

- d. Almost all students stated that their parents felt that graduation from junior college was important to some degree. 20% of the students of all subgroups felt that their junior college graduation was "quite important" to their parents. There appeared to be some difference in the "very important" category, however---57% for males, 67% for females, 71% for upper and 54% for lower group.
- e. 18% did not give an estimate of annual family income. Of those who did, the incomes ranged from "less than \$2,000" to "over \$32,000." The median income of all groups was in the \$4-6,000 range except for females where it was in the \$6-8,000 range. The upper quartile was in the \$8-10,000 range for all, except males for whom it was \$10-14,000. The lower quartile was in the \$2-4,000 range for all groups.
- f. About 60 to 70% of the parents of these students graduated from high school. More parents of students in the Fall 1964 group, compared with Spring 1964 group graduated from high school.

IV. Evaluative Data

A. General Characteristics of "Block Program" students: Fall and Spring 1964

In order to determine whether the data collected on the Spring 1964 and Fall 1964 Block program students describe the same population of students, a comparison was made between the scores of the two groups. Where the same psychological tests and inventories were used, the median and quartile figures are given.

TABLE 21 - Aptitude * Achievement Measures: Spring & Fall 1964 Block Program

Inventory	GATB "G"		SRA Non-Verbal		Calif. Reading Vocab.		Cal. Reading Comprehension		SRA Reading Placement	
	Centile Work Pop.		Centile Gen'l. Pop.		Grade Level		Grade Level		Centile & Gr. Level (LACC Psych. I)	
	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
N	58	92	56	81	64	84	64	84	64	88
Median	27	27	55	65	9.2	9.6	8.8	9.2	7(8.3)	8(8.5)
Upper Quartile	39	38	70	81	10.4	10.4	9.4	9.9	17(9.3)	16(9.3)
Lower Quartile	15	20	25	34	7.5	8.2	8.1	8.4	3(7.6)	4(7.8)

Inventory Scale Group	GATB - Centiles (working population)															
	Verbal		Numerical		Spatial		Form Perception		Object Perception		Motor Coord.		Finger Dexterity		Manual Dexterity	
	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall
N	58	92	58	92	58	92	58	92	58	92	58	92	58	92	58	92
Median	26	27	32	36	33	38	48	56	54	56	67	67	35	40	50	67
Upper Quartile	43	38	46	48	54	62	68	74	75	69	86	86	65	63	76	87
Lower Quartile	18	20	16	25	15	22	33	35	34	38	47	56	18	29	27	48

1. Aptitudes and Achievement Levels.

In the overall view, it can be seen in Table 21 that the two groups appear to run at the same general level in all areas. There appears, however, to be a consistent, if slight tendency for the Fall 1964 group to have scores higher than those of the Spring 1964 group.

In general, the average composite person in the block programs of both semesters places as follows in scholastic measures.

<u>Measure</u>	<u>Centile on grade level</u>	<u>Norm group</u>
Verbal Intelligence	27 centile	working population
Non-verbal Intelligence	50 centile	17 yrs. old & older
Reading Vocabulary	Grade 9 (5-9 %ile)	College Freshman
Reading Comprehension	Grade 9 (2-5 %ile)	College Freshman
Critical reading (untimed)	Grade 8.5 (8 %ile)	L.A.C.C.

In specific aptitudes, compared with working population norms, the average person falls between the lower 25 to 33% in Verbal, Numerical, and Spatial aptitudes and around the average in Form Perception, Clerical Perception, Motor Coordination, and Manual Dexterity (with Finger Dexterity slightly lower) on the GATB. In terms of OAP eligibility (Table 22) the females and total group in Spring and Fall of 1964 appear to be similar in the percent of students eligible for most OAP's. The males, however, show a slightly larger percent eligible for some higher level OAP's and for some OAP's in general, therefore more job eligible in terms of established OAP's.

TABLE 22 - Percent of Students Failing in Occupational Aptitude Patterns Based on GATB

OAP Number	Group	Males		Females		Total		College Level
		"G"	Spr.	Fall	Spr.	Fall	Spring		Fall
1	125		0	0	0	0	0	Graduate School
2	115		0	0	3	0	0	
3	110		0		3		2	
4	105		0	7	4	1	2	
5	105		0	7	6	4	2	2 years
6	100		0		3		3	
7	100		0	2	3	2	2	
8	100		1	5	6	2	3	
9	95		9	20	19	12	16		16
10	95		4	28	19	10	14	18
11	95		4	26	22	12	16	18
12	95		9	20	19	10	16	15
13	90		14	24	25	20	21	22
14	90		14	26	33	18	26	22
15	90		18	38	19	24	19	30
16	90		13	47	26	32	33	39
17	85		55	64	56	58	55	61
18	80		59	64	61	68	60	66
19	80		59	68	64	64	62	66
20	80		45	68	55	78	52	74
21	80		68	71	58	60	52	65
22	75		59	64	78	66	71	65
23	--		0	14	25	20	16	17
24	--		14	38	28	28	22	33
25	--		45	57	42	42	43	49
26	--		32	57	44	42	40	49
27	--		27	57	50	44	41	50
28	--		82	30	80	70	81	75
29	--		41	59	64	56	55	58
30	--		50	64	39	58	43	61
31	--		77	76	75	74	76	74
32	--		59	71	78	70	71	71
33	--		36	64	67	66	55	65
34	--		27	59	53	58	43	59
35	--		55	66	72	68	66	67
None	--		0	2	6	8	3	5
Total Students			22	42	36	50	58	92

2. Motivational and Personal Areas

- a. The Need levels shown on the Edwards Personal Preference Schedule are, in general, quite similar by observation (Table 23.) Differences in the total groups for the two semesters may reflect the difference in the male-females composition of the classes. The median centiles for the two semesters by sex, however appear very similar.

Considering the groups from both semesters together, the tendency was for them compared with college freshman norms to have above average needs for order, abasement, deference, change, and endurance. On the other hand, they appear to have below average needs for heterosexual interests and dominance.

An interesting note is that the Fall 1964 class appeared more volatile to the instructors than had the Spring 1964 group. This may be attributed to increased class size, varying class size and scheduling during the semester, adding more units to the block, etc. However, it is to be noted that in the Fall 1964 group, the males had more need for aggression and the females had more heterosexual interest and more need for change and variety.

Table 23 - Edwards Pers. Pref. Sched. (% of class in upper & lower 16% & mid 68% of Norm GP.)

Nat'l. Col. Norm	Class	ACH	DEF	ORD	EXH	AUT	AFF	INT	SUC	DOM	ABA	NUR	CHG	END	HET	AGG
Upper 16% of Norm Group (High need)	SPRING '64	9	27	40	20	8	5	15	9	2	30	15	13	46	6	29
	FALL '64	11	28	40	19	10	10	7	11	2	35	14	25	26	4	21
Mid 68% of Norm Group (Ave. Need)	SPRING '64	70	64	59	60	95	91	76	80	76	68	92	83	54	62	70
	FALL '64	64	60	56	62	85	70	81	70	60	62	72	67	73	58	61
Lower 16% of Norm Group (Low need)	SPRING '64	21	9	2	20	17	24	9	11	22	2	13	4	3	32	6
	FALL '64	17	8	1	19	16	21	11	11	21	5	14	6	1	31	9
Male Median Centile	SPRING '64	30	93	78	49	93	36	57	50	32	79	63	64	85	27	57
	FALL '64	30	75	71	59	80	30	46	50	21	49	63	64	75	17	44
Female Median Centile	SPRING '64	64	73	83	42	95	32	43	44	42	66	58	52	69	24	66
	FALL '64	64	62	83	42	87	29	45	44	36	66	58	73	67	25	49

Need relative to Nat'l. Norm (Col)	Male	SPRING '64	DEF	ORD	EXH	AUT	AFF	INT	SUC	DOM	ABA	NUR	CHG	END	HET	AGG
		Female	FALL '64													

Meaning of Scales

- ACHievement = to do one's best
- DEfERENCE = to follow others and do what's expected
- ORder = to have things in order and arranged
- EXHibition = to be the center of attention
- AUTonomy = to be independent of others
- AFFiliation = to participate in groups and form strong attachments
- INTerception = to analyze one's motives & the behavior of others
- SUCcorance = to have others provide help
- DOMinance = to be regarded as a leader & stand for pt. of view
- ABAsement = to accept blame, feel inferior
- NURturance = to help others in trouble
- CHange = to do new and different things
- ENDurance = to keep at a task till finished
- HETerosexuality = interest in the opposite sex
- AGGression = to get angry, blame, criticize

* + appears significantly above national Norm
 - appears significantly below National Norm

TABLE 24 - Kuder Preference Record (Interests - Adult Norms): In Quintiles

Interest	Outdoor		Mech.		Comput.		Scient.		Per- suasive		Art		Literary		Music		Soc. Serv.		Clerical	
	S	F	S	F	S	F	S	F	S	F	S	F	S	F	S	F	S	F	S	F
Males S=Spring F=Fall	22	40	22	40	22	40	22	40	22	40	22	40	22	40	22	40	22	40	22	40
N	5	4	4	4	3	2	3	4	4	3	2	2	3	2	3	2	3	2	3	2
Median Quintile	3	4	4	3	2	2	1	3	3	2	1	1	2	1	1	2	2	1	1	1
Upper 25%	5	5	5	5	5	4	5	5	5	4	3	3	4	3	5	4	4	3	3	3
Lower 25%																				
Females																				
N	33	51	33	51	33	51	33	51	33	51	33	51	33	51	33	51	33	51	33	51
Median Quintile	4	4	4	4	2	3	4	3	3	2	3	3	3	4	2	2	2	2	2	3
Upper 25%	4	3	3	3	1	3	3	2	2	2	2	2	2	2	1	1	1	1	1	2
Lower 25%	5	5	5	5	3	4	4	5	3	4	4	4	4	5	4	3	4	4	4	4

Strength of Interests of Block Program Groups Relative to Adult Male & Female Norms

Interest	S= Spring		F= Fall		S		F		S		F		S		F		S		F	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
Males	Low	Low	Low	Low	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High	High
Females	Low	Low	Low	Low	High	High	Low	Low	Low	Low	High	High	Low	Low	Low	Low	High	High	High	High

- b. The Kuder Preference Schedule indicates that there were many similarities of interest among the two groups (Table 24) compared with adult male and female norms.

Specifically, the males show a low interest in outdoor and mechanical activities and a high interest in Artistic and Clerical activities. Females are also low in outdoor and mechanical interests but high in social service interests.

- c. In Study Habits the two groups also follow a similar pattern during the Spring and Fall semesters, with the distribution of scores for males being slightly higher than that for females (Table 25). The median centiles for males and females are essentially at the same low average level for both in the fall, although they are more divergent in the Spring.

TABLE 25 - Survey of Study Habits and Attitudes (centile - College Freshmen Norms)

GROUP	MALES		FEMALES	
	Spring	Fall	Spring	Fall
N	23	44	40	49
Median Centile	50	40	33	38
Upper Quartile	63	70	56	58
Lower Quartile	18	28	18	19

B. Enrollment and Grade Statistics

Enrollment statistics for this Fall 1964 group are given below - with a comparison made with the first (Spring 1964) group.

TABLE 26 - Enrollment Statistics

	<u>Fall 1964</u>	<u>Spring 1964</u>
A. Initial Enrollment (Alpha)	110	64
B. Number Completed Alpha	91 (83% of A)	58 (91 % of A)
C. Number @ "C" average or higher	27 (25% of A) (30% of B)	22 (34% of A) (38% of B)
D. Average GPA (Alpha)	1.61	1.65
* E. Average Units Attempted	10.31	9.4
F. Number Enrolled (Beta)	75 (68% of A) (83% of B)	36 (56% of A) (62% of B)
G. Number Completed Beta	71 (95% of F)	33 (92% of F)
H. Number @ "C" average or higher	30 (40% of F) (42% of G)	13 (36% of F) (39% of G)
I. Average GPA (Beta)	1.71	1.48
J. Average Units Attempted	11.19	10.6
** K. Number Enrolled Gamma	** 49 (45% of A) (65% of F)	22 (37% of A) (61% of F)

* Number of units required in Block Program: Fall 1964 = 9.5; Spring 1964 = 6.5

** 31 out of 49 high group (63%)

26 out of 49 females (53%)

TABLE 27 - Distribution of Grade Point Average in "Block" Fall 1964 - with Comparison made with the "Block" Spring 1964 Group - (Average During the Alpha Semester of those Completing the Alpha Semester and of Those Enrolling in the Beta Semester.

G. P. A.	Completing Alpha Semester		Returning Beta Semester	
	Fall 1964	Spring 1964	Fall 1964	Spring 1964
3.50 - 4.00	0 (0%)	0 (0%)	0 (0%)	0 (0%)
3.00 - 3.49	1 (1%)	1 (2%)	1 (1%)	1 (3%)
2.50 - 2.99	9 (10%)	8 (14%)	9 (12%)	6 (17%)
2.00 - 2.49	17 (18%)	13 (22%)	17 (23%)	11 (30%)
1.50 - 1.99	20 (22%)	11 (19%)	18 (24%)	4 (11%)
1.00 - 1.49	30 (33%)	15 (26%)	26 (35%)	9 (25%)
0.50 - 0.99	9 (10%)	10 (17%)	4 (5%)	5 (14%)
0.00 - 0.49	5 (6%)	0 (0%)	0 (0%)	0 (0%)
Number	91 (100%)	58 (100%)	75 (100%)	36 (100%)
Average G.P.A.	1.61	1.65	1.76	1.85

Table 27 above shows that in the Fall 1964 "Block", as compared with the Spring 1964 group a smaller percent (29% vs 38%) received a "C" average or more, a larger percent (55% vs 45%) received a "D" average, while the same percent received "less than a D" average.

Of students returning for the Beta semester, 50% of the Spring '64 group had received at least a "C" average as Alphas while only 36% of the Fall 1964 group did so. The average of the Spring returning student slightly exceeded that of the Fall returning students, although the Spring group did not do nearly as well in the Beta semester as did the Fall group (Table 26).

Could these differences relate to group size, unit load, type of program in Alpha and Beta semester, or Spring group being slightly lower on aptitude and achievement scores?

TABLE 28 - High Schools Last Attended.

<u>School District</u>	<u>No. Fall 1964</u>	<u>No. Spring 1964</u>
Los Angeles City Schools		
Dorsey	8	1
Manual Arts	7	7
Belmont	6	2
Jefferson	6	3
Fairfax	5	0
Fremont	5	4
Los Angeles	5	4
Washington	5	5
Marshall	4	5
Roosevelt	3	1
Wilson	2	0
Eagle Rock	1	1
Hollywood	1	1
Other Los Angeles City	4	6
	<hr/> 62 (57%)	<hr/> 40 (62%)
Other California High Schools	18 (16%)	1 (2%)
Total California High Schools	<hr/> 80 (73%)	<hr/> 41 (64%)
Total Out-of-State	30 (27%)	23 (36%)
Total Enrolled	<hr/> 110 (100%)	<hr/> 64 (100%)

The above Table (Table 28) shows that the majority of students graduated from California high schools. In Fall 1964, about 2/3 of the California graduates had been in California for 10 years or more, and about 90% were in California for at least 3 years. The large number completing elementary school outside California may have educational implications, however.

**TABLE 29 - Distribution by Race and Sex (Fall 1964 and Spring 1964):
Alpha and Beta Semesters**

	M A L E						F E M A L E						T O T A L			
	Negro		Caus.		Other		Negro		Caus.		Other		Male		Female	
	F'64	S'64	F'64	S'64	F'64	S'64	F'64	S'64	F'64	S'64	F'64	S'64	F'64	S'64	F'64	S'64
Initial Enroll	34	19	9	3	9	2	38	30	12	6	8	4	52	24	58	40
Completed Alpha	28	16	8	3	7	2	30	29	11	4	7	4	43	21	48	37
"C" Average	7	6	4	1	0	0	10	12	4	2	2	1	11	7	16	15
Average GPA	1.55	1.59	1.84	1.80	1.27	1.24	1.67	1.67	1.69	2.09	1.62	1.57	1.56	1.59	1.67	1.69
Aver. Uts. Att.	10.5	9.2	10.4	11.5	10.1	9.5	9.9	9.3	11.0	10.2	10.2	8.5	10.4	9.1	10.2	9.5
Complete Beta	20	9	7	1	6	2	22	19	10	0	6	2	33	12	38	21
"C" Ave. (Beta)	5	2	2	1	4	1	9	7	7	0	2	1	12	4	18	8
Ave. GPA (Beta)	1.47	1.23	1.74	2.84	2.06	1.95	1.68	1.43	2.13	-	1.41	1.70	1.60	1.51	1.75	1.46
Ave. Uts. Att (Beta)	10.3	9.9	10.2	13.0	8.5	9.2	10.3	10.1	11.8	-	10.4	11.5	9.9	10.5	10.7	10.7
Enrolled (Gamma)	15	5	4	2	5	1	13	11	8	-	4	3	24	8	25	14
Av. Units Enrolled (Gamma)	11.4	10.0	13.0	10.2	11.4	15.5	11.1	9.5	13.4	-	10.6	11.6	10.5	10.9	11.7	10.0

C. Changes in Reading Performance: Comparison between First and Second Semester Block Program Groups (Spring 1964 and Fall 1964)

It can be seen that Block Program students in both the Spring and Fall of 1964 were comparable at the beginning and at the end of their respective semesters. (Table 30). Reading work was given but not emphasized because of group size.

TABLE 30. - Changes in Reading Performance: Spring 1964 and Fall 1964

	Spring and Fall 1964 Before - After Performance Levels*											
	California Reading Vocabulary				California Reading Comprehension				SRA Placement			
	Before		After		Before		After		Before		After	
S = Spring F=Fall	S	F	S	F	S	F	S	F	S	F	S	F
N	46	84	NOT	84	46	84	46	84	48	88	48	88
Median	9.4 (9)	9.6 (9)	AD	10.2 (13)	8.6 (-)	9.2 (5)	9.4 (6)	9.8 (8)	8.3 (7)	8.5 (8)	9.3 (16)	9.3 (16)
Upper Quartile	10.6 (18)	10.4 (15)	M	11.2 (23)	9.4 (6)	9.9 (8)	10.0 (9)	10.7 (16)	8.8 (10)	9.3 (16)	10.2 (28)	10.2 (28)
Lower Quartile	7.0 (-)	8.2 (3)		9.4 (8)	7.8 (-)	8.4 (-)	8.6 (-)	9.2 (5)	7.4 (2)	7.8 (4)	8.5 (8)	8.5 (8)

Purple

* Decimal = grade level

Green

Parenthesis = centile LACC Psychology 1

D. Comparison of High and Low Reading Groups (Block Program-Fall 1964) on Selected Characteristics

The data presented thus far indicates that the students in the groups differentiated by their reading levels appear to be different in other reading characteristics also.

It was decided to compare these two reading level groups on some other specific characteristics as indicated below.

1. Grades

Tables 31 and 32 below indicate that males exceed females in the proportion that they are found in the low reading group. Low reading group males exceed low reading group females in GPA, while no sex difference exists in GPA in the high reading group. 11 out of 43 males and 16 out of 48 females received 2.00 or higher. 5 out of 43 males and 9 out of 48 females received .99 or below.

TABLE 31. - Grade Point Average, Fall 1964 (First Semester) by Sex and Reading Group of Those Completing Semester.

SEX	READING GROUP		TOTAL
	HIGH	LOW	
Male	1.94 (N=14)	1.37 (N=29)	1.56 (N=43)
Female	1.93 (N=31)	1.19 (N=17)	1.67 (N=48)
TOTAL	1.93 (N=45)	1.30 (N=46)	1.61 (N=91)

TABLE 32 - Distribution of Grade Point Averages of Students in High and Low Group During Alpha Semester

GPA	HIGH	LOW	TOTAL
3.00+	1 (2%)	0 (0%)	1 (1%)
2.00 - 2.99	21 (47%)	5 (11%)	26 (29%)
1.00 - 1.99	20 (44%)	30 (65%)	50 (55%)
.00 - .99	3 (7%)	11 (24%)	14 (15%)
TOTAL	45 (100%)	46 (100%)	91 (100%)

2. Location of High School from Which Graduated Block, (Fall 1964) only.

TABLE 33 - Location of Last High School as Related to Reading Group, Withdrawal During Semester, and GPA of 2.00+ or .99-

Purple = Frequency

Red = Percent

Location	Reading High	Group Low	Total Completing Semester	Withdrawal	GPA 2.00+	GPA .99-
Los Angeles City	24 (53)	28 (61)	52 (57)	11 (58)	14 (52)	5 (45)
Other California	<u>7</u> (16)	<u>8</u> (17)	<u>15</u> (17)	<u>3</u> (16)	<u>6</u> (22)	<u>2</u> (18)
Total California	31 (69)	36 (78)	67 (74)	14 (74)	20 (74)	7 (64)
Southern	8 (18)	6 (13)	14 (15)	3 (16)	5 (19)	3 (27)
Others	<u>6</u>	<u>4</u>	<u>10</u>	<u>2</u>	<u>2</u>	<u>1</u>
Total outside California	14 (31)	10 (22)	24 (26)	5 (26)	7 (26)	4 (36)
Total Number	45 (100)	46 (100)	91 (100)	19 (100)	27 (100)	11 (100)

Table 33 above shows that Los Angeles City School graduates make up slightly over half of the total group completing the semester, while California graduates make up 3/4's of the group of the remainder, Southern high school graduates make up about 15%.

A slightly larger proportion of the low, as compared to the high group, is made up of Los Angeles City and California graduates. The high school locations contribute "C averages or better" in proportion to their representation in the total group. The ".99 or less" grades are slightly higher from the Southern graduates.

3. Reading Level, SCAT scores, and grade point average (Alpha Semester)

The SCAT scores were compared for the students in the high and low reading groups who earned GPA's, in their first semester, of 2.00 or higher and .99 or lower. Table 34 shows this relationship on the Verbal, Quantitative, and Total SCAT Scores. The frequencies in the columns represent the number of students in the indicated group that received the particular SCAT score on higher, e.g., on the Verbal Scale, of the students in the high reading group earning a GPA in their first semester of 2.00+, 4 had a SCAT Verbal score of 25 or more.

In general, this table suggests that on the Verbal Scale, the high group "2.00" students cover a broad range of "V" scores. The high group ".99" student are among the higher scores (above 20 centile) on "V" (motivational problems). The low group "2.00" and ".99" student are in the lower range (below 20 centile) on "V" and not apparently different from one another. The combined (high and low group) "2.00" students distribution of scores on "V" don't appear to be different from that of the ".99" students.

On the Quantitative Scale, the high group "2.00 and .99" students don't appear differentiated and rank (in general) lower on the "Q" than the "V" Scale. The low group "2.00" students score at the higher range on "Q" (apparently significantly higher than the ".99" low group students and perhaps even significantly higher than the high group "2.00"

and ".99" students). The combined 2.00 students appear (in general) higher on the "Q" than the combined ".99" students.

On the Total Scale, the high group "2.00" and ".99" students are undifferentiated. The low group "2.00" students score higher than the ".99" students and are not differentiated from the high "2.00" student. The combined "2.00" students (in general) score higher than the ".99" students and are more homogenous in score level.

The distribution of the Total scores suggests also that even at this low level and narrow range of raw scores, the SCAT Total may be helpful in selecting those who can profit from those who are less likely to, under the conditions of this program---e.g., a total score of 31 or higher includes 66 out of 91 who completed the semester, among the 66 are all 27 of those who earn a "2.00 or higher" in their first semester, while excluding one half of those earning ".99 or less," and 20 of the 50 of those earning between 1.00 and 1.99 (not shown). That is, the proportion in this program would be less and would include a larger proportion of those who might succeed.

It also suggests the possible need for at least two different: grams at this level instead of one.

4. Beta (second) semester grades for Fall 1964 group. Does the relationship between GPA for sub groups and between SCAT and Beta semester GPA hold as for Alpha grades?

VERBAL				QUANTITATIVE				TOTAL SCORE					
% Raw	High	Low	Both	% Raw	High	Low	Both	% Raw	High	Low	Both	Tot. Gp.	Tot. Gp.
file Sc.	2.00	0.99	2.00	file Sc.	2.00	0.99	2.00	file Sc.	2.00	0.99	2.00		
40	11		1	40				20				48	1
35				35		1	1	15				47	2
30	3		3	30								46	3
25	4		4	25								45	5
24				24		2	2					44	8
23	6		6	23								43	11
22				22								42	15
21	12		12	21				10				41	18
20	9		9	20								40	20
19	9		9	19								39	23
18	12		12	18								38	29
17	14		14	17								37	36
16	15		15	16								36	47
15	17		17	15								35	53
10	18		18	10								34	65
5	18		18	5								33	70
3	20		20	3								32	74
2	21		21	2								31	80
1	21		21	1								30	82
0+	22		22	0+								29	84
												28	86
												27	87
												26	90
												25	91
												24	
												23	
												22	
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												6	
												5	
												4	
												3	
												2	
												1	
												0	

To check this out, a follow-up was conducted to determine second semester grades and the relationship of SCAT Total scores to second semester grades. Preliminary data is as follows:

TABLE 35. - GPA for Fall 1964 Block Groups in Beta Semester

	MALE	FEMALE	HIGH	LOW	TOTAL
Mean GPA	1.65	1.75	1.74	1.67	1.71
N	33	38	36	35	71

Females and highs have higher GPA's than males and lows in the Beta as in the Alpha semester (Tables 35 and 29). The GPA's are not as extreme, nor the differences as great as in the Alpha semester

5. Comparison of Beta Semester grades with SCAT Total score.

Table 36 shows the cumulative frequency during the Beta semester of individuals on SCAT Total according to groups: High, low, and total group members who earned a 2.00 or higher during the Beta semester; and high, low, and total group members who earned less than 2.00 during the Beta semester but who had earned 2.00 or more during the Alpha semester.

In comparing GPA of the high and low groups during the Alpha and Beta semesters it can be seen that while "C" or better was earned by 22 High and 5 Low, for a total of 27 during the Alpha semester (Table 34), a GPA of "C" or better was earned by 17 High and 13 Low, for a total of 30 during the Beta semester (Table 35). That is, there were more "C" averages out of a smaller group (91 vs 71) and at the same time the SCAT total for these "C" students were not higher and if anything, slightly lower, while the units attempted were at least the same or greater than those taken during the Alpha semester (an average of 10 for the low group

TABLE 36 - Cumulative Frequency Distribution on Total Score of Those Completing One Year at LACC during Beta semester.

Total SCAT	Cumulative frequency								
	No. Students			# with Beta 2.00+			# with Beta GPA 1.99- who had ALPHA GPA of 2.00+		
	Hi	Lo	Tot	Hi	Lo	Tot	Hi	Lo	Tot
41	1		1				1		1
40									
39	8	3	11	3	1	4	2		2
38	10	5	15	4		5	3	1	4
37	14	10	24	6	4	11			
36	19	12	31	9	5	14	4		5
35		15	34		6	15			
34	20	16	36				5		6
33	24	19	43	12	7	19			
32	28	21	49	14	8	22			
31	31	22	53	15	9	24	7		8
30		24	55		10	25			
29	34	25	59	16		26			
28		27	61		11	27			
27		28	62						
26	35		63	17		28			
25		30	65		12	29			
24		32	67						
23		33	68		13	30			
22									
21									
20									
19		34	69						
18	36		70						
17									
16									
15									
14									
13									
12		35	71						
11									

The SCAT Total therefore, appears to be of less of a prediction for Beta grades than for Alpha grades, (particularly for the poorer readers). For example the 31 cutoff mentioned earlier in this section (Section D1) would have left 70% of those completing the Alpha semester and 100% of the Alpha semester's "2.00+'s". Had it been used at that time however, it would have eliminated 6 of the 30 Beta 2.00+ or 20% of those successful in the second semester (and these from the low reading group). Is the the cost worth the savings?

6. Alpha grades as related to Beta grades

Of those completing both Alpha and Beta semesters, the following grade relationship between semesters is shown. (Fall 1964 Block only).

TABLE 37 - Fall 1964 Block Only

A L P H A	S E M E S T E R	B E T A S E M E S T E R														
		GPA	.99-		1.00-1.49		1.50-1.99			2.00+		H	L	T		
	2.00+	1	1	1	1	6	1	7	11	3	14	19	4	23		
	1.50-1.99	3	3	1	1	2	1	3	4	5	4	9	10	8	18	
	1.00-1.49	2	3	5	1	2	3	3	7	10	1	5	6	7	17	24
	.99-		1	1		2	2		2	2		1	1		6	6
	High	6			3			10				17			36	
	Low		4			5			13			13			35	
	TOTAL			10			8			23			30			71

H - High

L - Low

T - Total

It can be seen that, e.g., of the 17 students of the high group that earned a 2.00+ in the Beta semester, 11 also did so in the Alpha semester. For the 13 of the Low group earning Beta 2.00+, only 3 had done so in the Alpha semester.

Of those getting .99 or less during the Beta semester, 4 had gotten 1.50+ and 6 had gotten 1.49 during the first semester. A cursory look at those getting .99 or less in the Beta semester shows many to be those with SCAT totals in high 30's. Is this a motivational problem--negatively speaking?

Also suggested is that the better reader of this "low tested ability" group who gets a "C" average the second semester is likely to have gotten a "C" the first semester. However, the poorer reader who gets a "C" the second semester is not likely to have gotten it the first. To what degree has the first semester helped him make it the second? Is it a function of the courses he is taking the second or a case of having found his level? Courses taken in the Beta semester need to be examined as to type and grade. (This is in process).

7. Grades of non-returning students.

The grades during the Alpha Semester of those not returning in the Beta semester were as follows:

TABLE 38 - Grades of non-returning students in Alpha semester

GPA	High	Low	Total	Male	Female
2.00+	3	1	4	2	2
1.50-1.99	1	1	2	2	0
1.00-1.49	2	2	4	3	1
.99-	4	8	12	4	8
Total	10	12	22	11	11

This Table 38 shows a tendency for those not returning from the lower reading group to be the ones with poorest grades, while in the higher reading group the relationship of returning to school and grades in Alpha semester is not as clearly shown.

Females not returning tended to be those receiving low grades. While this was a slight tendency for males it didn't seem as strong. Females in the low reading group received a lower average GPA than males in the low group (1.19 vs 1.37).

8. Reading Level

Table 39 indicates that for the Fall 1964 group, the change in vocabulary and Comprehension on the timed California Reading Achievement test is greater for the high reading (over 1 year) than for the low reading group (about 6 months). On the untimed critical Reading test, however, the low group appeared to make a greater change than the high group.

It is to be noted that the level (before and after) of the lowest quarter of the high group appeared similar to that of the highest quarter of the low group.

TABLE 39 - Changes in Reading Performance: High and Low Groups, Fall 1964

g

Fall 1964 High & Low Group Before - After Performance Levels*

	California Reading Vocabulary				California Reading Comprehension				SRA Reading Placement				
	Before		After		Before		After		Before		After		
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	
H = High L = Low													
N	41	43	41	43	41	43	41	43	44	44	41	43	
Median	9.7 (9)	9.2 (7)	11.0 (20)	9.7 (9)	9.4 (6)	8.9 (2)	10.7 (16)	9.5 (6)	9.3 (16)	7.8 (4)	9.6 (20)	8.8 (10)	
Upper Quartile	10.6 (16)	10.2 (13)	11.8 (30)	10.6 (16)	9.9 (8)	9.9 (8)	11.1 (20)	10.4 (12)	9.9 (23)	8.5 (8)	10.2 (28)	9.6 (20)	
Lower Quartile	9.4 (8)	7.3 (-)	9.9 (10)	7.7 (1)	9.0 (3)	7.7 (-)	9.6 (7)	9.0 (3)	8.3 (7)	7.4 (2)	9.0 (13)	8.1 (5)	

* 9.6 = grade level

(20) = centile Psychology I LACC (Placement
centile College Freshmen (California Reading))

Referring back to Tables 5, 6, and 7 will give more detailed information on the male, female, high, and low subgroups. Males and females were similar both before and after the course in vocabulary.

Table 6 shows that in Comprehension (California Reading Achievement) the males slightly exceeded the females in the beginning but that the female gained more and approximated the male level at the end.

Table 7 indicates that while the females began at approximately the same level as the males on Critical Reading, they gained slightly more. On the other hand, the low group appeared to gain slightly more than the high group.

9. SRA Reading Placement as Related to Grades

The study on the Spring Block program indicated that the SRA Reading Placement Test score appeared to be related to GPA in the program.

An attempt was made to check this relationship on the Fall group. Table 40 shows the relationship between the Beginning Placement test score (Pretest) and GPA for the Alpha and Beta semesters, and between the score on the placement test taken at the end of the Alpha semester (Post-Test) and the Beta semester GPA. (Some students are included in the post test). The number of students is shown by high and low reading group (classified during the Alpha semester). The graphing diamond (\diamond) reflects the median score of all of those failing in the specific GPA category. The bar represents the mid 50% of those in the GPA category. (Q3 and Q1).

Several interesting points show here.

1. The students earning a GPA of 2.00 or better in the Alpha semester appear to have an initial reading advantage.
2. Reading advantage (Pre and Post Test) is not related to better GPA's during the Beta semester.
3. High and Low reading group students whose Beta GPA is 2.00 or better appear more alike on Post test scores than Pre-Test scores.

TABLE 40-

SRA Reading Placement Test Scores as Related to GPA of Fall 1964
Block Student Enrolled in Alpha & Beta Semesters

	Pretest Reading Score as Related to:										Post-test Reading Scores as Related to:					
	Alpha Grades					Beta Grades					Beta Grades					
	1.00-1.49		1.5-1.99		2.00+	.99-1.49		1.5-1.99		200+	Not Return.	1.0-1.99		1.5-1.99	2.00+	Not Ret.
	HI	Lo	HI	Lo	HI	Lo	HI	Lo	HI	Lo	HI	Lo	HI	Lo	HI	Lo
12.2 36																
11.9 35																
11.5 34																
11.3 33																
11.0 32																
10.7 31																
10.4 30																
10.2 29																
9.9 28																
9.6 27																
9.3 26																
9.0 25																
8.8 24																
8.5 23																
8.3 22																
8.1 21																
7.8 20																
7.6 19																
7.4 18																
7.2 17																
7.0 16																
6.8 15																
6.5 14																
6.3 13																
6.1 12																
6.0 11																
N	14	30	20	27	9	7	22	30	22	11	11	18	30	18		
Med	21	21	22	26	22	23	23	23	24	27	23	25	26	27		
Upper	26	25	24	28	27	27	25	27	26	30	30	29	29	29		
Lower	16	19	20	22	20	20	20	20	20	23	20	22	24	24		

E. Evaluative Questionnaire on Attitudes About Self, College, Faculty, and Studies

This questionnaire was taken without names of students known at the end of the semester.

1. Instruction

- a. The freedom of the faculty and students to discuss a particular subject was never noticed to be restricted by 70% of students while 13% noticed a restriction only once or twice.
- b. Almost 90% of the students generally felt that they were graded on the basis of the quality of their work rather than on irrelevant factors. 58% felt that "never" and 30% felt that "very rarely" did other than quality of work enter into their grades.
- c. About 70% of the students generally felt free to disagree with their instructors. Of these, 23% felt instructors "definitely encouraged" reasonable disagreement, 46% felt instructors accepted disagreement, 9% felt penalized for disagreement.
- d. The instructors were considered to be competent by over 90% of the students, ("very competent" by 71% and "fairly competent" by 21%).
- e. As far as student satisfaction with opportunities to meet with instructors privately about work and progress, about 90% appeared satisfied to some degree--22% "extremely;" 41% "quite;" and 26% "fairly."
- f. Most (82%) felt that the methods used by instructors were effective--("usually" - 60% or "almost always" - 22%)

2. Study

- a. Almost 60% felt uneasy and inefficient on examinations during the semester. 35% felt fairly efficient and 7% very efficient.
- b. 54% felt they studied "slightly" or "much" less than their classmates. 42% felt they studied slightly more and 4% said "much more."
- c. 50% felt "completely" or "generally" unsuccessful in finding a good place to study (in terms of comfort, heat, ventilation, light, distraction-free.) 1/3 felt successful in some ways and 16% felt completely successful.
- d. 75% found putting ideas on paper difficult (38% "very difficult," 36% "frequently some difficulty" 10% felt "little or no difficulty.")
- e. The students are split on their feeling of their ability to remember what they have read: 46% "slightly above average" and 37% "slightly below average," 4% fairly poor and 11% "quite good."
- f. Almost 60% felt "prepared" going into examinations during the semester (46% "more often than not" and 12% "almost always"). Only 8% felt inadequately prepared while 34% felt "generally not."

- g. Almost 80% said they kept up on assignments (46% "usually" and 32% almost always.)
- h. In terms of their own personal satisfaction, these students attach importance to grades - 44% a "great deal," 38% "quite a bit," 13% a "moderate amount," 4% "not too much."
- i. 70% found themselves unintentionally napping or day dreaming when intending to study (26% "frequently" and 44% "occasionally.") 23% of the remainder "infrequently" did so.
- j. Most (85%) found themselves distracted by other people, conversation, street noises, etc (45% "easily," 40% "somewhat.").
- k. The students spent little time during the week in discussion on "serious topics" with other students --- averaging between 1 and 2 hours.

3. Attitudes to College and Student Body

- a. The students responded in the following way when asked of their emotional feelings toward LACC; 19% "very strong attachment," 67% "like it, but feelings not strong," 8% "don't like it, but feelings not strong," 7% "thoroughly dislike it." 86% therefore felt positively toward LACC.
- b. The students are split half and half on their satisfaction regarding the honesty of students in their class with reference to cheating, plagiarism, etc. 11% "very satisfied," 38% "fairly satisfied," 26% "somewhat dissatisfied" and 23% "very dissatisfied."
- c. Generally speaking, the students are "fairly satisfied" (58%) with the degree of concern for political, economic, and social issues shown by most students at LACC. (13% were "very satisfied" while 20% were "somewhat dissatisfied" and 80% were "very satisfied.")
- d. Generally speaking, the students (83%) are ("fairly" - 51% or "very" - 32% satisfied with the willingness of most students on this campus to associate with other students whose racial, ethnic, or social backgrounds are different from their own.
- e. In comparing their classmates concern for social life as opposed to school work, this group feels that the interest is not generally in favor of social life. However, 20% feel that there is too much concern for social life and another 20% feel that social life is favored but not too much so.
- f. When asked about the existence of a "group feeling" in their class, the responses were broadly "yes." Specifically they were as follows: "yes, quite strong" - 14%, "Yes, moderate degree" - 38%, "Yes, but rather weak" - 34%, No, practically none" - 14%.
- g. There is mixed feeling about the degree that the college (in terms of numbers of persons or organizations), is interested in the student as an individual. One-half "very seldom feel an interest" or "feel like a number," while one-third "frequently feel an interest" and only 16% say that many show an interest in them as individuals.

4. Goals

- a. Almost 80% felt that they knew what they wanted their college education to do for them, (45% "definitely," and 33% "think so.") 11% hadn't decided and were seeking answers.
- b. Over half of the group felt "fairly" (almost 40%), or "very" (almost 20%) "certain" that they have the aptitudes necessary for reasonable success in studying for their major field at this college. About one-third were somewhat "uncertain" and about 10% were fairly certain they did not possess the necessary aptitudes.

It is to be noted that this question was asked at the end of the semester. It is important to compare this figure of almost 60% feeling "fairly" or "very" certain of having the aptitude for reasonable success in study for their major with the figures showing the amount of schooling needed for the job they hope to get on graduation: - 24% - one or more years of graduate work; 37% - 3 or 4 years of college; and 39% - 1 to 2 years of college. This comparison is important in view of academic aptitude and achievement scores reported on this group and the desire of over 50% to go into professional fields generally requiring graduate level work.

F. Persistence and Performance of Spring and Fall 1964 "Block" Students Compared with "Non-Block" but "Block Eligible" Students.

I. Persistence and Performance

In order to make some meaning out of the persistence figures on these block program students, a comparison was made with a random sample of students eligible for, but not selected for the block program. The criterion for the non-block sample was, as for the block groups; under 22, no previous college, not of foreign background, SCAT Total raw score of 39 or below.

TABLE 41 - Comparison of enrollment and GPA data on "Block" groups initially enrolling in Spring and Fall 1964 with a comparable sample of non-block probationers

Green = Block Purple = Non-Block		Entered Spring 1964				Entered Fall 1964			
		Alpha	Beta	Gamma	Delta	Alpha	Beta	Gamma	4th Sems.
Numbered Registered		34 69	36 21	32 16	16 8	110 114	75 40	49 22	..
Number Completing Semester		58 61	33 19	21 15	..	91 102	71 37	..	..
Number with semester GPA	0.00 - 0.99	10 24	8 8	2 6	..	15 47	11 13	..	..
	1.00 - 1.49	15 11	4 5	3 3	..	29 22	8 1	..	..
	1.50 - 1.99	11 9	8 3	8 4	..	20 17	22 6	..	..
	2.00 - 2.99	21 16	13 3	6 2	..	26 14	30 13	..	..
	3.00 - 4.00	0 1	0 0	0 0	..	1 2	0 4	..	..
	Average Semester GPA		1.65 1.41	1.48 1.21	1.84 1.21	..	1.61 1.30	1.71 1.81	..
Average number units attempted		9.4 8.1	10.6 7.8	8.3 6.8	..	10.3 8.6	11.7 9.5	..	..
% Above C Average*		34% 25%	20% 4%	9% 3%	..	25% 14%	27% 13%	..	..
Cumulative Average 2.0 or better			12 3				23 8		

* Percents based on original number registered

Generalizations pertinent to Table 41 are as follows:

1. The initial Block and Non-block comparison groups were of approximately equal size in the Spring of 1964 and Fall of 1964.
2. The proportion of students completing each semester, of those beginning it, is similar in both the Block and Non-block groups.
3. The proportion returning for the semester following the first (out of those initially enrolled) is substantially greater for the Block as compared with the Non-block.
4. The GPA each semester has been higher for the Block (except for Fall group Beta semester).
5. The units attempted was greater for the Block group each semester.
6. The percent of those earning "C" averages or better each semester of those initially enrolled was greater for the Block group.
7. Of the students in each group attending more than one semester, substantially more of the Block than Non-block group have cumulative GPA's of 2.0 or higher.

It is true that the members of the Block program were allowed to enroll for a second semester almost irrespective of first semester grades, while the Non-block did not have this prerogative.

This condition might be a factor in explaining why more of the Block than Non-block return each semester and are present into the third or fourth semester.

However, if this were the case (the very low GPA students of the Non-block not being permitted to return), those who do ~~not~~ return should be those having the higher Alpha GPA and should logically do much better in the succeeding semesters. The figures in Table 41 shows however, that the spring Block students show a higher GPA average in the succeeding semesters while the fall Block group shows a GPA of .10 of a grade point lower than the Non-block.

It is also to be noted that the students in the Block program achieved GPA's while averaging about 1 to 1.5 units more in load.

Could the generally poorer performance of the non-block control group while at L.A.C.C. be related to their poorer performance during the first semester?

To check on this possibility, the block and non-block probationary students who completed a year at L.A.C.C. were compared on their grades during the Alpha (Table 42) and Beta (Table 43) semesters. (Caution must be exercised in drawing inferences from the data as presented due to sample size, particularly in the case of the spring control group).

It can be seen in (Table 42) that of the students completing the Alpha and Beta semesters, the percent falling in the GPA categories indicated during the Alpha semester are apparently similar for the fall groups and, if anything, indicative of a higher GPA for the control spring group. That is, of those in the lowest decile on SCAT total completing a year, the performance during the Alpha and Beta semesters shows that the block group performed no better than the non-block group in GPA distribution.

Does this similar performance during the first semester carry to the second when both block and non-block students are in "regular" classes? Table 43 indicated that the percent of the fall control group earning a 2.00+ is slightly greater than that in the fall block, while the percent of the spring block earning 2.00+ is substantially greater than that of the spring control.

On the other hand in both spring and fall groups, the percent earning .99 GPA or lower during the Beta semester is substantially greater for the control groups.

If one considers a GPA of 1.50 or greater during the second semester for this level student as being indicative of benefit, then the evidence in favor of the block program appears to be more positive. That is, in both the spring and fall groups, the percent of the block program earning a GPA of 1.50 or better in the Beta semester is greater than that of the control group (57% to 27% for the spring and 74% to 66% for the fall.)

TABLE 42 - Grade Point Average (GPA) distribution During the Alpha Semester of Block and Control Probationary Students Completing Beta Semester

GPA During Alpha Semester	% of Groups Completing Beta Semester			
	S P R I N G 1964		F A L L 1964	
	Block	Control	Block	Control
2.00+	49	60	32	34
1.50-1.99	12	27	25	26
1.00-1.49	24	0	34	29
0.00- .99	15	13	8	11
Total % Comp. Beta	100	100	100	100
N	33	15*	71	35*

TABLE 43 - GPA Distribution During Beta Semester of Block and Control Probationary Students

GPA During Beta Semester	% of Group Completing Beta Semester			
	S P R I N G 1964		F A L L 1964	
	Block	Control	Block	Control
2.00+	39	7	42	49
1.50-1.99	18	20	32	17
1.00-1.49	15	27	11	3
.99-	27	47	14	31
Total % Comp. Beta	100	100	100	100
N	33	15*	71	35*

* Totals differ from those in Table 1 since some control group students withdrew without grade during 1st semester but completed second semester.

TABLE 44 - Grade Point Averages distribution for Alpha semester of spring and fall 1964. Block and control groups who completed Beta semester as a percent of those initially enrolled in Alpha semester.

ALPHA GPA	Beta Students as a Percent of the Group Initially enrolled			
	SPRING		FALL	
	Block	Control	Block	Control
2.00+	25	13	21	11
1.50 - 1.49	6	5	16	8
1.00 - 1.49	13	0	22	9
99 -	8	3	5	4
"Saved"; % of original Enrollment Completing 1 year	52	21	64	32
"Lost"; % complet- ing less than 1 yr	48	79	36	68
Total % enrolled initially	100	100	100	100

TABLE 45 - GPA distribution for Beta semester of spring and fall 1964. Block and control groups as a percent of those initially enrolled in Alpha semester.

BETA GPA	Beta Students as a % of group initially enrolled			
	SPRING		FALL	
	Block	Control	Block	Control
2.00+	20	1	27	15
1.50 - 1.99	10	4	21	6
1.00 - 1.49	8	6	7	1
99 -	14	10	9	10
% of initial enrollees completing 1 year	52	21	64	32
% of initial enrollees completing less than 1 year	48	79	36	68
Total % of original enrolled	100	100	100	100

Using completion of a year of study as a criterion, the question might be asked, what value does the block program have as regards the percent of people "saved" (remaining) after a year of work, i.e., what proportion of the initial group complete a year of work and how do they fare "grade-point wise."

Tables 44 and 45 indicate that of the spring groups almost $2\frac{1}{2}$ times many block students as control students are "saved" (52% vs 21%) and that of the fall groups twice as many block students as control students are "saved" (64% vs 32%). That is, "lost" are 79% and 68% of those initially enrolled in the control groups in less than one year as compared to "losses" of 48% and 36% in the block program groups.

Grade-wise it can be seen that the block groups who completed a year had a larger percent of the numbers initially enrolled in the higher grade areas during both the Alpha and Beta semesters.

Using the larger fall group as an example, it might be inferred that not using the "block" for all in the lowest decile on the SCAT Total cost society, the school, and individuals, 12 "C" students during the Beta semester out of 100 initially enrolled ($27-15=12$). If 1.5 is considered as indicating "profit from instruction" the loss is 27 "profiting students" out of 100 initially enrolled ($48-21=27$). The cost in students potential for profiting is even greater for the spring.

This apparent "savings" by the "block" program, of course, needs more rigorous evaluation and consideration philosophically, criterion-wise, educationally, and cost-wise (in instructional and facility time, as well as, cost of alternate means of educating—with its attending values, societally and individually).

2. Alpha Semester Grades as Related to Beta Semester Grades

Previous sections IV/5 and 9 indicated that the SCAT Total and the Reading Placement Test scores did not appear to be very related to Beta semester

performance, although some relationship was indicated with Alpha semester grades.

Section IV D 6 Indicated some relationship between Alpha and Beta semester grades for the Fall 1964 block program for students completing both semesters.

Does the relationship between Alpha and Beta semester grades hold for non-block probationers?

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The Table/below includes only the numbers of students of the fall and spring 1964 groups and shows that there appears to be a slight, positive relationship between Alpha and Beta grades for both groups.

TABLE 4C - GPA Matrix of Alpha and Beta grades of Block and Non-Block groups during Spring and Fall 1964

G P A		B E T A								Total Alpha GPA Distribution		Group
		0.00 - .99		1.00-1.49		1.50-1.99		2.00+				
A	2.00+	3	3	1	2	0	3	8	1	12	9	Non-Block
	1.50-	3	2	2	0	4	1	9	1	18	4	Block
L	1.99	1	3	0	1	2	0	6	0	11	4	Non-Block
	1.00-	5	2	3	1	10	1	6	4	24	8	Block
H	1.49	4	0	0	0	4	0	2	0	10	0	Non-Block
	.99 or less	1	3	2	2	2	0	1	0	6	5	Block
		3	1	0	1	0	0	1	0	4	2	Non-Block
Total Beta GPA Distribution		10	9	8	5	23	6	30	13	71	33	Block
		11	7	1	4	6	3	17	1	35	15	Non-Block
Semester		↑ Fall	↑ Spr.	↑ Fall	↑ Spr.	↑ Fall	↑ Spr.	↑ Fall	↑ Spr.	↑ Fall	↑ Spr.	

It appears that many of those who did well the Beta semester also did well the Alpha semester. For example, of the 30 Fall block students receiving a 2.00 or higher during the Beta semester, 14 had received a 2.00+ during the Alpha semester.

However, some who might be considered "unsuccessful" the Alpha semester (less than 2.00) "found" themselves in the Beta semester, e.g., of the 30 Beta "2.00+" GPA's mentioned above--9 had GPA's of 1.50-1.99 and 6 had 1.00-1.49 as their Alpha GPA.

More information is needed on whether the Beta grades represent initial unmeasured competence, capacity to learn, changes in attitude and learning during Alpha semester, type of Beta courses, Beta units attempted, grading procedures, etc.

The data in this section does suggest, however, that a block program for those with lowest decile scores on SCAT Total provides values in terms of student retention and performance over a program of undifferentiated, but limited, enrollment.

In summary, Table 41 shows that of those enrolled each semester out of the initial group, block students tend to exceed non-block students in retention and performance areas.

Tables 42 and 43 further compare block and non-block probationers. They indicate that those block students who complete two semesters perform as well as, during the Alpha semester, and better than, during the Beta semester, the non-block probationary students. Tables 44 and 45 then indicate that the block group, while comparable or better in academic performance over two or more semesters, performs at this level while retaining at least twice the number of students. (Less loss of potential).

V. SUMMARY

This is the third report on the progress of an experimental program for the "low-ability" student at Los Angeles City College. At this time (February 1966) this program has just completed its fourth semester of operation, having begun in February, 1964. This report relates primarily to the second group of students to enter this program--those entering LACC in September of 1964.

The purpose of this report is to:

- 1) present data descriptive of the psycho-social and college performance characteristics of the "low-ability" students in the second experimental group.
- 2) compare the second experimental group (Fall 1964) characteristics with comparable measures taken of the first experimental group (Spring 1964) "low-ability" students.
- 3) compare the "better" and "poorer" readers within the Fall 1964 experimental group on selected factors.
- 4) present attitudes of the Fall 1964 experimental group about the program.
- 5) compare the performance and retention of the experimental group "low-ability" with a comparable group of students not in the experimental group.

The experimental group in the Fall 1964 consisted of 52 males and 58 females. 72 of the group were Negro. 62 of the group last attended a Los Angeles city high school, 18 a California high school, and 30 were from out-of-state. Of the 110 beginning the semester, 91 completed it, with 30 having a "C" average or above. 75 enrolled for the second semester.

The program included a block of courses comprised of English, Speech and Psychology.

Psychological inventories and questionnaires were administered to the group. The data was presented for subgroups by sex (male and female) and reading level--high (A8 and above) and low (B8 and below) and for the total group. The following results about the experimental group were obtained:

A. Academic Potential and Achievement

1. 13% show potential for two years or more of college, based on the GATB "G" score.
2. On verbal measures of mental ability, the average student places at the 7th centile compared with college students (SCAT), and at the 27th centile compared with the working population (GATB-"G").
3. On non-verbal measures of mental ability, the average student places at the 20th centile compared with Los Angeles city junior college norms (Raven Progressive Matrices-untimed), at the 50th centile compared with 20-25 year olds (Raven Progressive Matrices-untimed), and at the 65th centile compared with "17 year olds and older" (SRA Non-Verbal, timed). Reported gains in Listening Comprehension warrants further study.
4. On tests of reading vocabulary and comprehension the average student placed at the 9th grade level (California Reading Achievement Test) while on a test of critical reading the average was at the 8th grade level (SRA Reading Placement Test).
5. Where sex differences appear to occur relative to academic potential and achievement, males exceed females in 1) the number with 2 years or more of college potential (9 to 3) and 2) reading comprehension level (9.4 to 9.0).
6. Where reading group differences appear, the "highs" exceed the "lows" in 1) Non-Verbal mental ability (73rd to 49th centile average - 17 year old norms) and (27th centile to 18th centile averages - junior college norms), 2) reading vocabulary level (9.7 to 9.2), 3) reading comprehension level (9.4 to 8.9), and 4) critical reading level (9.3 to 7.8). Interestingly, the high and low groups both have 6 students with 2 year or more college potential.

B. Vocational Aptitudes

1. The average aptitude scores in verbal, numerical, spatial, and finger dexterity is below the 50th centile on working population norms, while at or above the 50th centile in form perception, clerical perception, motor coordination, and manual dexterity.
2. The median for the total group on all aptitude measures, except "G" and "V", are within one half standard deviation (10 centile points) of the working population norm mean.
3. While about 13% were academically suitable by intelligence score for 2 or more years of college, this does not hold for aptitude patterns. That is, none are high enough on combined scores to qualify for occupational areas related to the GATB necessitating 4 or more years of college and only 2-5% qualify 2 year occupational areas predicted by the GATB.

4. There don't appear to be significant sex or reading level differences.

C. Motivational

1. Both males and females (relative to national norms) tend to be above average in need for order and tendency to feel inadequate, while showing a low interest in the opposite sex.
2. Males tend to be above average in their need for deferring to others, sticking with things, and aggression, while below average in their need for dominance. Females have an above average need for change and below average need for affiliation.
3. While both "highs" and "lows" need order and feel inadequate--"lows," more than "highs," defer to others and tend to stick with things, while showing less interest in the opposite sex.
4. The interest inventory shows outdoor and mechanical interests to be low for all groups. In addition, males and highs have below average scientific interests. Otherwise, above average interests are indicated for males in computational, artistic, and clerical areas; for females in persuasive, musical, and social service areas; for highs in persuasive, musical, social service, and clerical areas; and for lows in computational areas.
5. Study Habits and attitudes are consistently but slightly lower than college norms with females and "lows" being weaker than males and "highs."

D. Questionnaire Data Showed the Following:

1. The group averaged 18 years old, was 53% male, had 75% living with one or both parents, and had 25% living with 5 or more other persons in their residence.
2. As a group, 70% had decided on a major, with half making the decision within the last year and with difficulty. Over half of the group wanted 4 or more years of college, which is more than they felt would be required for the job they wanted. However, most felt they would achieve the education necessary for their job goal and for over 50% these job goals were at a professional level. Financial considerations and human relation aspects of the job are considered to be their most important job considerations.
3. The major source of financial support comes from parents for 50% and from jobs for 35%, with more "high" group and females receiving parental support.
4. Most of these students expected competition for grades, expected most problems with their studies, and felt the purpose of college was to give job training.
5. Most of the students are from large urban areas, attended no more than 2 high schools and elementary schools, lived in California for at least 3 years (50% lived here for 10 or more years), and graduated from public, racially integrated high schools). Almost 3/4 graduated from California high schools, with almost 60% from Los Angeles city high schools. 45% ranked themselves in the upper half of their graduating class while 40% didn't know where they ranked.

6. Almost 90% stated that both parents were living but 40% were separated or divorced. Most parents were in the skilled, semi-skilled, and clerical category. Most mothers worked. Median reported income was in the \$4000-\$6000 range. Junior college graduation of the students was of some importance to most parents, but more so to parents of "highs" and females.
- E. Comparison of the Spring 1964 and Fall 1964 Block groups were made on the GATB, SRA Non-Verbal, California Reading Achievement Test; SRA Reading Placement Test, Edwards Personal Preference Schedule, Kuder Preference Record, B-H Survey of Study Habits and Attitudes. Comparisons of the Fall 1964 and Spring 1964 Block groups were made on the Mooney Problem Check List. All comparisons show substantially similar results.
- F. Enrollment statistics of the Spring and Fall 1964 groups show that out of the original enrollment about 40% return for a third semester.
- G. Comparison of "high" (A8 and up) and "low" (B8 and lower) reading groups as determined in the beginning of the semester showed:
1. Females more prevalent in the "high" group, 2) "high" group GPA exceeded "low" group GPA (1.93 to 1.30), 3) more "high" group members had a "C" average or better (22 to 5), 4) slightly more "lows" were from Los Angeles city schools (61% to 53%), 5) total SCAT scores were higher for those getting 2.00+ than for those getting .99 or less (median raw score 36 vs 32) with all 2.00+ above 31, 6) SCAT total seems to have predictive value for Alpha grades, while Alpha grades may show more value in predicting Beta grades, 7) more "low" group students earned 2.00+ in their second semester than in their first (13 Beta) vs 5 (Alpha), while slightly less "high" group members earned Beta 2.00+ (17 to 22), 8) "high" group average on California Reading Test changed from average of about 9.5 to almost 11th grade while "low" group went from about 9.0 to 9.6, 9) while pre-test critical reading test scores were related to getting an Alpha 2.00+, post-test scores of both "high" and "low" group student getting Beta 2.00's are similar.
- H. Anonymous student questionnaire data to evaluate the Alpha program indicated 1) very favorable reactions on the quality of instruction, academic freedom, fairness, and opportunity for conferences; 2) difficulty in finding a place to study, in studying, and in expressing themselves, but they felt that they kept up on assignments; 3) importance is attached to grades; 4) generally positive attitude toward LACC, concern of students for political, social, economic issues, and willingness of students of differing backgrounds to associate with one another; 5) mixed feeling about college's interest in them as individuals; 6) over half felt that they had the aptitude to successfully complete their studies.

1. The students in the Block were compared with a randomly selected group of non-block, but "block-eligible" students. In general, 1) block students tended to exceed non-block in retention and performance, 2) block students completing two semesters performed as well during the first semester and better in the second semester than the non-block students 3) block students, while comparable to non-block students in performance over two semesters, have a retention of twice the number of students after one year.

VI. CONCLUSIONS

A. Generalizations Regarding Characteristics--

Independent evaluations of two samples of "low-ability" students at LACC by means of psychological tests, inventories, and questionnaires during two semesters indicates that the characteristics described in the first report can be considered hypothetically representative of this group.

In general, the data was congruent in the following areas:

- 1) rank in lower 25% of general population in verbal intelligence, while average in non-verbal measures, 2) 8th to 9th grade reading level, 3) below average in academic aptitudes (verbal, number, spatial) while about average in non-intellectual aptitudes (form and clerical perception, motor coordination, manual dexterity), 4) job potential below junior college semi-professional level, with more possibilities in skilled and semi-skilled range, 5) above average in need for order, tendency to feel inadequate, need to defer to others, need for variety, need to stick with things, and below average in interest in the opposite sex and the need to be regarded as a leader or stand up for a point of view, 6) low interest in areas of outdoor, mechanical, and scientific (somewhat), while high in areas of clerical, social service, and art 7) low in study habits, 8) have major problems in academic adjustment to college, personal-psychological relations, life goals, and financing while in school, 9) the primary purpose for college attendance is indicated as vocational preparation.

B. Differences Within the Group Related to Learning Potential

1. There appears to be possible sex differences in academic potential, motivational and interest patterns, and environmental and home background factors that seem to have relationship to academic endeavors.

2. The students falling in the lowest decile on the SCAT total score, while on the average not appearing to have the aptitude or achievement level for college work, do not appear to be a homogeneous group in terms of junior college potential. While the SCAT provides some potential for differentiation of these two groups, other measures are also necessary.
3. Some students appear to have initial ability that might be more profitably developed in the present junior college institutional frame work than do others.

C. Conflict between Personal Needs and College Expectations

The need patterns of this group of students is reflected in immediate (and indicative of future) conflicts within the college environment. This tends to superimpose personal-social difficulties upon the learning problems already existing as a result of their inadequate academic competences. That is, their difficulties relating to independence, reality of goals, self-discipline, self confidence, motivation, study skills, etc. are dissonant with the expectations and demands of the institution.

D. Need for Counseling

1. This group has need for the availability for extensive and meaningful counseling and referral services as indicated by 1) high goal aspirations relative to present low academic functioning level and knowledge of jobs 2) felt problem areas of personal-psychological, adjustment to academics, financial resources, home and study conditions, success in life, etc., and 3) 2/3 to 3/4 desire (counseling, job potential as predicted by GATB may reflect the inadequacy of the test for this student and the narrow range of occupations predicted to, as well as weak potential on the part of some students.
2. While lower level readers and males appear to be more likely, than females and higher level readers, to have difficulty in matching their aspirations with their abilities and motivations, they seem to have less family support and more financial, academic, and emotional factors against them.

E. Value of the "Block" Program

1. Aptitude and achievement variables, seem to have predictive value to first semester success. However, they appear to be of somewhat lesser value than first semester performance in predicting second semester success. There are indications that 1.5 rather than 2.0 (4.0 point scale) may be a better measure of first semester "success," as related to obtaining a second semester 2.00 average.
2. Evidence of the value of a special "block" or "core" program for the "low-ability" student is indicated by a) a generally favorable attitude toward the school, faculty, and program b) a general personal attitude that "someone cares," c) the 2:1 ratio of retention into the third semester in favor of the "block" approach

over a limited list of courses from which a program may be made for comparable low ability students, d) better GPA performance over a years time and a 3:1 advantage of the block group in numbers of students with a cumulative "C" or better after one year (about 20% of original block enrollment to about 5% of original comparable group), e) results showing that those of the block control group students completing one year, a larger percent of those initially enrolled in the block do better, grade-wise, the second semester than the controls--even though the controls and block students perform in a similar fashion during the first semester.

VII. RECOMMENDATIONS

On the basis of evidence in this report, observations of the program, and its effects on the students and the campus community, the following recommendations are offered:

- A. Insofar as the description of student characteristics and performance in this report further support the evidence presented in the First Report #64-14 and in the followup study #65-2, the recommendations of the previous reports should be more actively followed through. They are summarized below, with comments related to this study added. (More detailed aspects of these broad points may be found in the earlier reports).
1. "Continuing study and thought should be given to the place of a program such as this in the junior college," including its place in alternative agencies or under coordinated auspices and the meaning of "remedial" as intended and realistically possible at the junior college level.
 2. "The purposes and objectives of the program should be carefully delineated" e.g. individualized remedial, group remedial, appreciation, appreciation-counseling, remedial-counseling, or combination of preceding. Functions, authority, and responsibility should be formally delegated and assigned.
 3. "Methods other than just using SCAT Total score cutoff should be explored for selecting students for the program," and for differentiating them by probability of success within several tracts. Particular emphasis should be placed on finding motivational and learning probability measures.
 4. "Creativity and experimentation in instructional method should be encouraged." (It should also be made more feasible by a commitment on the part of the state, the college, and the district as represented by allocation of funds and time (clerical, instructional, counseling, conference, preparation and planning, evaluation, etc.), personnel, consultants, etc.

5. "Creativity and experimentation in counseling and guidance techniques should be encouraged" with more individual analysis as opposed to group analysis. This should also be made feasible as indicated in (4) above.
6. "Explore additional methods for evaluating the program" including the student self perception as well as measures of achievement, savings, effect on campus, and other organizational variables. The variables and criteria utilized in evaluation must indicate consideration of several points suggested by these studies.
- a) predictor variables may be valid for first semester success, but not for the second semester and beyond.
 - b) predictor variables may be valid for one subject field or category of student but not for others. Predictors for success of the "culturally deprived" may differ from those of the academically weak, "non-deprived."
 - c) predictor variables and criteria may be influenced by characteristics of the teacher, method used, classroom climate developed, community attitudes, etc.
 - d) academic criteria of success e.g., reading gains, may not be as meaningful to the student as personal criteria e.g., finding realistic goals.
 - e) follow-ups should be continued in terms of courses and programs in which these students are successful, activities after leaving school, attitudes about the program, recommendations of students for changes, etc.
7. The program should be coordinated with other local agencies interested in the problem of the ~~uneducated~~,^{*under educated*} and actively pursued.
- B. Develop methods of data collection, storage, retrieval, analysis, publication, and distribution that will permit further research on the scope necessary and access to the data by professional personnel.
- C. Develop a battery of tests, inventories, and questionnaires that will allow for obtaining generalizations regarding group or subgroups, as well as differentiations within groups and between individuals. This may necessitate the use of individual, group,^{and} projective methods. Group administration and ease of scoring should be considered important where the device is to be used with groups. Consideration should be given to adapting individual tests to group use.

- D. Conduct a survey to determine the projection for future enrollment of this "low-ability" student at LACC. This will also require knowledge of ameliorative efforts now being made (and projected for the future) by other agencies, e.g., those 1) at the lower educational levels designed to remove the academic deficiencies of this student and to provide adequate and appropriate counseling, 2) at the department of employment for job placement and training programs for high school graduates, 3) established by government and industrial organizations.
- E. Develop an instructional program to allow for the differences existing within this group e.g., 1) two or more tracks as was suggested by the differential first semester performance of students between the 0-5 centile and the 6-10 centile. For example, a partial effort at remediation might be attempted, that is, the higher performing members of the lower decile group may be given more in a remediation effort the first semester while the lower group is given a "general education" program (hopefully with materials and methods that are appropriate, with extensive terminal and vocational counseling, 2) flexible programming with a staff of instructors who work with the group on a year basis. This might allow for more fluidity in moving from one subject skill to another at anytime during the year, but with standards which must be met by the end of the year in order for credit to be received, 3) counseling-oriented learning programs which might include 4 weeks of counseling followed by 16 weeks of instruction .

The counseling phase might include:

- a. administration of a diagnostic test battery to include measures of scholastic achievement, study habits, non-verbal ability, motivational or personality measures, listening, and interests.

The purpose would be to identify, as much as possible, the learning problems and regroup students according to types of learning difficulty in order to facilitate effective learning groups.

- b. Group for counseling sessions according to type or category of problem and in group sizes that might be most effective for working with it.
- c. These counseling sessions might run 3 to 5 days a week for 2 hours a day and be concerned with educational-vocational goals and motivation. The remaining hours of the program might include school orientation; lecture series on subject and vocational fields; library or study skills work; community, business, and industry visitations, and other general cultural activities.

The instructional phase might include:

- a) Assigning students to skills classes, laboratories, study skills center, vocational information laboratories, interview of significant persons in the community.
- b) Continued counseling or guidance on group or individual basis for remainder of semester periodically, depending on the nature of the problem and the objectives.
- c) Development of a means of teaching and evaluating of performance that is less dependent on writing or reading at the beginning but requiring more academic performance measures at the end.
- d) Keeping students on a rigid schedule in the beginning with their studying kept under the control and guidance of school personnel and with gradual "weaning" occurring over a year, so as to require more self-responsibility at the end.
- e) Opening library facilities for more evening hours and week end hours and seeking study facilities in the area from which students come. Assistance might be provided by the community members where qualified.
- f) Providing systems of rewards for students that are meaningful, i.e., money, equipment, materials, subscriptions, tickets, free professional vocational guidance, tuition to technical or trade school, scholarships. (A cooperative effort of various funding agencies, schools and/or organizations.)

F. Broad student Personnel Services should be developed to help provide experience and programs on and off campus that would aid the student in his "acclaturation."

For example:

1. Counseling and guidance services should be provided to this group, whether integrated with the curriculum, as in E 3c above, or separately. It is particularly needed with respect to the areas of vocations, personal values and goals, interpersonal relations, study, educational objectives, and part-time employment and financial assistance. Individual, small groups and classroom techniques should be developed according to problem areas. A pointed effort should be made to locate and keep contact with referral resources that might help the large number of students who are here because they know of no other place to go for training or jobs.

Efforts should be made to include psychologists in the counseling service and/or provide for psychologist-consultant time.

2. The placement function might: work through department of employment, Economic Opportunity Act Agencies, business, and industry, and place students in "community service interest areas" for experience a couple of hours per week, or for pay for more hours a week in order to provide more realistic knowledge of occupational fields.
 3. Provide campus "retreats and cultural events" and on campus "special programs" to help the student build a "growth through learning" orientation.
- G. "Community contact" programs should be developed that would reach into community to secondary schools, parents and family, business, and community organizations.
- 1) This would encourage their participation in school functions on campus.
 - 2) Informational, discussion, and counseling sessions in rented, donated, or public school facilities in a centrally located community locations from which the students come might be of use in furthering this goal and helping to develop a favorable home climate for the student.
 - 3) Closer efforts at articulation with secondary schools would aid in developing continuity in instruction and counseling.
 - 4) Major attempts to get at reasons and expectations in college attendance would help find out what is really desired by the community and reduce the probability of developing "paper" programs based on narrowly viewed idealism, inappropriate value orientations, or ignorance.

For example, it is commonly assumed that college attendance for these students' status oriented. While this may be so, the question arises as to what needs this status gain is intended to satisfy, whether these underlying needs can be met in another fashion, and whether satisfying status needs by attendance at college is not only a mere temporary gain, but in addition, creates more long term frustrations and problem areas. Are the desires of the student and the community forces incongruent? How does he profit? Is he being pressured? That is, would a special division, campus, or program --whose main purpose would be intensive remediation of skills--really be so frustrating to the status need that students would not attend and that the community would be upset? Is it the program or its method of introduction and implementation that is the problem? This area needs looking into.

H. Develop a program to aid in reducing intra-personal conflicts of students, faculty, and administrators within the college. These conflicts, it is hypothesized, result from perceived discrepancies, between aspirations, expectations, and realities relative to personal and institutional motives, goals, capacities, and behaviors. Therefore,

1. Recognition must be given to the fact that:

- a. The student described in this study has characteristics (reflecting intellectual, motivational, economic, ethnic, political, historical, social, or technological factors) different in many ways from those for whose needs the junior college had originally established its purpose, objectives, organizational structure, personnel, and curriculum. The college climate and expectations create pressures that this student is unprepared to cope with.

It should be particularly noted that viewing the situation of culturally deprived and the Negro (and his progress with increasing opportunity) as being similar to that of other ethnic minority groups who made progress out of the "melting pot" may not be a valid comparison for one or more of the following reasons:

- 1) the visibility factor--color creates extreme difficulty in breaking the housing, education, economic, and social barriers.
- 2) lack of family unity and frequent absence of the father.
- 3) opportunity being greater for females than males--and lack of "identity" in the male student.
- 4) lack of "cultural heritage" value orientation (learning as being significant and important).
- 5) economic conditions of automation and requirements of higher level training for entry job against a background of minimal, restricted, and inadequate educational opportunity that was not as extreme during the assimilation of the previous ethnic groups.

- b. Faculty training, experience, and role expectations are not congruent with instructional and personal-psychological demands made on them by the growing pressures of the "new remedial student." It is true that recognition must be given to the aspirations and needs of students and that the responsibility of the faculty to the community, the college, and the student is to do what must be done to provide educational opportunities in accordance with the law, professional ethics, and social conscience. It is also true however, that recognition must be given to faculty in terms of their high level of training, competence areas, and personal aspiration. If the needs of the faculty are not also considered, the loss to the students, college, and community will be great.
- c. The concept of "remedial" upon which the junior college has been operating successfully in the past has not yielded a curriculum, organizational arrangement, or faculty to meet the "remedial" problem as represented by this current "low-ability" student body. The first report (#65-14) compared the "low-ability" student with a sample of "regular" students. While in some respects the groups were not dissimilar, the areas in which they were (e.g., background and achievement level) allowed the regulars to compensate for their weaknesses under the old concept of the "remedial" function of the junior college.
- d. There must be an effort toward a "meeting of the minds" between the junior college, other institutions in the educational structure, parents, community, industry, and government regarding the role of the junior college. A beginning should be made by clearly putting forth the expectations of each regarding the junior college and a "hard headed" understanding taken of the discrepancies between the expectations, the ~~realistics~~ *realities*, and the possibilities.
- e. The problem is a community problem, not a college problem. The solution must come from the community, not just the college. What is needed is a coordinated attack on the problem by the various responsible agencies of the community---not isolated "fire fighting" attacks by specialized but uncoordinated agencies. We need to get the conflicts in the open and come to some resolution.

A realistic look at the scope of the problem is necessary in order to establish machinery to handle the training and education of this student. Where ever the machinery and program is established to handle the problem---whether in the regular junior college program, in extension division of junior college, extended adult schools, specialized community developmental centers, short-term government or industry programs, private schools, centralized testing, counseling, and selected referral procedures for high school graduates, or coordinated agencies---the authority, funds, and necessary specialized personnel, materials, and facilities must be allocated to match the scope of the responsibilities assigned.

2. A single, clearly delineated line of authority and responsibility should be established for the program within the school. The administrative level of the person responsible and the facilities and resources made available for the program should represent the commitment of the institution to, and be in accordance with the purpose, scope, and administrative relationships necessary for the success of the program.

Consideration should be given to placing this program in a separate department or division of the college, in which case the responsible authority should hold a department chairman or dean position.

3. An attitude and opinion survey of faculty, administrators, and students should be conducted to evaluate and aid in developing a program to *alleviate* ~~alternate~~ any discrepancies between the school climate, expectations, goals, and accomplishments as perceived by these groups.
4. Recognition must be given to the need for specialized faculty in this program. An experimental approach of assigning students and faculty based on personality, motivational, attitudinal, and/or intellectual characteristics might have value in establishing a positive learning climate.
5. Involve faculty in special training, program development, and evaluation activities, e.g.,
 - a) develop in-service training programs on school time for faculty member to receive special training in the teaching and counseling of these students.
 - b) develop "group sessions" of faculty members working in this program to "air" and develop means to handle common problems; feelings and attitudes about this group; feelings and attitudes about their own aspirations and roles; develop ideas and procedures; and make recommendations and evaluations.
 - c) conduct area-wide seminars, symposia, workshops.

1. Finally, it is recommended that research be carried out, using "models" of broad scope, that will include the student, the college, and the community -- recognizing that the three are intricately intertwined. The study of isolated problems in courses and colleges is useful, but quite limited where social, as well as psychological, amelioration is required. Eventually, each study must be tied into its larger context.

1. There is need for coordinated research projects both within colleges and between colleges. The education at the junior college level of the "low tested ability" student is a complex problem. The mythical typical student described by the "average" on the various variables utilized in this study is a composite of several types. Among these types are included for example -- the one who "doesn't now" but "might later," who "could" but "won't," who "can't" but "tries," and who "can't" and "won't".

Initial studies need to be done in establishing intermediate and long range criteria for evaluation and the broad range of variables affecting student performance.

2. The studies on the problem of academic achievement have taken at least three approaches:

a. Emphasis on the individual: suggesting that those who have internalized the attitudes, motives, and behaviors appropriate to the academic system tend to be more successful in school.

b. Emphasis on cultural factors: suggesting the significance of parental and family background, early training, and support and of the congruence of parental, student, and school values during the development phases of life. Further, the student's achievement is considered to be a measure of the degree of his acculturation i.e., the degree to which one derives a significant portion of his gratification from cultural accomplishments.

c. Emphasis on interacting factors: suggesting that college achievement is related to the interaction of students' needs with the college expectations and pressures. More specifically, the factors in achievement include: the college environment; immediate classroom cues; the student (motives, habits, skills); the teacher and the learning procedures; and the criteria for evaluation (tests).

3. The data on this group reflects much relating to these areas.

a. The effect of the factors in the individual as related to achievement is reflected in such items as the discrepancy between lower verbal scores and higher non-verbal scores, as well as between the lower intellectual

aptitude scores and higher non-intellectual and performance scores, high tendency to feel inadequate and inferior, low need to take the lead and support a point of view, low study habits and attitude scores, low value on college as a place for intellectual development. previous low academic achievement or high grades where standards were low.

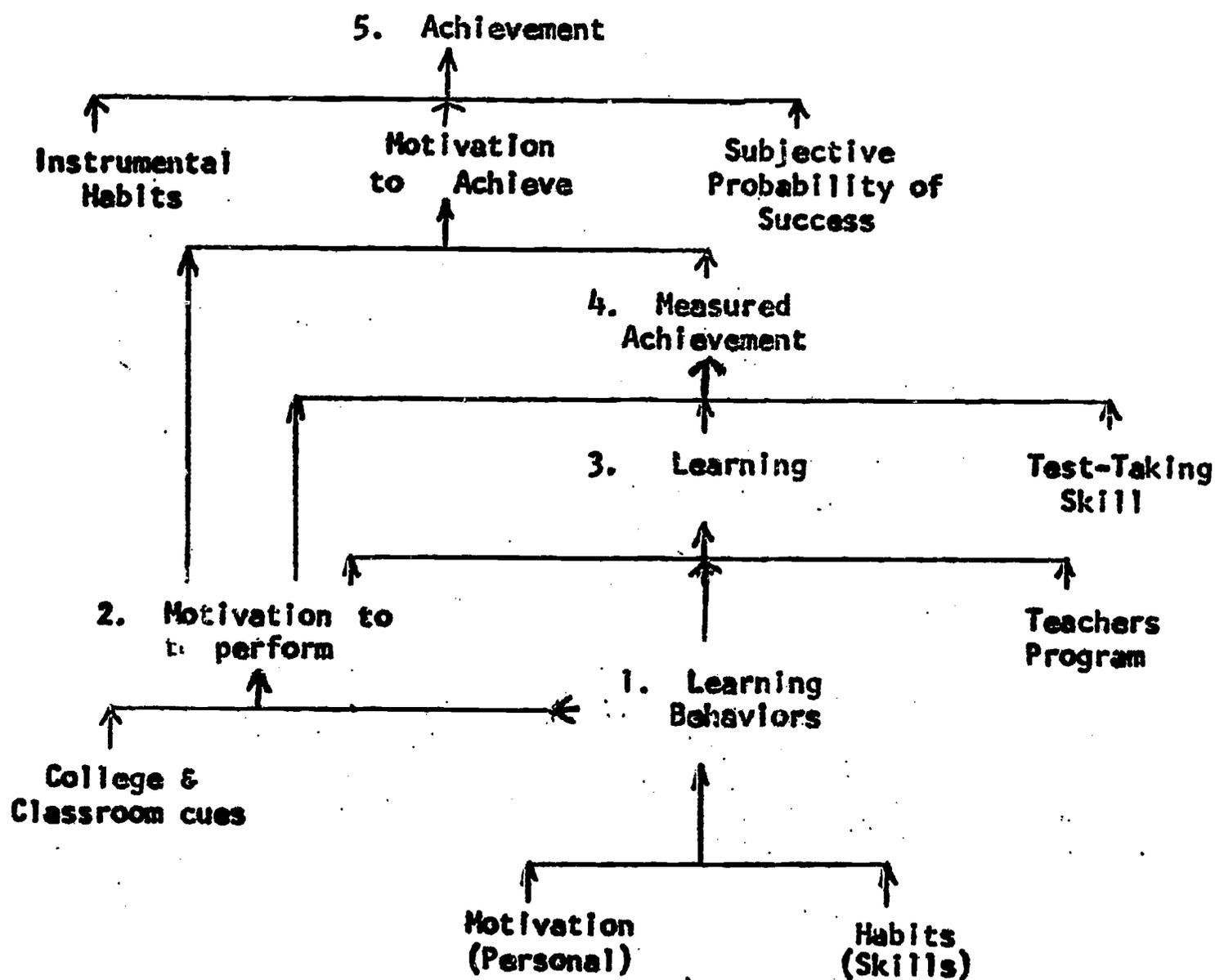
b. The effect of the second factor of cultural background is reflected partially in the lower socio-economic background, working mothers, divorced parents, large numbers of persons living in the home, lack of study facilities, and for the majority of students in this group, the racial factor -- segregated background and being negro.

c. Since the students don't come to us with positive internalized values regarding education, appropriate "grade earning" and "student" behaviors and "adequate cultural background," and since the law states that they are entitled to be here and entitled to a program from which they can profit, we are obligated to do something toward developing meaningful learning experiences while they are at L.A.C.C. Information regarding the student characteristics must be related to factors in the learning process.

4. Mc Keachie (1961) suggests relationships in college learning that, if considered, might lead to more effective learning in the classroom.

a. The following diagram is suggested as representing the relationship between the factors mentioned by Mc Keachie. From this, ideas can be gleaned that might relate to program development.

FIGURE 1



- 1) Initial personal motivations interacting with earlier learned skills are reflected in the initial learning behaviors necessary for all future learning, i.e., reading, listening, speaking, writing, study methods, etc.
- 2) The motivation to perform in the classroom (or frustration derived from classroom performance) results from the learning behaviors in interaction with the climate of the college and classroom.
- 3) Learning in the classroom results from the interaction of the motivation to perform, learning behaviors, and the material and program presented by the teacher.
- 4) Measured achievement (evaluation process) is dependent upon the interaction of learning, test-taking skill, and motivation to perform.
- 5) The student's perception of his measured achievement interacts with his motivation to perform to yield a motivation to achieve. This may have a positive or negative basis i.e., either to do one's best to reach a preferred goal or --- to aspire to a goal so as to avoid a negative goal. One's achievement is based, then on one's motivation to achieve, the habits he has developed, and his own feelings regarding the probability of his success. (again, an interactional effect)

b. A suggestion regarding program development that comes out of this model might be to:

- 1) Develop organizational structure, procedures, and techniques for initially evaluating and training students in the basic academic learning behaviors, the underlying habits and skills, and the motivation for attendance and participation. In addition, there should be researched and provided relevant environmental college and classroom cues in order to develop academic motivation.
- 2) Combine this motivation with the appropriate learning behaviors and program to yield learning.
- 3) Develop test taking skills and apply these skills to the learned material under optimum motivational conditions to get a measure of achievement.
- 4) Counsel with the student regarding the meaning and significance of his measured achievement and its relationship to a motivation to achieve that is realistic and positive.
- 5) Further counsel with him regarding his probability of succeeding and the habits and behaviors that would be instrumental in achieving his goal.

6) It is to be noted that motivation and subsequent performance can be closely related to personal needs and goals, habits and skills, and environmental climate and cues.

Areas mentioned in 1) through 5) above could be used as significant departure points for research within the broader context. There are implications for research on student characteristics, learning behaviors, teaching methods, programmed learning, teacher personality, college expectations, goals, and pressures, counseling methods and techniques, administrative organization and procedures. (McKeachie, for example, has demonstrated that where a need for affiliation exists in a student group, and the teacher provides a classroom climate for satisfying this need, those with this need perform better than those with other significant needs).

5. A second model that might have a bearing is that of Maslow's (1954) hierarchy of needs. He postulates five needs which, in order of prepotency, are: physiological, safety (order and stability), love (relating to others and belonging to a group, rather than feeling rejected and isolated), esteem (self-respect and respect from others), and self actualization (fulfilling one's potential). Further, he suggests that earlier needs must be gratified before later ones can be. As earlier needs become gratified, they become less potent. Then the next need in order becomes more potent and the one upon which behavior primarily operates. All needs are present and functioning at all times, however one may be more significant at any point in one's lifetime.

The values one has reflects the need level upon which he is operating. Perhaps this will give clues as to what must be done to chance values --- i.e., provide satisfaction to the need level that this value represents. Another point is that differences of values between individuals and groups do not so much reflect "right" and "wrong" ways of thinking, but rather that some individuals are at different need levels and have experienced more gratification in some areas than others have.

The value of college as a place for job training seems to reflect the physiological and safety need level. The safety need is also reflected for students in this group in their high need for order and need to defer to others.

The low need for affiliation score may reflect a defensive reaction to previous rejections; while the feeling expressed in class by these students that "someone now cares" reflects the real need. This also suggests the need for a faculty that can express this. Can this be done by a faculty that is "assigned one of these classes in order to share the load in a department"?

The idea of attending college for its prestige value may reflect the attempt to get symbolic esteem. This is symbolic in the college world because the lack of performance doesn't allow real esteem, but it may be real to the student in his own community because attendance, not performance, may be the standard. But what of their self-esteem in this conflict of two worlds? Are they seeking this esteem from others by college attendance because this is the current currency with which a sense of belonging and identify is found. In addition, can one who does not feel accepted use esteem or prestige to gain a sense of belonging and acceptance? Maslow suggests not. He suggests the opposite occurs.

The questions in this motivational area are very complex. Perhaps this model will give some ideas regarding the motives, values, and behaviors of this student group and some insights useful in resolving conflicts between individuals and groups whose differences reflect their level in the need hierarchy (faculty, students, negroes, caucasians, etc.). It also suggests that unless one obtains satisfaction at the physiological, safety, love, and esteem levels he is unlikely to fulfill his potential. Maslow also suggests that the "freedom to act" is a need underlying all of the others. One may be so concerned with this need that he may appear to be foregoing satisfaction of the others to satisfy it.

In more specific terms, this model suggests the broad goals of (1) helping the student become aware of jobs that are open and opening, with specific information about curricula and experience opportunities in the jobs. (2) helping him see himself for what he is (vocationally, educationally, personally) so that his motives, behaviors, and goals are compatible and effective, and (3) setting up procedures for allowing and encouraging individual differentiation within groups so as to allow him to optimize his own development and potential. This may help him work basically on the needs of "freedom to act," physiological, and safety, while providing a basis and a start toward satisfying those at a higher level.

6. One of the college's objectives with respect to the provisional students then, should be to develop an environmental situation, organizational structure, appropriate activities, and evaluative procedures so as to induce, as much as possible, the physical and psychological participation and the academic production of the students. This would be done to the end that they come to better understand themselves and the world they live in and are capable of making meaningful decisions regarding their life activities.

The following "model" taken from March and Simon (1958) and placed in an educational frame-work is an example of how a "broad scope research model" might provide a useful starting reference-point for thinking in this area of academic participation and production.

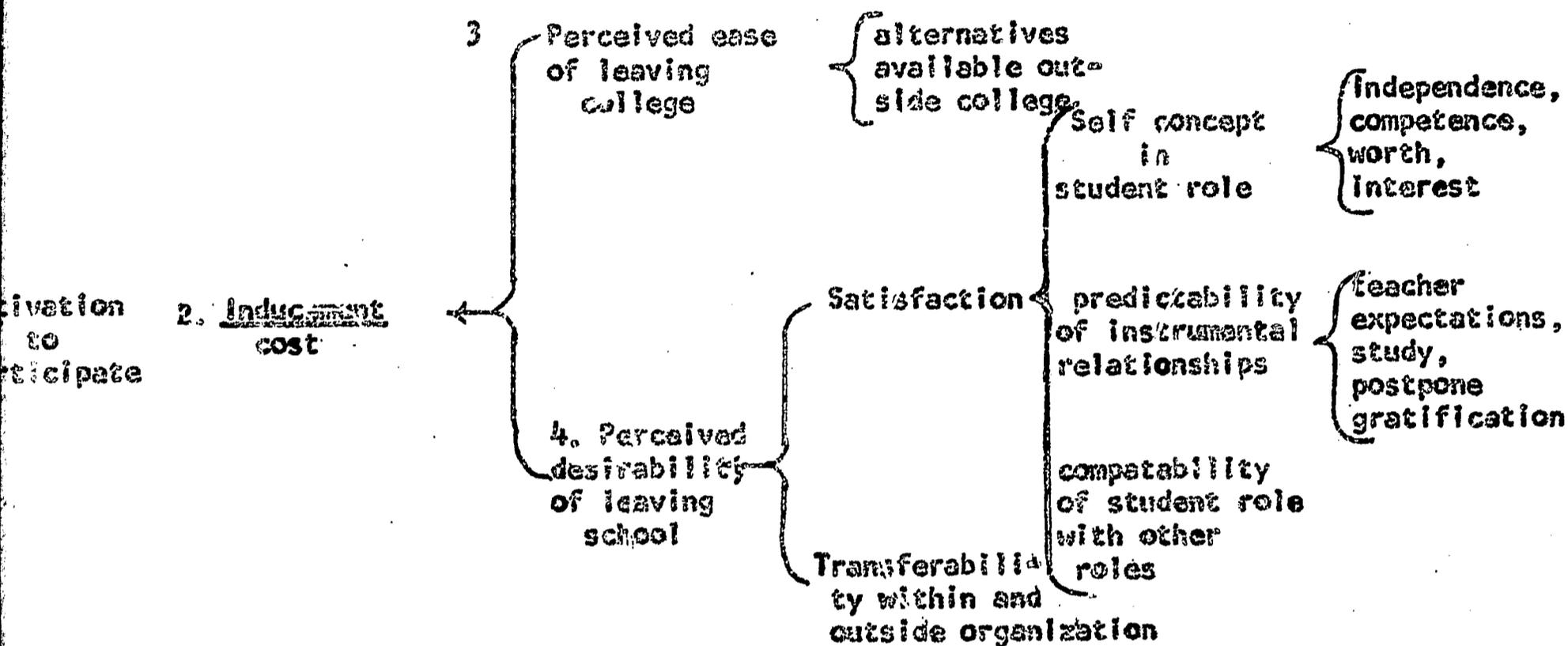
a. Participation in college and learning activities

1) Figure 2 suggests the following relationships. The student's degree of psychological, as well as physical, participation in learning is a function of the degree to which the inducements to his learning are greater than the costs to him (e.g., in energy, anxiety, time, money, etc.)

2) The ratio of inducement over cost is greatest when the student perceives it difficult to leave the college (because of limited outside alternatives) and also finds it undesirable to leave college (because of his satisfaction with the college and the transferability and choice options within the college setting.)

FACTORS IN PARTICIPATION

FIGURE 2.



These categories of perceived ease and desirability of leaving suggest a way of measuring student motivation and relating it to his later learning. The four-way table below suggests motivational categories in which students might be hypothetically placed. (Requires developing an instrument for measurement in this area.)

FIGURE 3.

		Perceived ease of leaving school	
		High	Low
Perceived desirability of leaving school	High	A	C
	Low	B	D

Students in Block A would be most likely to leave college while those in D might be least likely to leave. Those in C and B might have motivational conflicts, i.e., C finding it desirable, but difficult, to leave and B finding it easy to leave, but undesirable. Those in Blocks C and D are most likely to stay in college and this likelihood compounded with aptitude limitations creates quite a counseling problem.

Students might even move from one block to the other while in school e.g., from "B" to "C" as "reality" increases. A student in block "C" might be a particular problem as he feels it desirable to leave, but hard to leave (No where to go).

Dissatisfaction with one's situation might ordinarily lead to search behavior for alternatives (other programs, how to improve, a job, etc.). However, as March and Simon point out, if the environment is perceived as malevolent and/or barren, search behavior does not necessarily follow from a decrease in satisfaction, but rather aggression, withdrawal, and regression may be observed. (A possible result of the suggestion made by some to "put these students in regular classes and let them flunk out. They'll learn this is not the place for them.")

3) Ease of leaving is shown as related to outside alternatives available. (Figure 2). This suggests the need for counseling referral, since this person might not stay in college if he knew of somewhere else to go to gain objectives he might have -- particularly for the student in block C.

4) Desirability of leaving is inverseley related to two factors--satisfaction and transferability.

Satisfaction is further related to a) an adequate self concept in the student role based on feelings of independence, competence, worth, and interests; b) predictability of instrumental relationships based on such things as teacher expectations, study, postponement of gratification, etc; and c) compatibility of the student role with other roles of family member, worker, father, etc.

Transferability refers to the possibility of movement within the college (variety in programs) and is related to its size. Transferability might also refer to movement in the educational system or between systems.

The data in this study would suggest that low satisfaction and high desirability of leaving college combined with difficulty in leaving, in terms of a place to go would characterize this group.

5) A critical problem is indicated for this group in the term "perceived." For what is "perceived" and what is "real" may be, and for these students frequently is, incongruent and yet motivationally relevant. This suggests a need for a) definitive college objectives and programs, b) developing means of communicating them to interested parties, c) developing programs within them, and d) making referrals to those agencies more capable of handling these problems not within the junior college province.

b. Production in college and learning settings.

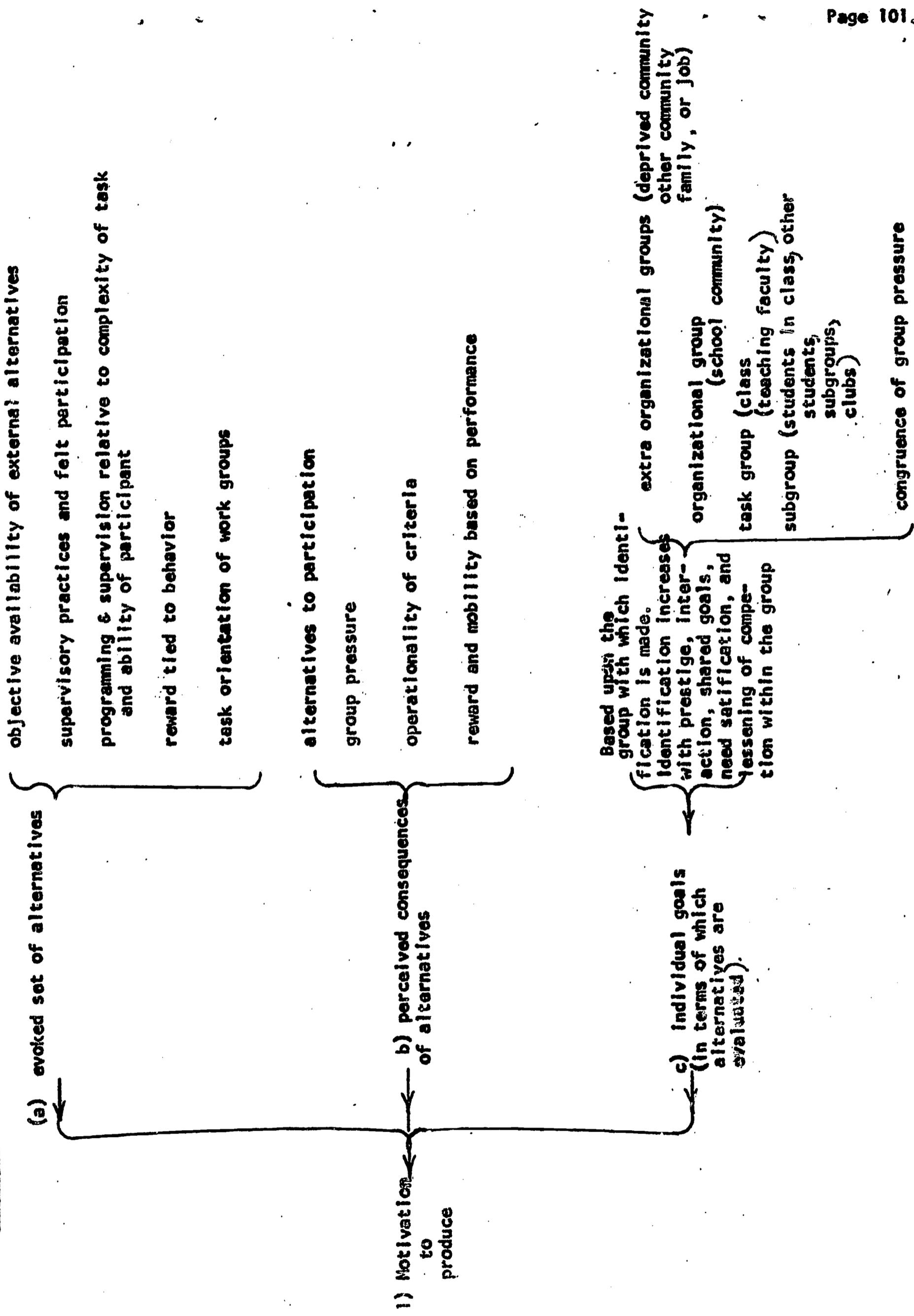
Important in one's learning is that he actively produce. Dissatisfaction in the organization can lead one to do one of several things--leave the organization, conform to production standards, or seek satisfaction in non-productive areas. Since the student stays in school, the alternatives remaining to him are staying and producing or staying and not producing.

That is, he may stay and obtain satisfactions from non-production related activities e.g., socializing, saying he is a college student, etc.

(Parenthetically, this brings up the point that if the college considers co-curricular activities e.g., athletics, lectures, social affairs, student government, as educationally defensible, then they should be included among the areas in which a student "may profit" from attendance. But what of the student who has very limited capabilities in the Academic sphere, but profits from co-curricular activities? For many of the provisional student group, the co-curricular activities may be of greater immediate worth than the academic, yet the students are evaluated on academics. Should students be evaluated on gains in these co-curricular areas and should these be used as inroads to academic learning? Or, perhaps a program should be set up that is more co-curricular with minimal academics for one semester (or a summer) and then the situation reversed the next semester -- credit being given upon successful completion of the year? Has the high level of importance assigned to co-curricular activities been based on an implicit assumption of its educational value to the academically able, while it has been assigned low value to the academically unable? Again, are the assumptions upon which the junior college "institution" was founded such that the type of provisional student now attending was not considered to be one of the potential recipients of its benefits? Are we at the crossroads of either limiting attendance to those for whom the junior college was implicitly assumed to provide for originally or adapting the organization to a new all-inclusive role?)

"Motivation to produce stems from a present or anticipated state of discontent and a perception of a direct connection between individual production and a new state of affairs." (March and Simon p. 51).

- 1) Figure 4 indicates that the motivation to produce in the learning situation would be maximized if the alternatives to production available to the student were minimized, the consequences he perceives as resulting to him by selecting the various productive alternatives were maximized, and the goals of the individual in terms of which he evaluates the alternatives were institutionally related. More specifically, the following pertains:
 - a) Academic production can be maximized only if non-productive alternatives are minimized. The alternatives related to academic production then depend upon and can be maximized by doing the following:
 - (1) Minimize the objective availability of outside of school opportunities as alternatives to school production (This is not to negate the value or need of outside school activities, but forces us to realistically establish objectives of the academic program in light of them!)
 - (2) Maximize the degree to which the student feels himself a participant in decisions made about him by such means as the instructor's showing his awareness of students' problems, utilizing the student's ideas in program development, utilizing "graduates" of program as aides, incorporating influences of the community from which the students come, etc.



- (3) Optimize task complexity-supervision ratio. The learning materials should be more closely programmed, the supervision closer (by teacher or aide) and the groups smaller as the task becomes more complex relative to the weak abilities of the student.
- (4) Rewards should be tied directly to the behavior desired and should be meaningful and available to the student (it may be necessary for rewards to be material and concrete at first, with gradual reward training taking place toward more normative rewards). Rewards may have to be different for different types of students e.g., those in Block D (low-ease-low desirability of leaving) in Figure 3 might take more normative rewards ("grades", "good work") while those in Block C (low ease-high desirability of leaving) may need more concrete rewards.
- (5) Maximize task orientation of groups and minimize task-irrelevant behavior. Assign individuals to groups by their "susceptibility to contagion" in order to reduce negative effects of the group on individuals.
- b) The student will see the consequence of academic production maximally if the following factors are accounted for and controlled.
- (1) The fewer the alternatives to academic production the more important will be the consequences of performing in school.
- (2) The utilization of appropriate group pressure. A system that maximizes the value and goals of the groups within which the individual finds himself will probably be more effective (at least in the beginning until the individual begins differentiating himself from the group). Group pressures increase in effectiveness with strong identification, uniformity of opinion, the range of control the group has over the environmental circumstances, and the interaction in the group.

Looking again at Figure 3, those in block "D" (perceiving it undesirable to leave school) might be treated differently from those in block "C" (perceiving it desirable to leave school). That is, those perceiving it undesirable to leave school may be more likely to benefit by incorporation into or having more contact with the general student body, take on their norms, and ward off conflicting norms of the outside group. On the other hand, those perceiving it desirable to leave may find student body norms and behavior in the academic reality outside their value system, tend to participate in outside activities, and obtain less benefit from counseling and training.

- (3) **Operationality of criteria.** Academic productivity will be increased to the extent that its consequences include rewards and/or mobility within the organization or within the larger social-occupational system of which the college is a part.

To be effective, rewards and standards must be acceptable to the student and well-defined. He must learn "student behavior" and must see this as an acceptable way to behave.

- c) **Individual goals.** It is suggested by March and Simon that individuals evaluate themselves in relation to others and take on the goals of groups with which they identify. Identification, they propose, increases with prestige, interaction, shared goals, need satisfaction, and lessening of competition within the organization. They indicate targets for identification.

- 1) **Extra-organizational groups:** e.g., family, community, ethnic groups jobs, etc.
- 2) **Organizational group:** e.g., the college. The identification may lead only to the symbolic behavior of attending classes, carrying books, attending activities, etc., since the organization represents a value system different from that of the student. Being placed on probation may be viewed more as a rejection than as a provisional acceptance, leading the student to physical or psychological avoidance. Since the school is not satisfying personal goals, this situation may lead to less identification.

There may be a point here for a separate probationary organization or division of the school. That is, perhaps its better to be a full fledged student in a skill development and guidance program, than a provisional student backing into college so that when pushed out, he can run away fast.

- 3) **Task groups (e.g., class and teacher) and subgroups (social groups and clubs) within the school** are two other types of target groups with which identifications are made and by whose values alternatives to action are evaluated.
- 4) **The significant point about individual goals as they relate to academic production, is that groups with which the individual identifies influences his actions.** In so far as the various groups' values are congruent, or complementary (at least not antagonistic), the individual will have less conflict. Furthermore, insofar as extra-organizational (outside college) and subgroups values (within the college) are congruent or complementary with those of the organization (college) and the task groups (teacher and class), the individual will have less goal and value conflict. Where college and classroom values differ from extra organizational and subgroup values, the individual's goals may be conflicting and his major emphasis will be in the direction of the greatest identification.

The school then must account for and compensate for forces acting on the student when he is outside the academic sphere of influences by showing awareness of outside forces, interacting with them, and creating a situation in the college that will increase the student's identification with the college and educational value system and his consequent academic production. The questionnaire item showing mixed reaction to "the college consideration of the students as individuals" and the obvious lapsing into "sub-group colloquial behaviors after class" is an indication of needs in the areas just described.

In summary, academic production appears related to minimizing alternatives to productive behavior, maximizing meaningful and attainable consequences of productive behavior, and controlling for organizational, extra-organizational, and intra-organizational forces with which the student identifies and which affect his goals as an individual.

7. The purpose for describing these "models" is not to suggest them as being all inclusive or the ideal models to be used. Rather, they are suggested to indicate the direction in which it is felt that college research should go. A means must be found to incorporate limited studies into the larger scope of living societies. These are examples of broad scope models which provide the means for studying the "student" and the "learning processes", and in addition, have the breadth to handle some of the relevant "context" variables that affect motivation and learning, ^{and} which are so frequently omitted in the typical limited studies.

It is suggested that college, district, and state educational leaders and administrators commit themselves and their resources to synthesis, as well as analysis, in research and furthermore, that they view and handle this problem in the breadth and depth within which it exists. Education and training must be viewed in its broader social context and the concern of the community (including its members, "institutions", and agencies) should be for the analysis, allocation, and integration of functions and resources to realistically meet the educational needs of the community.

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